



■ *ISS45 Version 8 Transaction File*
■ *Technical Reference*
■ *Version 8.1.5.2*
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ISS45 V8 Transaction File Technical Reference

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Table of Contents

Table of Contents	i
Overview	1
General.....	1
Opcodes.....	2
Sub Opcode	2
Transaction File Reference Document.....	3
Transaction File, Tail Format.....	4
01 – Full Line Item Record (Item Sale Transaction)	6
02 – Department Sale.....	9
03 – Discount/Promotion	12
04 – Media.....	14
05 – Ticket Total.....	16
06 – Tax	18
07 – Float.....	19
08 – Coupon	20
09 – Cash Lift	21
10 – Non-Scanned Department	22
11 – PLU Sale Extension Record	23
12 – Department Sale Extension Record.....	25
13 – Discount Ext	27
14 – Media Extension Record	29
15 – Media Extension Record 2	31
16 – Payout/Receipt Record	32
17 – Information T7E	33
18 – Media Extension Record 3	34
19 – Media Extension Record 4	35
20 – Log Function.....	36
21 – Ticket Frame	39
22 – PLU Sale Extension Record 2	42
24 – Media UK Ext.....	44
25 – Dummy Ticket Total.....	45
26 – Media Ext5.....	46
27 – Discount Ext2	47
50 – Transaction Info Ticket Frame.....	48

Opcode 56, Sub-Opcodes: 0 X 00 to 0 X 34	50
56 – Cash Office.....	50
00 – Cash Office Safe Locking	52
0B/OC – Cash Office Deposit/Receipt.....	54
OD – Cash Office Declare Safe	55
OE – Cash Office Safe Lock	56
15 – Cash Office Safe Transfer	57
1B – Transaction Deposit Receipt Bank Account.....	58
1D – Cheque List.....	59
19 – Cash Office Over Short Lock.....	60
20 – Cash Office Buy Aid Declaration	61
21 – Cash Office Entry Docket Declaration.....	62
30 – Info Media Transfers	64
33 – Safe Envelope.....	65
34– Safe Envelope Init	66
Opcode 60, Sub-Opcodes: 0 X 01 to 0 X FF	67
01 – Item Not found	67
02 – EFT Comm. Fail.....	68
03 – Birthday.....	70
04 – Tax Exempt	71
05 – Car	72
06 – Checksum	73
07 – Background Load	74
08 – Account	75
09 – Bagger ID	76
0A – Charge Posting.....	77
0B – Expense.....	78
0C – Cost Percent	82
0D – Supervisor.....	83
0E – Buyaid.....	84
0F – Staff Discount.....	85
10 – ECCA 1	86
10 – ECCA 2	87
10 – ECCA 3	88
11 – Customer Information 1	89
11 – Customer Information 2	91
11 – Customer Information 3	92
11 – Customer Information 4	93
11 – Customer Information 5	94

13 – SKU	95
14 – Price Override.....	96
15 – Cheque Guarantee	98
16 – Drive Off	99
17 – Bad Accounts	100
18 – Reprint Ticket Request.....	101
19 – Assistant	102
1A – Promotion Information	103
1B – ClubCard.....	105
1C – Points	106
1D – Track.....	107
1E – Cash in Drawer	108
1F – Wrong Password	109
20 – Frequent Shopper	110
21 – Unlock Update.....	111
22 – Redemption	112
23 – APAC	113
24 – Alerts	114
26 – Total key.....	115
27 – Extra Card Info.....	116
28 – OLA Result.....	118
28 – OLA Airtime EXT0 A0.....	119
28 – OLA Airtime EXT1 A1.....	120
28 – OLA Card Authentication A2	121
28 – OLA Secure Data A3	122
28 – OLA Certificate Details A4.....	123
28 – OLA Request 01.....	124
28 – OLA Ack 02	125
28 – OLA Answer 03	126
28 – OLA Free 04.....	127
28 – OLA Results Extra 05	128
28 – OLA Printing 06.....	129
28 – OLA Referral Save 07.....	130
28 – OLA Trans Ref8.....	132
28 – OLA Result 00.....	133
28 – Club Card Request 11.....	134
28 – Club Card Answer Continued 12	135
28 – Club Card Answer Continued 13	137
28 – Club Card End Of Ticket 14.....	138

28 – Hungary OLA Results 30	139
28 – Hungary OLA Request 31	140
28 – OLA E Pay Result 32	141
28 – OLA E Pay Result Ext 33	142
28 – OLA Gift Card Result 34	143
28 – OLA Bill Payment Result 35	144
28 – OLA Auth Guide 36	145
28 – OLA Auth Guide 37	146
28 – OLA Serial Number 42	147
28 – OLA Pin Number Ext 2 43	148
28 – OLA Result EXT 2 44	149
28 – OLA Identify Number Extension	150
28 – OLA Epay Result	151
28 – OLA Loyalty Update Result	152
28 – OLA Result Ext 2	153
28 – OLA Result Ext 2 47	154
28 – OLA Unique ID 48	155
28 – OLA Payment Card Result 49	156
28 – OLA Abort 99	157
28 – OLA PCIDSS_Hashed PAN 4A	158
29 – Auth Price Diff	159
2A – Host Batch	160
2B – Check Fee	161
2C – New ECCA	162
2D – Embedded Price	163
2E – EFT Media	164
2F – EFT Print Reject	165
30 – Transaction Index	166
31 – Location (POS Information)	168
32 – Tender Coupon	169
33 – Training Charge Posting Account	170
34 – Ticket Trailer	171
35 – Finish Media	172
36 – Bad External Device Transaction	173
37 – Q-Length	174
38 – EFT Print Data	175
39 – Alcohol Restricted	176
3A – Minimum Age Message	177
3B – Clubcard Extension	178

3C – Commission	179
3D – Fly Buys	180
3E – Charge Reverse Balance	181
3F – Clubcard Re-entry	182
40 – Promotions/Coupons Cross	183
41 – Deposit.....	184
42 – Trading Stamps.....	185
43 – Coupon Information	186
44 – Frequent Shopper Member	188
45 – Staff Discount.....	189
46 – Recall Transaction.....	190
47 – EFT Settlement (Option 1).....	191
47 – EFT Settlement (Option 2).....	192
48 – EFT WYNID	193
49 – Respond Number	194
4A – Cheque Sort Code.....	195
4B – Void Report	196
4C – Reorg Print.....	198
4D – Family Coupon	199
4E – Customer Select	200
4F – Family Promotion.....	201
50 – Advanced Frequent Shopper	202
51 – Frequent Shopper Card.....	203
54 – Retrans.....	204
55 – Vouchers.....	205
56 – Info Store count	206
57 – Info Credit/Debit Reentry.....	207
58 – Info Saving Total.....	208
59 – Savings Plus	209
5A – Info Smart Card 01-ICC	210
5B – Info Smart Card 02 - POS terminal	211
5C – Info Smart Card 03 - Issuer	212
5D – Info Sales On Account.....	213
5E – Info Customer Survey Questions	214
5F – Voucher (Fuel Reward).....	215
61 – Info Pre-payment.....	216
62 – Info Charge FNB.....	217
63 – Info Promotion Total Stub.....	218
64 – Info Easy Shop Restricted Item.....	219

65 – Community Partner	220
66 – Info Automatic Refund.....	221
67 – Info CCMS	222
68 – TRS Bonus Buy.....	223
69 – Info Bonus Points Saving.....	224
6A – Info Black Box	225
6B – Balance Inquiry.....	226
6C – Black Box Data.....	227
6D – O1 Pay at Pump	228
6E – Fuel Reward	229
6F – Reward Tender	230
70 – Info EFT Nomad Media	231
71 – Info EFT Nomad Print Slip	232
71 – Info EFT Nomad Print Slip1	233
72 – Info EFT Nomad Owner Name	234
73 – Info Redemption Points.....	235
74 – Info EFT Nomad Budget.....	236
75 – Info EFT Nomad Cheque	237
76 – Info EFT Nomad TRX Key.....	238
77 – Scanpoint Save Report	239
78 – Saved Ticket.....	240
79 – Electronic Smart Card Coupon.....	241
7A – Smart TV Card Information	243
7B – Gift Card Transaction	245
7C – Smart Card Coupon Information Transaction	246
7D – Return Voucher Issued	247
7E – Information Transaction for Recalled Invoice.....	248
7F – Information on Charge Payments.....	249
80 – EFT Finland (Request 1)	250
81 – EFT Finland (Request 2)	251
82 – EFT Finland (Response 1).....	252
83 – EFT Finland (Response 3).....	253
84 – Matthew Clubcard Trigger	254
85 – CC OLA Message	255
86 – Department Additional Data	256
87 – Promotion Coupon Required.....	257
88 – OLA Day Totals	258
89 – Pump Totals.....	259
8A – Message 5 PLU.....	260

8C – Cash Withdrawal EFT	261
8D – Information on Delivery Charges	262
8E – Information Segment	263
8F – Chip Card Information	264
91 – PLU Stock Count – 7.3.4	265
92 – Card Deposit.....	268
93 – Ticket Times.....	269
94 – Ticket Exceptions	270
95 – Info EFT Nomad Print Slip2	272
96 – Info EFT Nomad Print Slip3	273
97 – Pump Post Dec	274
98 – Pump Grade Price ID	275
99 – Chipcard Handle Message.....	276
9F – Invoice Reprint.....	277
A0 – EJ Info Bad Account	278
A1 – EJ Info Price Inquiry	279
A2 – EJ Info Control Check.....	280
A3 – EJ Info Age ID.....	282
A4 – Add Loss Report (Item On Sale).....	283
A5 – Tank Reading Header	284
A6 – Tank Reading Detail.....	285
A7 – Pump Reading Header.....	286
A8 – Pump Reading Detail.....	287
A9 – Delivery Reading Header	288
AA – Delivery Reading Detail	289
AB – Alarm Reading Header	290
AC – Alarm Reading Detail	291
AD – Tank Config Reading Header	292
AE – Tank Config Reading Detail	293
AF – Pump Config Reading Header.....	294
B0 – Pump Config Reading Detail.....	295
B1 – Information Sundry Product	296
B2 – Information Grid Calculation	297
B2 – Information Grid Calculation	297
B3 – Information Price Calculation.....	298
B5 – Priceline Abn	299
B6 – Staff Card.....	300
B7 – Info TPF Recall.....	301
B9 – Information OEM Points	303

BB – Information Repeat Code	304
BC – Customer at SOT	305
BD – Gift Basket	308
BE – EFT Handle Transaction	309
BF – PRN_NMD	310
C0 – Loyalty Message	311
C0 – Foreign Currency/DCC Transaction Detail (TESCO).....	312
C1 – Loyalty Customer	313
C2 – EFT Information Data.....	314
C3 – Information Additional Credit Limit	316
C4 – Clubcard Information.....	317
C5 – External Charge Payment	318
C6 – Self-Scanning Recovery	319
C7 – Information on Invoice Recall	320
C9 – Customer Language	321
CB – Information on Non-Merchandise.....	322
CC – Loyalty Mail Information.....	323
CD – Information Exclusive Calculation	324
CE – Information Supplementary Data	325
CF – Information on Barcode Program.....	326
D0 – Information Invoice Request	327
D0 – Information Invoice Request	327
D1 – Information Transaction	328
D1 – Information Transaction	328
D2 – Create Clubcard	329
D3 – Information Coupon Redemption.....	330
D4 – Bookkeeping PLU Sale	331
D5 – Online Information Script Sales	334
D6 – Payment Information Transaction For Script.....	335
D7 – Transaction Information Points	337
D8 – Phone Card Action	338
D9 – Barcode Programming Information.....	339
DA – Information Ticket Points.....	340
DB – Information Service Desk Voucher	341
DC – Signature Capture HDR.....	342
DC – Signature Capture Data.....	343
DD – Information Order Number.....	344
DE – Information Price List ID.....	345
DF – Information Customer Account ID	346

E0 –Information Order Status	348
E1 –Information Fuel Discount Coupon	350
E2 – Car Wash.....	351
E3 – Tax Discount.....	352
E6 – Information Barcode Coupon	353
E7 – Information Offline EFT.....	354
EF – Information Confirmed Promotion.....	356
EF – Information Confirmed Promotion.....	356
F2 – Information Net Gross Price – PRJ USA ONLY	357
F6 – Information Order Promotion Apportionment.....	358
F7 – StoreNext.....	359
F9 – Information Tare	360
FA – Scanned Image Information	361
FD – Extended Gift Card Data	362
FD – Extended Gift Card Data	362
FE – Info EFT Decline	363
FF – Information Denomination.....	364
Opcode 63 Alerts	365
Transaction Alert (general)	369
Alert INDYME.....	370
Unbalanced POS.....	371
Program Version.....	372
POST Version Alert	373
File Refresh	374
Alert Batch	375
Wrong Version Alert.....	376
Alert Trans Send.....	377
Package DE	378
Check Card 51	379
Alert Host Lookup.....	380
Alert CFM	381
Disk Space Info	382
Storeboard Message	383
Post Mail.....	384
Transaction Error.....	385
Code Distribution	386
OLA 387	
QDX Problem.....	388
Gift Card Enquiry.....	389

Alert File Distribution	390
AlarmSrv	391
Auto Fuel Management 176	392
Combined User Security	393
Uncollected Change	394
Opcode 64 Printout	395
Transaction Printout	395
Opcode 65 Fuel System	396
Debug Transaction	396
Opcode 66 Fuel Reconciliation	397
Site Controller Raw Data	397
68 – Zip Printout	399
69 – Zip Printout Wide	400
Opcode 70, Sub-Opcodes: 0 X 01 to 0 X FB	401
01 – Manual Settlement	401
02 – Info Sequence	403
03 – Unknown Item	404
04 – PLU Sale Ext 3	405
05 – Transaction Info Parcel	407
06 – Transaction Info Charge Data	408
07 – Transaction Info RSS (Reduced Space Symbology) Data 1	409
08 – Transaction Info RSS (Reduced Space Symbology) Data 2	410
09 – Transaction Info Cash Lift	411
0C – Info MobileLime Data Loyalty – Loyalty Record	413
0C – Info MobileLime Data Loyalty – EFT record	414
0D – Info MobileLime Data Loyalty – Comments Header	415
0D – Info MobileLime Data Loyalty – Comments Data	416
12 – Info Zipped Text	417
17 – Info2 Fuel Voucher	418
31 – Info2 Local Barcode	419
32 – Info2 Member Account	421
33 – Info2 Ticket Type	425
3B – End of Ticket Apportionment	428
45 – Trans Info2 External Loyalty Reward	429
4B – Phone Card Act Ext	430
51 – Trans Info2 Add Segment	431
76- Transaction Info2 Local Barcode Issued EXT	432
77- Transaction Info2 Voucher Reward	433

7A- Transaction Info2 Promotion Extension	434
84- Transaction Info 2 Head Trigger.....	436
86 - Transaction Info2 RX Sale.....	437
86 - Transaction Info2 RX Sale.....	437
87- Transaction Info2 FSA.....	439
8C Transaction Info 2 Member Account Update	440
99 – Transaction Info EBTWIC Ticket End	442
99 – Transaction Info2 EBTWIC 01	443
99 – Transaction Info2 EBTWIC 02	444
99 – Transaction Info2 EBTWIC 06	445
99 – Transaction Info2 EBTWIC 08	446
99 – Transaction Info2 EBTWIC 09	447
99 – Transaction Info2 EBTWIC 0A	448
99 – Transaction Info2 EBTWIC 0B	449
99 – Transaction Info2 EBTWIC 0C	450
99 – Transaction Info2 EBTWIC 20	451
99 – Transaction Info2 EBTWIC 99	452
A0 – Transaction Info2 Promotion Ext2	453
A4 – Transaction Info2 ORC Reward Split by Redemption Info	454
B0 – Transaction Info2 ORC Reward Split By Redemption Info Ext	456
B2 – Transaction Info 2 FSA	457
C2 – Info 2 MTX Receipts	458
CC – Info 2 Copient Logix.....	459
D0 – Info 2 Gift Card Activation Extension 2	462
D8 – Info 2 Phone Card Activation Extension 2.....	463
DF – Info 2 Update Transaction.....	464
E5 – Info 2 Recovery.....	465
F0 – Info 2 Databar Coupon.....	466
F3 – eWIC	470
F4 – External 2 Coupon.....	474
F5 – External Coupon Data	475
F7 – Info 2 Lane Manual Add Item.....	476
F9 – Info 2 DPS.....	477
FA – Info 2 Lane Hawk Clear Item.....	479
FB – Info 2 Promotion Tax Info.....	480
FD – Info 2 WIC CVV Info	481
FE – Info 2 WIC CVV Tax Info.....	482
FF –Info 2 Fuel Voucher Redeemed	483
88 – Transaction QDX Update.....	484

95 – Transaction External Data.....	485
0A – Cashier Time/Performance Statistics	486
0B – Cashier Declaration.....	488
B0 – New Sequence Number	490
C5 – Transaction Media Extension 6	491
C9 – Transaction General Long Data	492

Overview

This document contains all the descriptions, specifications and record formats of the ISS45 v8 Transaction Files.

Transaction numbers missing from this document are either not defined for use, or are reserved for internal use only.

The document represents all the Transactions currently on the system; however, it is ongoing and there will be future updates to be added.

General



Every POS terminal has a Transaction File and all events are recorded as Transactions. Transactions are generated by the PCs for cashier functions and inventory purposes.



The Back Office Server collects all the data from all the POS terminals, and saves it in one file. In this file all the information on the POS terminal operations are stored. For example, the Sale of an Item, Sale of Department, Discounts, Credit Card Transactions, Start and End of Shift, Reports etc.



Every Transaction made at the POS terminal sends out a type of command, which is called an Opcode. Opcode numbers are set, e.g., the Opcode number for the Sale of an Item is 01.

Opcodes

Opcodes are the code for all operations. It is the operation performed from the start of a ticket to the end, including the in-between operations, e.g., reports. For each ticket there is a set framework, and within this framework there are 'Informative Bytes'. The transaction file is binary. A byte is a unit of data that is eight binary digits long. In one transaction there are 64 bytes. 1 byte is equal to 2 digits. Each digit is equal to 4 bits. Each bit has a purpose within the transaction. A bit can have one of two values, either 0 – where the bit is 'Not used' or 1 where the bit is 'Used'.

An Opcode has a general structure representing transactions:

```
struct trs_general_  
{  
    unsigned char Opcode;  
    unsigned char sub_opcode;  
    unsigned char data[trans_Len – 2 – sizeof (struct trans_tail_)];  
    struct trans_tail_ tail;  
}
```

Description:

1 Byte – Opcode
1 Byte – Sub-Opcode
42 Bytes – Data
20 Bytes – Tail

Total of **64** Bytes.

The first byte is represented by the Start command Opcode number 21.

The second byte is represented by the Sub Opcode functions.

The data is shown in the next 42 bytes.

The last line is the tail, which represents 20 bytes.

Every Opcode has a tail, always made up of 20 bytes. (This is explained in detail, further on.)

Sub Opcode

A Sub Opcode is included in the structure when there are two Opcodes with similar functions. The Sub Opcode describes the function.

For example, all Opcodes with the number 0x60 are informative transactions. To differentiate between them there is a Sub Opcode with another number or alphabetic character, which describes the type of information transaction involved.

Transaction File Reference Document

File Number 15

Name	TRANSACT.QDX
File Type	QuickDex FIFO file
Record Size	64
Flag Offset	63
File Size	Dependent on disk size

Description This file contains the POS transaction records information and is the main means of transferring information from the POS to the server.

All events are recorded as transactions. Transactions can be generated by the PCs for cashier functions and inventory movement purposes.

At the end of each transaction is a 20-byte tail.

Transaction File, Tail Format

Explanation: At the end of every transaction is the 20-byte tail (from offset 44-64). In the tail general data specifies which POS performed the transaction, transaction version, ticket number, date, time, kind of ticket transacted, TV number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Seq_No2 (Transaction Sequential No2) 1 byte from 3 bytes.		The seq_no is built from 3 bytes. The other 2 bytes are located in offset 60. For example: If the POS is in SEQ=661230 (Decimal) A16EE: The field seq_no with 2 bytes will contain the value 5870 (Decimal) 16EE (HEX) The field seq_no2 with 1 byte will contain the value 10 (Decimal) A (HEX).	
1	1	2	Flag	Bit 0	Two PO checker sign	For two person operation
				Bit 1	Opt master trans	Master transaction of events
				Bit 2	Opt don't process	In QSR scenarios, when marked, don't process this transaction
				Bit 3	Opt saved bad record	Retains original bad record value when necessary
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	2	3	External POS Number			
1	3	4	Flag Options:	bit 0-3	External device number	Came from self scanning
				bit 4	Quick POS terminal	
				bit 5	Docking POS terminals	
				bit 6	Scanpoint Item POS terminal	
				bit 7	Skip Transaction	
2	4	6	Ticket Number			
3	6	9	Date		6 Digits YYMMDD	

Bytes	From	To	Data	Bits	Explanation	Remarks
3	9	12	Time		6 Digits HHMMSS	
1	12	13	Options	bit 0	Return Ticket	
				bit 1	Training Mode	
				bit 2	PC Generated	
				bit 3	POS Off-line	
				bit 4	Void Ticket	
				bit 5	Bad Record	
				Bit 6	Store count	Store stock count TRS Tesco
				bit 7	Wastage mode	Tesco
2	13	15	Cashier Number			
1	15	16	POS Number (Hex)		MFS1 241 MFS2 242	
2	16	18	Seq_no (2 bytes from 3 bytes)		Transaction Sequential No.	The Seq_No is built from 3 bytes. The third byte is located at offset 44.
1	18	19	PC_No (4 bits) 1/2b TV# + 1/2b PC#(0-15) Trans version (4 bits)		PC Number 0-3 (0-15) TV# 4-7 (0-15)	Receiving trs from POS
1	19	20	Not Used byte for QuickDex must be 0			
20			Tail Total			

01 – Full Line Item Record (Item Sale Transaction)

0 X 01

Explanation: Full line item (all PLU sales) is recorded within this command: Item Code, Quantity, Amount, Department, etc. **Note:** This opcode has the same data as opcode 0x91 used for Stock Count.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode No. 01		01 Full line item	
7	1	8	Code		Item Code (BCD)	
1	8	9	Flag 1	bit 0	Extension record	
				bit 1	Subtract	Item was subtracted
				bit 2	Cancel	Item was canceled
				bit 3	Negative	Negative item
				bit 4	Was canceled	Fuel item sale canceled
				bit 5	Supplier promotion	Item flagged s being on supplier promotion
				bit 6	Staff discountable	
				bit 7	Accept price override	
1	9	10	Flag 2	bit 0	Item on Sale	
				bit 1	Price Override	
				bit 2	Manual Price	Price was keyed
				bit 3	Manual Price allowed	
				bit 4	Weight from Scale	Weight read from scale
				bit 5	Qty is weight	Weighted item sold
				bit 6	Qty is Decimal Qty	Decimal quantity item (e.g. meters)
				bit 7	Qty is fuel gallons	Fuel item sold in gallons
1	10	11	Flag 3	bit 0	Chained previous item	Item was sold as a result of link to previous item
				bit 1	Promotion	
				bit 2	Reduction	
				bit 3	Offer	
				bit 4	Non Merchandise	
				bit 5	Store Coupon	
				bit 6	Vendor Coupon	
				bit 7	Item Discount Flag	
1	11	12	Flag 4	bit 0	Scanned Item	
				bit 1	Read from PC	Item read from front office

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 2	Next Info	An informative record follows
				bit 3	Non Rx	
				bit 4	External Promotion	Item on member promotion
				bit 5	Price Embedded	
				bit 6	FF drags modifier	Coffee-shop great 8 item
				bit 7	Opt WIC CVV	
1	12	13	Flag 5			
				bit 0	Offer Discount	03 will follow
				bit 1	Offer Continue	Continuation offer
				bit 2	Offer First	01 & 03 will follow
				bit 3	Manual Tare Weight	
				bit 4	Return 2 Stock	Tesco taken from return structure
				bit 5	Cost Plus	Cost Plus Item
				bit 6	Freq. Shopper Discount	FS discount given
				bit 7	FS Payment	Payment by food stamps allowed
2	13	15	Department Number			
1	15	16	Multi Sell Unit		Multi Sell Unit	
1	16	17	Return type		Return type number	
1	17	18	Tax Pointer		Tax flags	
4	18	22	Qty		Quantity sold	
4	22	26	Price		Item price	
4	26	30	Amount		Amount received for this item	
4	30	34	No Tax Price			
4	34	38	No Tax Amount			
4	38	42	Return Surcharge Percent			
1	42	43	Product Code		Used in Fuel Receipts to report to Fuel Company	Tesco: taken from department
1	43	44	Flags			
				Bit 0	Opt RSS item sale	
				Bit 1	Markdown	Markdown given on this item
				Bit 2	Member discount	Members as frequent

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
						shopper, discount given.
				Bit 3	Bottle Deposit	Bottle deposit/refund
				Bit 4	Bottle Refund	Bottle deposit/refund
				Bit 5	RX	Legal requirements for USA, bit for prescription items. The basic requirement is to track the healthcare items at the item and department levels. A regulatory change came in January 01, 2008 that forced this change on retailers if they were to support a specific credit card that is used for healthcare type items. Part of the requirement is that the retailer can be audited. These bits identify the items as Rx or non-Rx for the audit/data storage purposes.
				Bit 6	Limited Quantity Promotion	A's Limited quantity promotion (ROW)
				Bit 7	Quantity case	Case Item Sale
20	44	64	Tail			
64			TOTAL			

02 – Department Sale

0 X 02

Explanation: Department Sales are recorded when a sale is made from a Department. The transaction sends the data from the POS specifying the Department Number, Amounts and Quantities, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		Department Sales	
2	1	3	Department Number			
1	3	4	Flag 1	bit 0	Extension record	TRS 0x12
				bit 1	Subtract	Was subtracted
				bit 2	Cancel	Was canceled
				bit 3	Negative	Negative item
				bit 4	Was Canceled	Fuel item sale canceled
				bit 5	Bottle deposit /refund	Bottle Deposit/Refund
				bit 6	Bottle deposit/refund	Bottle Deposit/Refund
				bit 7	Not Used	Pharmacy Script
1	4	5	Flag 2	bit 0	Not found sale	Sold after item was not found
				bit 1	Price Override	
				bit 2	Manual Price	Price was keyed
				bit 3	Manual Price allowed for item	
				bit 4	Weight from Scale	No manual weight entry
				bit 5	Qty is Weight	Weighted item is sold
				bit 6	Qty is Decimal Qty	Decimal quantity item
				bit 7	Qty is Fuel Gallons	Fuel item sold in gallons
1	5	6	Flag 3	bit 0	Chained previous item	Item was sold as a result of link to previous item
				bit 1	Cost Plus	Cost plus
				bit 2	Promotion	Item promotion flag
				bit 3	Non Merchandise	Non merchandize Dep.
				bit 4	Store Coupon	Store Coupon Dep.
				bit 5	Vendor Coupon	Vendor Coupon Dep.
				bit 6	Department Discount Flag	Discount allowed for this Dep.
				bit 7	FS payment	Payment by food stamps allowed

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
1	6	7	Flag 4	bit 0	Cost Plus item	
				bit 1	External Promotion	Item on member promotion
				bit 2	Staff discountable	Staff discounts allowed
				bit 3	Counter department	(TESCO)
				bit 4	Don't display weight and quantity	
				bit 5	Fee	(TESCO) Service fee
				bit 6	Refund department	
				bit 7	Department additional data	
1	7	8	Return Type			
1	8	9	Tax Pointer			Tax flags
1	9	10	Product Code		ISS45 Fuel Sale	(Tesco, taken from dept.)
1	10	11	Pre Pay Pump Number		POS Pump Pre-Pay	
4	11	15	Cancelled Pre Pay Sync Number		POS Pump Pre-Pay	
1	15	16	Flags	Bit 0	Surcharge	Indicates Surcharge Department
				Bit 1	Delivery Charge	Indicates Delivery Charge Department Sale
				Bit 2	Info	FS1866 DEP Sale apportionment (info flag).
				Bit 3	Charge Amount per Tax Calculation	Indicate dep sell apportionments trans (#10194)
				Bit 4	Markdown	
				Bit 5	RX	FSA Legal requirements for USA, bit for prescription items. The basic requirement is to track the healthcare items at the item and department levels. A regulatory change came in January 01, 2008 that forced this change on retailers if they were to support a specific credit card that is used for healthcare type items. Part of the requirement is that the retailer can be

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
						audited. These bits identify the items as Rx or non-Rx for the audit/data storage purposes.
				Bit 6	Non RX	
				Bit 7	WIC CVV	
4	16	20	Qty			Quantity sold
4	20	24	Price			
4	24	28	Amount			Amount received for this item
4	28	32	Nt_price		Tax exclusive price (ROW)	
4	32	36	Nt_amount		Tax exclusive amount (ROW)	
4	36	40	At Qty			
4	40	44	Return Surcharge Percent			
20	44	64	Tail			
64			Total			

03 – Discount/Promotion

0 X 03

Explanation: Discounts are recorded when a discount is given on an item. The transaction sends the data from the POS specifying the Item Code, Department No., Type of Discount (if it was due to a promotion), and Percent etc. In addition, it is used to record extra points during a promotion.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		03 – Discount	
7	1	8	Item Code		14 Digits BCD	Item number (if discount is given to an item)
2	8	10	Department No.			
1	10	11	Flag 1	bit 0	Info Transaction	Ignore this transaction
				bit 1	Non Merchandise	
				bit 2	Subtract	Item was subtracted
				bit 3	Cancel	Item was canceled
				bit 4	Negative	Negative item
				bit 5	Upcharge	Negative discount
				bit 6	Additive	Additive discount
				bit 7	Delivery charges	(was progressive)
1	11	12	Flag 2	bit 0	Manual	Manual discount
				bit 1	Percent	Percentage discount
				bit 2	Cost Plus	Cost plus item/department
				bit 3	FS Payment	Foodstampable item
				bit 4	Store Promotion	Not used
				bit 5	Total Transaction Discount	Ticket discount
				bit 6	PLU Transaction Discount	Item discount
				bit 7	Department Transaction Discount	
1	12	13	Flag	Bit 0	Promotion	Promotion type given
				Bit 1	Reduction	Promotion type (reduction given)
				Bit 2	Offer	Promotion type (offer given)
				Bit 3	Multi Saver	
				Bit 4	Ext Promotion	
				Bit 5	Not Net Promotion	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 6	Member Discount	Frequent shopper discount
				Bit 7	Discount Flag	Item/department discount allowed flag. Used in cases of promotions.
1	13	14	Discount Type			
4	14	18	Percent			
1	18	19	Return Type			
1	19	20	Tax Pointer or Discount Item			Tax flags of discountable items
4	20	24	Qty		Item quantity	
4	24	28	Price		Item price	
4	28	32	Amount		Discount amount	
1	32	33	Flag4			
				bit 0	Points given as a reward	
				bit 1	Customer Account Discount	
				bit 2	Ext Trs	Extended trs
				bit 3	Automatic Discount	
				bit 4	Delayed Promotion	(Lucky)
				bit 5	Report as tender	Report discount as tender (Lucky)
				bit 6	Not Net FS	Non-netted promotions/frequent shopper
				bit 7	Staff discount	(ROW)
1	33	34	Multiple Selling Unit (MSU)			Item MSU
2	34	36	Tender			Tender number (Lucky)
4	36	40	No Tax Amount			
4	40	44	Return Surcharge Percent			
20	44	64	Tail			
64			Total			

04 – Media

0 X 04

Explanation: Media refers to the type of payment at the POS terminals. This Opcode is recorded when a payment is made at the POS terminals. The transaction records the Number, Type, Time and Day, Amounts etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode			
2	1	3	Media		Tender number	
1	3	4	Flag 1	bit 0	Change	Change given
				bit 1	Rounding	Rounding done
				bit 2	Subtract	Tender subtracted
				bit 3	Cancel	Tender canceled
				bit 4	Was Canceled	Fuel: tender canceled
				bit 5	Return	Not used
				bit 6	Given as a reward redemption	Redemption
				bit 7	Tender Purchase	
1	4	5	Flag 2	bit 0	Multi part receipt	Print multi part receipt
				bit 1	Confirm signature	
				bit 2	Charge Posting	Charge posting tender
				bit 3	ECCA	Use ECCA with this tender
				bit 4	ECCA defined	ECCA record defined
				bit 5	Issue number Used opt_issue_no_used	
				bit 6	Accept Issue Date	
				bit 7	Accept Exp. Date	
1	5	6	Flag 3	bit 0	MCR Used	Magnetic Card Reader used
				bit 1	Authorization checked	Authorization done
				bit 2	Not Authorized	Authorization not done
				bit 3	Account	Account number field used
				bit 4	EFT print data	
				bit 5	Acc auth Alpha	Account number transaction follows
				bit 6	Media_ext	Media extensions transaction follows

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 7	Accept auth number	Account number entered manually
1	6	7	Flag 4	bit 0	Next Car Info	Car info TRS follows
				bit 1	Buyaid	Tender is a buy aid
				bit 2	ECCA New	New ECCA record
				bit 3	EFT Authorization	Authorized by EFT
				bit 4	Coupon sale	
				bit 5	Next chq guarantee	Check guarantee TRS follows
				bit 6	Cashback	
				bit 7	Reverse balancing	Customer account purchase or payment
1	7	8	Type		Tender type or Class	
4	8	12	Amount		Tender amount or cash back	
4	12	16	Foreign Amount		Foreign currency amount	
4	16	20	Foreign Rate		Foreign currency rate	
2	20	22	Issue Date			
10	22	32	Account Number			
2	32	34	State Code		USA State Code	
2	34	36	Exp Date			
4	36	40	Auth Number			
1	40	41	Card Range Number			
1	41	42	Flag 5	bits0-4	Account length	
				bit 5	Forced positive amount	
				bit 6	Opt deposit from	
				bit 7	Media extension 2 follows	Media Extension 2 follows
1	42	43	Issue Number			
1	43	44	Count		Tender count	
20	44	64	Tail			
64			Total			

05 – Ticket Total

0 X 05

Explanation: Ticket total refers to the total amount displayed at the end of a transaction, and is recorded when the customer pays the amount due, sending the following fields: Ticket Number, Value, Number of Items, etc. It also specifies the type of ticket, for example, a Coupon Tender.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		0x05 Ticket Total (End of Ticket Transaction)	
1	1	2	Flag1	Bit 0	Ticket Total	1 – Ticket total 0 – Not a ticket total TRS
				Bit 1	Voided Ticket	
				Bit 2	Saved Ticket	
				Bit 3	Recalled Transaction	
				Bit 4	Drive-off (Garage)	
				Bit 5	Quick Store (Quick)	TESCO: Quick Terminal
				Bit 6	Info. to update PC with post Grand Total	Grand total transaction
				Bit 7	Tender Purchase	Tender Purchase Ticket
1	2	3	Flag2	Bit 0	Coupon Ticket	First item was a coupon
				Bit 1	Tender Ticket	First item was a tender
				bit 2	IH Payment	First item is IH payment
				bit 3	IH Purchase	First item is IH purchase
				bit 4	op_send_to_email	Send ticket by email
				bit 5	Send to Q-Buster	Send to Q-Buster @POS
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	Ticket Number			
4	5	9	Tax Value			
2	9	11	Items		Number of items	
4	11	15	Amount		Total ticket value	
4	15	19	Discount		Not Used	
4	19	23	Nt_Amount		Not Used	
4	23	27	Nt_Discount		Not Used	
6	27	33	Grand Total		POS grand total sales value	
1	33	34	Return Type		Return type number (if a return ticket)	

Bytes	From	To	Data	Bits	Explanation	Remarks
4	34	38	Food Stamp Real Payment			
4	38	42	Amount Without Electronic Coupons		Total amount excluding electronic coupons	
2	42	44	Reserved			
20	44	64	Tail			
64			Total			

06 – Tax

0 X 06

Explanation: This Opcode records the taxes paid or exempted. The data recorded includes Tax Numbers, Taxable Amounts, and the actual Tax Amount, etc. The opcode also reflects reward by tender tax data. The tax data structure is the same for both opcodes 0x06 and 0x0D, but the tax calculations are based on different taxable amounts.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		Ticket Tax information	
1	1	2	Tax Number			
4	2	6	Taxable Amount			
4	6	10	Tax Amount			
1	10	11	Flag 1	bit 0	Exemptible	Tax exempt given
				bit 1	Tax Included	GST inclusive tax
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
10	11	21	Tax Exempt Number			19 digits right justify
4	21	25	Food Stamp Forgive Taxable			
4	25	29	Food Stamp Forgive Tax			
4	29	33	No Tax Amount			Not used by UK
4	33	37	Tax Refund Amount			
7	37	44	Reserved		Not Used	
20	44	64	Tail			
64			Total			

07 – Float

0 X 07

Explanation: The Float is the amount of cash originally registered at the start of a shift. The data recorded includes how much money in the Float, how much money was added to the Float, the Amount, the Tender Number, POS No., etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		07 Float	
1	1	2	Function		01- Opening Float 02- Add on float 03- POST add on float	
4	2	6	Amount			
2	6	8	Count			
1	8	9	Tender Number			
4	9	13	Total		PC generated options	
1	13	14	Flag	bit 0	Previous period	
				bit 1	Don't update Employee record	
				bit 2	Reprocess	B/O Use
				bit 3	Remote	B/O Use
				bit 4	Amount_int64	B/O Use
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	14	15	PC_no			
1	15	16	POS_no			
4	16	20	Supervisor No.			SAL54
4	20	24	Safe Number			B/O Use
8	24	32	Amount 2			B/O Use
4	32	36	Carry Over Amount		Amount kept	
2	36	38	Carry Over Count		Amount kept	
6	38	44	Not Used			
20	44	64	Tail			
64			Total			

08 – Coupon

0 X 08

Explanation: This Opcode refers to the type of Coupon Tender used. Data recorded includes Quantities, Amounts, Tender Numbers, Tender Type, Coupon Department, Name and Code, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		08 – Coupon	
1	1	2	Flag 1	bit 0	Subtract	
				bit 1	Cancel	
				bit 2	Suppress Bonus Coupon	
				bit 3	Ext coupon information transaction	
				bit 4	Department net	
				bit 5	Bonus Coupon followed	
				bit 6	Cost Plus	
				bit 7	Chained Previous Item	
1	2	3	Flag 2	bit 0	Store Coupon	
				bit 1	Vendor coupon	
				bit 2	Bonus coupon	
				bit 3	UPC5 coupon	
				bit 4	FS Payment	Food stamp payment
				bit 5	Discount Allowed	
				bit 6	Manual entered amount	
				bit 7	Manual entered department	
4	3	7	Qty			
4	7	11	Amount			
2	11	13	Tender Number			
1	13	14	Tender Type			
2	14	16	Coupon Dept.			
7	16	23	Coupon Code			
16	23	39	Coupon Name			
1	39	40	Tax Pointer			
2	40	42	Minimum Qty			
2	42	44	Plus Amount			
20	44	64	Tail			
64			Total			

09 – Cash Lift

0 X 09

Explanation: Cash Lift refers to the money taken out of the drawer. The data records Amounts, Counts, Tender Numbers, Number of POS, etc. This is the opposite process to when the Float Opcode is transacted.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		09 – Cash Lift	
1	1	2	Function		01 – Regular 02 – POST pickup	
4	2	6	Amount			
2	6	8	Count			
1	8	9	Tender			
4	9	13	Reserved			
1	13	14	Flag			
				bit 0	Previous period	
				bit 1	Don't update employee record	
				bit 2	Reprocess	B/O Use
				bit 3	Remote	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	15	15	POS_no			
1	15	16	PC_no			
4	16	20	Supervisor number for pickup			SAL54
2	20	22	Cashier Number			
22	22	42	Not Used			
20	44	64	Tail			
64			Total			

10 – Non-Scanned Department

0 X 10

Explanation: Non-Scanned Department is recorded when an item is not scanned during a sale, recording the Department Number, Options available, POS Terminal Number and Amounts.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		10 – Non-Scanned Department	
2	1	3	Department			
1	3	4	Option		Not used	
1	4	5	Option 1		Not used	
1	5	6	POS Terminal Number			
1	6	7	Product Code			
4	7	11	Amount			
33	11	44	Not Used			
20	44	64	Tail			
64			Total			

11 – PLU Sale Extension Record

0 X 11

Explanation: The PLU Sale Extension record is the PLU sales recorded over and above the regular sales, for example, Garage sales, including Fuel Transactions, Pump, Fuel Grade, Quantities, Prices and Amounts.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		11 – PLU Sale Extension Record	
7	1	8	PLU Code			
1	8	9	Flag 1			
				bit 0	Pump Test	Fuel pump test trs
				bit 1	Fuel Transaction	Fuel transaction
				bit 2	Recalled Transaction	ALB Fuel/TESCO Garage. Fuel recalled trs
				bit 3	Drive Off	ALB Fuel drive off.
				bit 4	Prepay Transaction	ALB Fuel pre paid trs.
				bit 5	Post pay accepted	Index/defect
				bit 6	Post pay paid	Index/defect
				bit 7	Manual Fuel	
1	9	10	Flag 2			
				bit 0	CS Tax Comb.	
				bit 1	Self Scanning Additional Item	
				Bit 2	External modify	
				Bit 3	Void sequence number	
				Bit 4	Void sequence number cancel line	
				Bit 5	PLU price original	
				bit 6	Opt Lane Hawk item	
				bit 7	Not Used	
1	10	11	Pump Number			
1	11	12	Fuel Grade		Grade Number	
4	12	16	Pump Transaction Number			Synch number
1	16	17	Nozzle			
4	17	21	Quantity			Copy of values from PLU transaction –

Bytes	From	To	Data	Bits	Explanation	Remarks
						needed for SQL tables, not used in TESCO
4	21	25	Price			
4	25	29	Amount			
4	29	33	Fuel Display Price			3 decimal digits
4	33	37	Amount			Non GST amount
4	37	41	External sale handle			QSR Merge Diff
2	41	43	Prepay ticket no.		Need to know original prepay ticket number in case of multiple prepay recalls.	
1	43	44	Publication issue			
20	44	64	Tail			
64			Total			

12 – Department Sale Extension Record

0 X 12

Explanation: The Department Sale Extension Record records Department Sales over and above the regular Department Sales, for example, Garage and Fuel connected sales. The data refers to the Pump Number, Fuel Transaction, Price, Amount, Quantity, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		12 – Department Sale Extenuation Record	
2	1	3	Department Number			
1	3	4	Flag 1			
				bit 0	Pump Test	
				bit 1	Fuel Transaction	
				bit 2	Recalled Transaction	Alb Fuel / TESCO Garage
				bit 3	Current Transaction	TESCO Garage
				bit 4	Drive off	ALB Fuel
				bit 5	Self scanning additional item	
				bit 6	Post pay accepted	
				bit 7	Post pay paid	
1	4	5	Flag 2			
				bit 0	Opt prepay transaction	
				bit 1	Opt void sequence number	
				bit 2	Opt void sequence number cancel line	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	Pump number			
1	6	7	Fuel Grade			
4	7	11	POS Pump Transaction Number			
1	11	12	Nozzle			Copy of values from

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
						DEP transaction – needed for SQL tables, not used in TESCO.
4	12	16	Quantity			
4	16	20	Price			
4	20	24	Amount			
4	24	28	Fuel Display Price			(3 decimal digits)
16	28	44	Reserved			
20	44	64	Tail			
64			Total			

13 – Discount Ext

0 X 13

Explanation: This opcode is recorded when a discount is given on an item, and you are specifying the mark down department, from which the discount is calculated. In addition, target messages are recorded, and supported by Organized Receipt.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		13 – Discount Ext.	
7	1	8	Number		Item number (if a discount is given to an item)	
2	8	10	Department Number			
1	10	11	Flags	bit 0	Markdown department	Indicates the markdown department in which the discount was given.
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	11	13	Message Reward Limit			Reflection of the promotion's configuration.
6	13	19	Multi Reward			For target message. Code support 6 multi rewards but currently only 2 are used. If in the future more are required they could be added in another transaction.
12	19	31	Dec Multi Reward			For target message. Code support 6 decimal multi rewards but currently only 2 are used. If in the future more are required they could be added in another transaction.

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
10	31	41	Target Template			The name of the target message name.
3	41	44	Not Used			
20	44	64	Tail			
64			Total			

14 – Media Extension Record

0 X 14

Explanation: The Media Extension Records are advanced details on the Media types, and records fields such as Fee Types, Media Numbers, Table Numbers, Bank Account, and Check Numbers. Flags are included defining whether the MICR is used or not, or if in a certain department, for example, the WIC Department, whether the tax is exempt or not.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode record		14 – Media extension	
2	1	3	Number			
1	3	4	Fee type			
1	4	5	Table Number			
1	5	6	Flag 1			
				bit 0	Tender_req_add_fee	
				bit 1	Fee Tender	
				bit 2	Payment is change	
				bit 3	MICR used	
				bit 4	WIC Tax Exempt	
				bit 5	Tender Correction	
				bit 6	Duplicate Receipt	
				bit 7	Barcoded tender	Coinstar
21	6	27	Extension Description			
9	27	36	Bank Account			
6	36	42	Check Number			
1	42	43	Flag 2			
				bit 0	Deposit	
				bit 1	Withdrawal	
				bit 2	Coupon Coin Sale	
				bit 3	opt_bag_refund	
				bit 4	Cashback balance	Cashback balance transaction
				bit 5	EFT_ext	
				bit 6	EFT Force Transaction	
				bit 7	Debit savings	
1	43	44	Flag			
				bit 0	PIN used	
				bit 1	Tender rewarded	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bits 2-7	Not Used	
20	44	64	Tail			
64			Total			

15 – Media Extension Record 2

0 X 15

Explanation: The Media Extension Record 2 is an Opcode that records enhanced media records when transacted, including the EFT Reference and Tender Numbers. The records are additional information to those in the Media and Media Extension Records.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode record 2		15 – Media extension	
11	1	12	Reference No.		EFT Reference Number	
1	12	13	Flags			
				Bit 0	Enhanced MPR Voucher print	
				Bit 1	Print Cash Balance	
				Bit 2	Print Food stamps Balance	
				Bit 3	Void Tender not allowed	
				Bit 4	Voucher Tender	Return Voucher Redemption
				Bit 5	Voucher	Loyalty Voucher Redemption
				Bit 6	Media Ext 3	
				Bit 7	Print Gift Card Balance	
2	13	15	EFT Tender No.			
8	15	23	Settlement Date			Quest DDYYMM
1	23	24	Card Type			Quest
2	24	26	Account Type			Quest
2	26	28	Transaction Type			Quest
5	28	33	Sequence Number			
11	33	44	EBT Voucher Number			
20	44	64	Tail			
64			Total			

16 – Payout/Receipt Record

0 X 16

Explanation: The Payout/Receipt Record Opcode is used when payouts and receipts are transacted, recording the Expense Code, References, Amounts and VAT Amounts, Tender Number etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		16 – Payout/Receipts	
1	1	2	Expense Code			
10	2	12	Expense Reference		10 Characters	
4	12	16	Amount			
1	16	17	Tender number		For future use	
1	17	18	Flags			
				bit 0	POS accountability	
				bit 1	Reprocess	B/O Use
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Paid Out	
				bit 7	Receipt	
4	18	22	Expense Code		Enhanced expense code number	
4	22	26	VAT Amount			
18	26	44	Not Used			
20	44	64	Tail			
64			Total			

17 – Information T7E

0 X 17

Explanation: V7 EFT for Philippines

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		17 – Trans_Info_T7E	
6	1	7	Invoice Number			
1	7	8	Err_t7e_no		1 – T7 of-line (sale) 2 – T7 of-line (void) 3 – Bank of-line (sale) 4 – Bank of-line (void)	
2	8	10	Tender Number			
6	10	16	Approval Code			
4	16	20	Ticket Amount			
4	20	24	Amount			
1	24	25	Flags			
				bit 0	Void without invoice	
				bit 1	Cancel_subtract_eft_t7e	
				bit 2	Non EDC	
				bit 3	Post void transaction	
				bit 4	Save transaction t7	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	25	26	cc_t7			
2	26	28	err_comm_t7			
2	28	30	Response Code			
14	30	44	Reserved			
20	44	64	Tail			
64			Total			

18 – Media Extension Record 3

0 X 18

Explanation: The Media Extension Record 3 is an Opcode that records enhanced media records when transacted, providing additional information to the records in the Media and Media Extension Records previously defined.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		18 – Media extension 3	
11	1	12	EBT Gen Number			
26	12	38	EBT Case Number			
1	38	39	Flags	Bit 0	Signature Capture Failed	
				Bit 1	ECC in Sequence	
				Bit 2	Fleet Card	
				Bit 3	Media Extension 4	
				Bit 4	EFT Card Data Is Masked	
				Bit 5	Media Extension 5	
				Bit 6	Biometrics EFT Transaction Flag	
				Bit 7	Display Negative Tender Amount Flag	
1	39	40	Flags	Bit 0	Barcode Tender Coupon	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	40	44	Cashback Value			
20	44	64	Tail			
64			Total			

19 – Media Extension Record 4

0 X 19

Explanation: The Media Extension Record 4 is an Opcode that records enhanced media records when transacted, providing additional information to the records in the Media and Media Extension Records previously defined. It is mainly for the addition of locally issued barcodes identified in a transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		19 – Media extension 4	
10	1	11	Fleet Vehicle ID			BCD
1	11	12	Fleet Vehicle ID Length			
5	12	17	Fleet Odometer			BCD
1	17	18	Fleet Odometer Length			
2	18	20	EFT Card Type ID			ASCII
16	20	36	EFT Card Type Description			
6	36	42	EFT Trace Number			BCD
2	42	44	EFT Slot Number			BCD
20	44	64	Tail			
64			Total			

20 – Log Function

0 X 20

Explanation: The Log Function records all the Logs generated. The functions include all details from the time the POS is on-line to the time it is off-line, including sign on time, the POS Terminal Mode, Reports printed by the POS, Starting and Ending special printouts, as well as the POS status. In addition, the Cashier Number, Ticket Number, Passwords, Type of Transaction and Drawer in use, are also fields registered within the Log Function. The Log Function also records long cashier passwords entered at the POS.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		20 – Log Function	
1	1	2	Function		01 – Power Up	
					02 – Store Open	
					03 – Store close (EOD)	
					04 - Automatic Recover Ticket	
					11 – Sign On	
					12 – Sign Off	
					13 – Enter Secure mode	
					14 – Exit Secure mode	
					15 – Enter Wait mode	
					16 – Exit Wait mode	
					17 – Enter Training mode	
					18 – Exit Training mode	
					19 – Password Change	
					20 – Cashier Locking (zero cashier totals)	
					21 – Transfer current shift to previous	Move totals to previous, Zero current
					22 – X Read	
					23 – POS Report	
					24 – POS total to previous, zero current	
					25 – Reserved for PC Usage	
					26 – Start Special Printout	
					27 – End Special Printout	
					28 - Store Board Message	
					29 – START Reorg Print	
					30 – END Reorg Print	
					99 – PC Start of Day	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
2	2	4	Cashier number			
2	4	6	Secret Number			
1	6	7	Flag 1			
				bit 0	Off-line exe	
				bit 1	Remote command	
				bit 2	Reprocess	Process only if in reprocess mode
				bit 3	Force CMD	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	End of Period	
1	7	8	POS Status			
					0x00 Cold Stand by	
					0x01 Stand by	
					0x02 Idle	
					0x04 No Sale	
					0x08 Sale	
					0x10 Tender	
					0x20 Idle Stand by 1	
					0x40 Idle Stand by 2	
2	8	10	Ticket Number			
2	10	12	Old Password			
2	12	14	New Password			
1	14	15	POS Number			
2	15	17	Used Drawer 1			
2	17	19	Used Drawer 2			
21	19	40	Text			
1	40	41	Cashier Message No.			
1	41	42	Flag			
				Bit 0	Reset Message	
				Bit 1	Set Message	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 6	Not Used	
				Bit 7	Not Used	
2	42	44	Code			
20	44	64	Tail			
64			Total			

21 – Ticket Frame

0 X 21

Explanation: Every ticket printed by the POS terminal starts with the Opcode number 21. It is part of the framework of a ticket. Numbers of the POS, Cashier Number, Ticket Number, Type of Ticket, etc. are all recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		21 – Ticket Frame	
1	1	2	Flag 1			
				Bit 0	Start	
				bit 1	No Sale	Drawer is open
				bit 2	Negative	Tesco
				bit 3	EOD progress	Tesco
				bit 4	Save Transaction	Ticket was saved
				bit 5	Recall Transaction	Ticket was recalled
				bit 6	Void Transaction	Post-void
				bit 7	Tender Purchase	
1	2	3	Flag 2			
				bit 0	Factura ticket	
				bit 1	WIC Ticket	WIC transaction
				bit 2	Frequent Shopper	Frequent shopper ticket
				bit 3	Charge Payment	Account payment
				bit 4	Reverse Payment	Account payment reversal
				bit 5	Confirm price	
				bit 6	Give Cash only	On a return transaction give cash only
				bit 7	Multi Tender allowed	On a return transaction allow multi tenders.
1	3	4	Return Type			Return type number
2	4	6	Ticket number			Ticket number
2	6	8	Void Ticket No.			Post-void: original ticket number
2	8	10	Recall Ticket number			Recall the original (saved) ticket no.
2	10	12	Factura number			
15	12	27	Factura ID			
2	27	29	WIC Issue Date	bits 0-4	Wic issue day	
				bits 5-15	Wic issue year	

Bytes	From	To	Data	Bits	Explanation	Remarks
2	29	31	Wic Exp Date	Bits 0-4	Wic exp day	
				Bits 5-15	Wic exp year	
4	31	35	Wic Info	Bits 0-3	Wic issue month	
				Bits 4-7	Wic exp month	
				Bits 8-31	Wic amount	
3	35	38	Store number			
1	38	39	Recall POS Number			Recall original POS number
1	39	40	Garage flags	bit 0	Opt_balancing Drive off balancing ticket	
				Bit 1	Opt_ctp	lay by (was customer to pay)
				bit 2	Drive off	
				bit 3	Fuel Test	
				bit 4	Family-favorite choices	
				bit 5	Store count	Not a garage flag
				bit 6	QSR pre pack	
				bit 7	Take away	
1	40	41	Stuttafords flag	bit 0	Account cheque payment	
				bit 1	Charge enquiry	
				bit 2	Account payment	
				bit 3	Account fast payment	
				bit 4	Credit reentry	
				bit 5	Self scanning ticket	
				bit 6	Cash Deposit Withdrawal	Cash deposit
				bit 7	Express Order	Express ticket
1	41	42	Other flags	bit 0	WIC issue date	
				bit 1	Coupon Ticket	First item is coupon
				bit 2	Home shopping	
				bit 3	Tender Ticket	First item is a tender
				bit 4	IH Payment	First item is an IH payment
				bit 5	IH Purchase	First item is an IH purchase
				bit 6	Cash Purchase	Cash tender purpose

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 7	Deposit Ticket	
1	42	43	Home Shopping Origin Number			Tesco
1	43	44	Scan Point flags			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	WIC CVV ticket	
				bit 3	Self Scanning Void	
				bit 4	Barcoded Tender	Coinstar
				bit 5	Processed late swipe	
				bit 6	Self Scanning Rescan	
				bit 7	Fuel Post Void	
20	44	64	Tail			
64			Total			

22 – PLU Sale Extension Record 2

0 X 22

Explanation: The PLU Sale Extension Record is used to record Liquor and Tobacco sales. The Code and Liquor Type are recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		0x22 – PLU Sale Extension Record 2	
7	1	8	Code		PLU Code	
1	8	9	Liquor Type		Liquor/Tobacco type	
1	9	10	Flag	Bit 0	Bonus Item	
				Bit 1	Pick Quantity Zero	
				Bit 2	Home Delivery Charge	Indicates delivery charge PLU sale.
				Bit 3	Parcel Pick Charge	Indicates delivery charge PLU sale.
				Bit 4	Extra Code	Indicates extra code value is valid.
				Bit 5	Price Override Calculation	CC & C pricing
				Bit 6	Online Purchase Item	
				Bit 7	Lay By Fee Sale	
IF PRJ ROW						
4	10	14	Quantity		Quantity sold	
4	14	18	Price		Item price	
4	18	22	Amount		Amount Taken	
1	22	23	Price Type		Price Type	
2	23	25	Multi Sell Unit		MSU	
5	25	30	Out of stock code			
Else						
20	10	30	Extra Code		Extra Code	
IF PRJ ROW						
7	30	37	BCD Internal Item Code		BCD Internal Item Code	
Else						
7	30	37	BCD Original Item Code		BCD Original Item Code (The item code filtered from the drill	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
					down of an item)	
1	37	38	Flag 1			
				Bit 0	Additional Receipt Item	
				Bit 1	Prohibit Discount	
				Bit 2	Gift Card Balance Item Sale	
				Bit 3	Not Found Sale	Used for not found sale with PLU groups.
				Bit 4	Item Sold By Barcode Programming	
				Bit 5	Lay By Modify Refund Item	
				Bit 6	Delivery Item	
				Bit 7	External POS Item	
1	38	39	External Item Ref			
1	39	40	Flag 2			
				Bit 0	Depositable Item	
				Bit 1	Stock Allocation Type	
				Bits 2-6	Stock Mng. Bits	
				Bit 7	Option Bill Payments	
1	40	41	Flag			
				Bit 0	Do not increase item count	
				Bit 1	Online purchase item include commission	
				Bit 2	Extra Fee Sale	
				Bit 3	Cancelled Item	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	41	42	Not Used1			
2	42	44	Original PLU Sequence No.			The sequence number of the PLU in the original ticket (Before save/recall).
20	44	64	Tail			
64			Total			

24 – Media UK Ext

0 X 24

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		24 – Media UK Ext.	
2	1	3	Number			
1	3	4	Flags			
				bit 0	ICC Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
40	4	44	Not Used			
20	44	64	Tail			
64			Total			

25 – Dummy Ticket Total

0 X 25

Explanation: Refer to the transaction number 0x05 – Ticket Total for further details.

26 – Media Ext5

0 X 26

Explanation: This is the 5th extended Media Transaction. The Media Extension records are advanced details on the Media Types and record fields such as: Fee types, Media numbers, Table numbers, Bank accounts, Check numbers, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		26 – Media Ext. 5	
6	1	7	PO Number		POS Number	
1	7	8	PO Number Length		POS Number Length	
4	8	12	RX Tender Amount		Prescription tender amount.	
4	12	16	Non RX Tender amount		Non Prescription tender amount	
1	16	17	External Validation Against			0 –None, 1- LPE
7	17	24	Triggering Coupon		The coupon that generated the tender	
3	24	27	Expiration Date			BCD - YYMMDD
2	27	29	CVV Index			
1	29	30	Flag	Bit 0	Is WIC CV Voucher Info Available	
				Bits 1-7	Not Used	
13	30	43	Not Used			
1	43	44	Flag	Bit 0	Media Ext 6	
				Bit 1	Opt FSA Tender	
				Bit 2	Opt MTX Receipts Retrieved	
				Bit 3	Coupon Generated Tender	
				Bit 4	Accepted In Sale Mode	
				Bit 5	ECC In Sequence	
				Bit 6	Signature Capture In Sequence	
				Bit 7	Signature Is Confirmed	
20	44	64	Tail			
64			Total			

27 – Discount Ext2

0 X 27

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		27 – Trans Discount Ext2	
10	1	11	Offer Code		Offer code number	
4	11	15	Bonus Points			
29	15	44	Not Used			
20	44	64	Tail			
64			Total			

50 – Transaction Info Ticket Frame

0 X 50

Explanation: This opcode is recorded at the start and end of a transaction recording the action that calls start/end info ticket frame.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		50 Transaction Info Ticket Frame	
1	1	2	Flag	Bit 0	Start Info Ticket	Indication of start/end ticket transaction
				Bit 1	Print discount total amount	1 Not used
				Bit 2	Not used	
				Bit 3	Not used	
				Bit 4	Not used	
				Bit 5	Not used	
				Bit 6	Not used	
				Bit 7	Not used	
4	2	6	Action		The actions are: 1 – Sign On Action 2 – Sign Off Action 3 X Report Action 4 – End Of Day Action 5 – Doc Setting Action 6 – Gift Receipt Action 7 – Gift Card Enq Action 8 – Reorg Receipt Finish Media 9 – Doc Local Print Action 10 Add Float Action (trs number 0x07) 11 – Pickup Action (trs number 0x09) 12 – Declaration action (trs number 0x0B) 13 – Payout Action (trs number 0x16) 14 – Receipt Action (trs number 0x16) 15 – POS Shift Action 16 – Price Update Action	2 - Action that calls start/end info ticket frame

Bytes	From	To	Data	Bits	Explanation	Remarks
2	6	8	Shift ID		Shift management in Remote Office	
36	8	44	Not used			
20	44	64	Tail			
64			Total			

Opcode 56, Sub-Opcodes: 0 X 00 to 0 X 34

The Opcode number 56 refers to all the cash office functions. It is a general transaction. A Sub Opcode defining the function differentiates each one of the Opcode numbers 56.

56 – Cash Office

0 X 56

Explanation: The Cash Office Opcode records all safe locking functions the POS generates in connection with the Cash. The safe locking assures that the transaction is a Deposit, or a Receipt. There are also flags defining if the Cashier, POS or Safe is locked, etc., indicating that the Tender that has been counted and declared as being in the safe, is recorded as the starting Tender balance for further trading.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function Safe Locking		00 – Cashier/POS/Safe Locking	
					1 – Deposit	
					2 – Receipt	
					3,4 – Tender Exchange (see struct trs_coff_exchange_) ROW	
					05 – New Safe	For V8
					30 – Update safe expected amount in SAFE_TRANS	
4	2	6	Amount			
2	6	8	Count			
1	8	9	Tender			
1	9	10	Flags	bit 0	Lock Cashier	
				bit 1	Lock POS	
				bit 2	Lock Safe	
				bit 3	Reprocess	Process only if in reprocess mode.
				bit 4	Update Safe	Update safe with cashier/pos declaration.
				bit 5	Previous Period	
				bit 6	Header	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 7	Info	
2	10	12	Cashier/POS No.			
1	12	13	PC Number			
2	13	15	Bank ID			
16	15	31	Reference			
1	31	32	Flag	bit 0		
				bit 1		
				bit 2		
				bit 3		
				bit 4		
				bit 5		
				bit 6		
				bit 7		
8	32	40	Amount 2			
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

00 – Cash Office Safe Locking

0 X 00

Explanation: Locking the safe transfers the declared Tender balances to the In Safe figures in the safe records.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		00 – Cashier/POS 05 – New Safe	
4	2	6	Amount			
2	6	8	Count			
1	8	9	Tender			
1	9	10	Flags	Bit 0	Lock Cashier	
				Bit 1	Lock POS	
				Bit 2	Lock Safe	
				Bit 3	Reprocess	Process only if in reprocess mode
				Bit 4	Update Safe	Update safe with Cashier/POS declaration.
				Bit 5	Previous Period	
				Bit 6	Header	
				Bit 7	Info	
2	10	12	Key		Cashier/POS Number	
1	12	13	PC Number			
2	13	15	Bank ID			
16	15	31	Reference			
1	31	32	Flag	Bit 0	Amount	If this Bit is set On, then use the Amount2 field from Bytes 32-40.
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
8	32	40	Amount2			

Bytes	From	To	Data	Bits	Explanation	Remarks
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

0B/OC – Cash Office Deposit/Receipt

0 X 0B

Explanation: When the function ‘OB’ is used, the Deposit function is used. The Deposit function records when a Tender is removed from the Store safe for deposit in the Bank, recording the Tender, User, PC Number, Bank ID, etc. When the function ‘OC’ is used the Receipt function is used. The Receipt function records when a Tender is added from the bank to the Store Safe. Deposits and Receipts affect the In-Safe totals.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		0B – Deposit 0C – Receipt	
8	2	10	Amount			
2	10	12	Count			
1	12	13	Tender			
1	13	14	Flags	Bit 0	Not Used	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Reprocess	Process only if in reprocess mode
				Bit 4	Not Used	Update safe with Cashier/POS declaration
				Bit 5	Not Used	Update safe with Cashier/POS declaration
				Bit 6	Header	
				Bit 7	Info	
2	14	16	User		Cashier/POS Number	
1	16	17	PC Number			
2	17	19	Bank ID			
16	19	35	Reference			
2	35	37	Safe Number			
3	37	40	Trade Date		Trading date	
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

OD – Cash Office Declare Safe

0 X 0D

Explanation: The Declare Safe function records the process of counting the Tender in the Store Safe. The Amount, Tender, User number, Reference, PC number, and the Safe number with which the declaration is associated are all recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		0D – Declare Safe	
8	2	10	Amount			
2	10	12	Count			
1	12	13	Tender			
1	13	14	Flags	Bit 0	Reprocess	Process only if in reprocess mode
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Info	Informative only
2	14	16	Safe Number			
2	16	18	User Number			
16	18	34	Reference			
9	34	43	Not Used			
1	43	44	PC Number			
20	44	64	Tail			
64			Total			

OE – Cash Office Safe Lock

0 X 0E

Explanation: Locking the safe transfers the declared Tender balances to the In Safe figures in the safe records.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		0e – Safe Lock	
8	2	10	Amount			
2	10	12	Count			
1	12	13	Tender			
1	13	14	Flags	Bit 0	Reprocess	Process only if in reprocess mode
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Header	Header record
				Bit 7	Info	Informative only
2	14	16	Safe Number			
2	16	18	User Number			
16	18	34	Reference			
9	34	43	Not Used			
1	43	44	PC Number			
20	44	64	Tail			
64			Total			

15 – Cash Office Safe Transfer

0 X 15

Explanation: The Safe Transfer records when a transaction is made to withdraw a Tender from the cash draw and placed in the safe, after the cashier has accounted for and balanced the Tender in their possession.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		15 – Safe Transfer	
8	2	10	Amount			
2	10	12	Count			
1	12	13	Tender			
1	13	14	Flags	Bit 0	Not Used	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Reprocess	Process only if in reprocess mode
				Bit 4	Not Used	Update safe with Cashier/POS declaration
				Bit 5	Not Used	Update safe with Cashier/POS declaration
				Bit 6	Header	Header record
				Bit 7	Info	Informative only
1	14	15	PC Number			
16	15	31	Reference			
2	31	33	Source Safe			
2	33	35	Destination Safe			
9	35	44	Not Used			
20	44	64	Tail			
64			Total			

1B – Transaction Deposit Receipt Bank Account

0 X 1B (27)

Explanation: The Deposit Receipt Bank Account function serves as an enhancement to the existing Bank Account ID. The bank account ID can contain up to 30 characters. When a bank operation is performed, the bank account ID is extracted into the CashOffice log and transaction log files.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		1B(27) – Deposit Receipt Bank Account	
2	2	4	Bank ID			Current bank ID
30	4	34	Bank Account			Current bank account number
10	34	44	Not Used			
20	44	64	Tail			
64			Total			

1D – Cheque List

0 X 1D

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		29 trans coff cheque list	
2	2	4	POS Number			
10	4	14	Sequence Number			
2	14	16	Tender Number			
2	16	18	Action Code		Pickup Cheque – 1 Tender Correction – 2 Pickup and Edit Amount – 3 ROA Add Cheque – 4 Safe Transfer – 5 Bank Deposit – 6 Edit ECCA Account – 7 Edit Bank Name – 8	
1	18	19	Flag	Bit 0	Reprocess	18 Process only if in reprocess mode
				Bit 1	Not Used	18 Not used
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
20	19	39	Update Data			
5	39	44	Not Used			
20	44	64	Tail			
64			Total			

19 – Cash Office Over Short Lock

0 X 19

Explanation: The Over Short Lock function records when the declared (counted) Tender is less than the system calculated as In Safe Tender (reflected as ‘Short’) and when the declared Tender is greater than the expected Tender, the calculated amount is reflected as ‘Over’. The Amount, Lock Type, Date, Tender number are all recorded. The Lock Type records when the Cashier, POS, or Safe, transfer the declared tender to the In Safe figures in the safe records.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		19 – Over Short Lock	
8	2	10	Amount			
4	10	14	User ID			
4	14	18	Manager ID			
1	18	19	Lock Type		1 – Cashier 2 – POS 3 – Safe	
3	19	22	Start Date		YYMMDD	
3	22	25	End Date		YYMMDD	
2	25	27	Key		Cashier/POS/Safe Number	
2	27	29	Tender Number			
15	29	44	Filler			
20	44	64	Tail			
64			Total			

20 – Cash Office Buy Aid Declaration

0 X 20

Explanation: A Buy Aid is a type of voucher, a document/form issued by a Buy Aid company (not ISS45). This function records the amount, company name, member number, voucher number etc., for Buy Aids during the cashier declaration. The Cash Office staff declares the details of each Buy Aid tender. The details can be reviewed in the cashier specific declaration type report.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		19 – Buy Aid Declr	
8	2	10	Amount			
2	10	12	Count			
1	12	13	Tender			
1	13	14	Flag			
				Bit 0	Reprocess	Process only if in reprocess mode
				Bit 1	Previous Period	
				Bit 2	POS Mode	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	Informative only
2	14	16	Safe No.			
6	16	22	Member Number			
9	22	31	Voucher Number			
2	31	33	Company Number			
2	33	35	iKey		Cashier or POS Number depending on the POS account in system.	
9	35	44	Not Used			
20	44	64	Tail			
64			Total			

21 – Cash Office Entry Docket Declaration

0 X 21

Explanation: A Docket is a type of voucher, a document/form issued by a company (not ISS45). This function records the amount, account number, order number, and docket number, for docket during the cashier declaration. The Cash Office staff declares the details of each entry docket tender. The details can be reviewed in the cashier specific declaration type report.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	Function		20 – Entry Docket Declr	
1	2	3	Sub Function		0 – Main Information 1 – Additional Information	
Struct Info 1						
8	3	11	Amount			
2	11	13	Count			
10	13	23	Account Number			
5	23	28	Not Used			
Struct Info 2						
16	3	19	Order Number			
9	19	28	Docket Number			
1	28	29	Tender			
1	29	30	Flag			
				Bit 0	Reprocess	Process only if in reprocess mode
				Bit 1	Previous Period	
				Bit 2	POS Mode	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
2	30	32	Safe No.			
2	32	34	iKey		Cashier or POS Number depending on the POS account in system.	
10	34	44	Not Used			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

30 – Info Media Transfers

0 X 30

Explanation: This opcode records tenders that are transferred to the safe.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
2	1	3	SubOpcode		0x30	
1	3	4	Function		01 – Transfer Out 02 – Transfer In	
1	4	5	Flags			
				Bit 0	POS Cashier Accountability: 0 – cashier 1 – POS	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	5	9	Amount			
2	9	11	Count			
1	11	12	Tender			
1	12	13	Source POS No.			
2	13	15	Source Cashier No.			
1	15	16	Target POS No.			
2	16	18	Target Cashier No.			
2	18	20	Supervisor No.			
24	20	44	Not Used			
20	44	64	Tail			
64			Total			

33 – Safe Envelope

0 X 33

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	SubOpcode		0x33	TRANS_COFF_SAFE_ENVELOPS_TRANSFER
2	2	4	Sequence Number			
3	4	7	Date			
3	7	10	Time			
2	10	12	User ID			
2	12	14	From Safe			
2	14	16	To Safe			
2	16	18	Tender ID			
4	18	22	Amount			
1	22	23	Flag	Bit 0	Reprocess	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
21	23	44	Not Used			
20	44	64	Tail			
64			Total			

34– Safe Envelope Init

0 X 34

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		56 – Cash Office	
1	1	2	SubOpcode		0x34	TRANS_COFF_SAFE_ENVELOPS_INIT
2	2	4	Sequence Number			
3	4	7	Date			
3	7	10	Time			
1	10	11	Flag	Bit 0	Reprocess	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
33	11	44	Not Used			
20	44	64	Tail			
64			Total			

Opcode 60, Sub-Opcodes: 0 X 01 to 0 X FF

The Opcode number 60 refers to all the events logged by the POS that do not belong to any specific type of transaction registered. It is a general transaction. A Sub Opcode defining the function differentiates each one of the Opcode numbers 60.

01 – Item Not found

0 X 01

Explanation: This Sub Opcode is recorded every time an item is entered or scanned at the POS terminal, and is not found. The Back Office collects all this data in the Not found QDX file in order to keep a report on items not found on the system.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		01 – PLU Not Found	
7	2	9	Code		Item number	
1	9	10	Flag 1	bit 0	Scanned Item	Item was scanned
				bit 1	Inquiry	Item was looked up via inquiry
				bit 2	Info record	Informative record
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
34	10	44	Not Used			
20	44	64	Tail			
64			Total			

02 – EFT Comm. Fail

0 X 02

Explanation: The EFT Comm. Fail records when an external tender communication fails. The function includes many different options for the POS. e.g., information on the End Request, Fail Clear Input, Time Out on Ticket.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		02 – EFT Comm. Fail	
1	2	3	Sub Function			
Union						
Eft1						
8	3	11	Auth number			
10	11	21	Reference number			
5	21	26	Sequence number			
6	26	32	EFT trace number			
2	32	34	Tender number			
4	34	38	Tender amount			
3	38	41	Start time			
1	41	42	Flag	Bit 0	Opt MTX Receipts Retrieved	
				Bit 1	ECC In Sequence	
				Bit 2	PIN used	
				Bits 3-7	Not used	
2	42	44	Not Used			
Eft2						
11	3	14	Masked Account Number			
2	14	16	Expiration Date Year			
18	16	34	Payment Description			
4	34	38	Count			
6	38	44	Not Used			
Eft3						
41	3	44	EFT Owner Name			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

03 – Birthday

0 X 03

Explanation: The Birthday function is recorded when the sale of an item that is controlled with an age restriction is transacted, e.g., Alcohol. The item code triggers the function, prompting for the customers Age, Date, Month, and Year of birth, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		03 – Birthday	
1	2	3	Age			
1	3	4	Day		Date of Birth: Day	
1	4	5	Month		Date of Birth: Month	
2	5	7	Year		Date of Birth: Year	
1	7	8	Flags			
				Bit 0	Bio DOB Flg	Date of Birth obtained by PBT.
				Bit 1	Not Used bdate	
				Bit 2	Not Used bdate	
				Bit 3	Not Used bdate	
				Bit 4	Not Used bdate	
				Bit 5	Not Used bdate	
				Bit 6	Not Used bdate	
				Bit 7	Not Used bdate	
36	8	44	Not Used			
20	44	64	Tail			
64			Total			

04 – Tax Exempt

0 X 04

Explanation: The Tax Exempt function records the information registered when tax is exempted from the sale of an item. The POS registers the exemption number and specifies which tax is exemptible, if not all.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		04 – Tax Exempt	
1	2	3	Options		00 – Stop 01 – Start	
19	3	22	Exempt Number			
1	22	23	All Tax		Tax exempt for all taxes	
8	23	31	Tax		Allows to specify which tax is exempt	
1	31	32	Flag 1	bit 0	WIC Tax Exempt	Albertson's
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
12	32	44	Not Used			
20	44	64	Tail			
64			Total			

05 – Car

0 X 05

Explanation: The Car function refers to Fuel Station transactions. It is the information recorded when a car fuels, sending the Registration Number, Mileage, CVD, Range etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		05 – Car	
1	2	3	Flag 1			
				bit 0	Registration Number	
				bit 1	Mileage	
				bit 2	CVD	
				bit 3	Range	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
11	3	14	Registration Number			
11	14	25	Mileage			
1	25	26	CVD			
5	26	31	Range			
13	31	44	Reserved			
20	44	64	Tail			
64			Total			

06 – Checksum

0 X 06

Explanation: This Checksum function records on each PC: PLU Count and Checksum, Promotion Count and Promotion Checksum.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		06 – Checksum	
1	2	3	Flag 1			
				bit 0	No checksum performed	
				bit 1	Ignore PLU Maintenance	
				bit 2	Ignore BROM Maintenance	
				bit 3	PLU checksum failed	
				bit 4	Brom checksum failed	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	3	7	POS PLU Count			
4	7	11	POS PLU Checksum			
4	11	15	POS BROM Count			
4	15	19	POS BROM Checksum			
4	19	23	PC PLU Count			
4	23	27	PC PLU Checksum			
4	27	31	PC BROM Count			
4	31	35	PC BROM Checksum			
9	35	44	Reserved			
20	44	64	Tail			
64			Total			

07 – Background Load

0 X 07

Explanation: The Background Load is recorded when the POS loads, updates, or deletes items from the PLU list of items. The load is transferred from the Back Office to the POS.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		07 – Background load	
1	2	3	Flag 1			
				bit 0	Start PLU file load	
				bit 1	Stop PLU file load	
				bit 2	Start BROM file load	
				bit 3	Stop BROM file load	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	New Items			
2	5	7	Updated Items			
2	7	9	Deleted Items			
2	9	11	Errors			
33	11	44	Reserved			
20	44	64	Tail			
64			Total			

08 – Account

0 X 08

Explanation: The Account function records the details of customers store accounts at the end of the transaction, recording the Tender Number, Type, Account Number, Authorization Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		08 – Account	
2	2	4	Tender No.			Tender Number
1	4	5	Type			Tender type
21	5	26	Account			
9	26	35	Authorization Number			
9	36	44	Printed authorization number			
20	44	64	Tail			
64			Total			

09 – Bagger ID

0 X 09

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		09 – Bagger ID	
11	2	13	Bagger ID		Bagger name as captured at POS	
31	13	44	Reserved			
20	44	64	Tail			
64			Total			

0A – Charge Posting

0 X 0A

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0A – Charge posting	
16	2	18	cp_name			
12	18	30	cp_account_num			
1	30	31	cp_status			
4	31	35	cp_amount			
4	35	39	cp_balance			
4	39	43	cp_limit			
1	43	44	cp_upcharge			
20	44	64	Tail			
64			Total			

0B – Expense

0 X 0B

Explanation: The Expenses function records the information for all expenses, e.g., basic expenses, purchases, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0B – Expense	
1	2	3	Sub Function		1 – Basic 2,3 – Purchase 4 – Debtors 5 – Christmas Stamps 6,7 – Bad Debts Recovered 8 – Basic + VAT 9 – Salary 11 – Non Bankable 12 – Basic + Transaction Description 13 – Cost Center 14 – Additional Reference + Comments 15- Mileage Claim 16 – Automatic Machines	
1	3	4	Flag 1	bit 0	Payout	
				bit 1	Receipt	
				bit 2	Salary	
				bit 3	Option reprocess	Process TRS only in reprocess mode
				bit 4	Last ID	Use last transaction ID
				bit 5	Tender By Unit	If true, the Amount field will contain the quantity value
				bit 6	Is Last Transaction	First transaction in template
				bit 7	Is First Transaction	Last transaction in template
Info 1			Expense General			
40	4	44	Data			

Bytes	From	To	Data	Bits	Explanation	Remarks
Info 2			Expense Basic			
14	4	18	Reference			
4	18	22	Branch			
4	22	26	Expense Code			
2	26	28	Tender Type			
8	28	36	Amount			
2	36	38	Safe number			
2	38	40	User number			
1	40	41	Action			
1	41	42	PC No.			
1	42	43	Template Type			
1	43	44	Filler			
Info 3			Basic Expense 2			
4	4	8	Quantity			
3	8	11	Date			
33	11	44	Filler			
Info 4			Expense Basic VAT			
8	4	12	VAT Amount			
8	12	20	Double VAT Ref			
4	20	24	Quantity			
20	24	44	Filler			
Info 5			Expense Purchase 1			
8	4	12	VAT Amount			
8	12	20	Double VAT Invoice			
4	20	24	Grv Number			
2	24	26	Re Dept			
4	26	30	Quantity			
14	30	44	Filler			
Info 6			Expense Purchase 2			

Bytes	From	To	Data	Bits	Explanation	Remarks
28	4	32	Description			
12	32	44	Filler			
Info 7			Expense debtor			
8	4	12	VAT Amount			
7	12	19	VAT Invoice			
25	19	44	Filler			
Info 8			Expense Crst			Xmas
4	4	8	Agent			
4	8	12	Quantity			
32	12	44	Filler			
Info 9			Expense Account			
22	4	26	Account number			
4	26	30	Quantity			
14	30	44	Filler			
Info 10			Expense Account 2			
30	4	34	Name			
10	34	44	Initials			
Info 11			Expense Salary			
2	4	6	Type			
4	6	10	Quantity			
14	10	24	Batch code			
20	24	44	Filler			
Info 12			Non Bankable			
20	4	24	Ref Date			
20	24	44	Filler			
Info 13			Expense Cost Center			
7	4	11	Cost Center			
33	11	44	Filler			

Bytes	From	To	Data	Bits	Explanation	Remarks
Info 14			Additional References			
1	4	5	Type		0 – Add Reference 1 – Comment 1 2 – Comment 2 3 – Comment 3	
30	5	35	Add Reference			
9	35	44	Filler			
Info 15			Mileage Claim			
3	4	7	Drive No			
8	7	15	Mileage			
8	15	23	Price Per Mile			
10	23	33	Engine Size			
11	33	44	Filler			
Info 16			Expense Auto Machines			
2	4	6	Machine ID			
8	6	14	Open Read			
30	14	44	Filler			
20	44	64	Tail			
64			Total			

0C – Cost Percent

0 X 0C

Explanation: The Cost Percent function records the information on the cost percent of sales, sending the Old Percentages and the New Percentages in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0C – Cost Percent	
1	2	3	Flag 1			
				bit 0	Start	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	3	7	New Percent			
4	7	11	Old Percent			
33	11	44	Not Used			
20	44	64	Tail			
64			Total			

0D – Supervisor

0 X 0D

Explanation: The Supervisor function records information every time the Supervisor Card is needed at the POS, sending the data read from the Supervisor Scan Card.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0D – Supervisor	
1	2	3	Flag 1			
				bit 0	Scan Card	
				bit 1	Approved by RPO	This bit determines if the trs is approved at the POS or by RPO.
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	3	7	Supervisor ID			
1	7	8	Privilege			
1	8	9	Keylock			Does not exist in Tesco
20	9	29	Supervisor Name			
1	29	30	PLU Action			
1	30	31	Transaction Action			
13	31	44	Reserved			
20	44	64	Tail			
64			Total			

0E – Buyaid

0 X 0E

Explanation: The Buyaid Opcode registers when information on a tender type called Buyaid is sent from the POS. For example, Buyaid Number, Amount, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0E – Buyaid	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	Buyaid Number			
4	5	9	Amount			
4	9	13	Voucher Number			
20	13	33	Account			
11	33	44	Reserved			
20	44	64	Tail			
64			Total			

0F – Staff Discount

0 X 0F

Explanation: The Staff Discount function records the information when staff discounts are transacted. The Staff Number, Discount Amount, Number, Percent, Tender Number, etc., are all recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0F – Staff Discount	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
11	3	14	Staff Number		(ASCII null terminated)	
4	14	18	Discount Amount			
2	18	20	Discount Number			
4	20	24	Discount Percent			
2	24	26	Tender Number			
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

10 – ECCA 1

0 X 10

Explanation: The ECCA 1 function records the daily account records. The Name and Account are recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		10 – ECCA	
1	2	3	Sub Function		1 – Name (20) 2 – Address (30) 3 – Phone (10)	
10	3	13	Account			
1	13	14	Flag 1			
				bit 0	New_ec	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
20	14	34	Name			
30	14	44	Address			Union - the highest value 30
10	14	24	Phone			
9	34	43	Bank Number		Name Sub	
	44	53			Address Sub	
	24	33			Phone Sub	
21	43	64	Tail		Name Sub	
11	53	64			Address Sub	
31	33	64			Phone Sub	
64			Total			

10 – ECCA 2

0 X 10

Explanation: The ECCA 2 is a continuation of the daily accounts transaction, and the sub function is the Address. The Account and Address fields are recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		10 – ECCA	
1	2	3	Sub Function		2 – Address (30)	
10	3	13	Account			
1	13	14	Flag 1			
				bit 0	New	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
30	14	44	Address			
20	44	64	Tail			
64			Total			

10 – ECCA 3

0 X 10

Explanation: The ECCA 3 function is a continuation of the daily file transaction, sending the Account and Telephone number fields in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		10 – ECCA	
1	2	3	Sub Function		3 – Telephone (10)	
10	3	13	Account			
1	13	14	Flag 1			
				bit 0	New	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
10	14	24	Telephone			
20	24	44	Not Used			
20	44	64	Tail			
64			Total			

11 – Customer Information 1

0 X 11

Explanation: The Customer Information 1 function records customer information, sending the Customers Name in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		11 – Customer	
1	2	3	Sub Function		0 – Number (20) 1 – Name (40) 2 – Address (40) 3 – Address (40) 4 – Address (40) 5 – Phone (20) 6 – Date (12) 7 – Time (10) 8 – Customer Message (40) 9 – Name and VAT ID (Customer Account) 10 – Profession (Customer Account) 11 – Fiscal Office (Customer Account) 12 – New/Updated address 14 – Address 4 15 – Address 5 19 – Surname 28 – Company VAT 29 – Company Registration 30 – Bank Account number 31 – Detailed Tender	
1	3	4	Flag 1	bit 0 bit 1 bit 2 bit 3 bit 4 bit 5 bit 6	First Last Customer account Not Used Not Used Not Used Not Used	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 7	Not Used	
40	4	44	Data			
20	44	64	Tail			
64			Total			

11 – Customer Information 2

0 X 11

Explanation: The Customer Information 2 function records customer information, sending the Customers Address in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		11 – Customer	
1	2	3	Sub Function		2 – Address 1 (40)	
1	3	4	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
40	4	44	Address 1			
20	44	64	Tail			
64			Total			

11 – Customer Information 3

0 X 11

Explanation: The Customer Information 3 function records customer information, including a second Address that is recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		11 – Customer	
1	2	3	Sub Function		3 – Address 2 (40)	
1	3	4	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
40	4	44	Address 2			
20	44	64	Tail			
64			Total			

11 – Customer Information 4

0 X 11

Explanation: The Customer Information 4 function records more information on customers, including a third Address that is recorded within the sub function of the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		11 – Customer	
1	2	3	Sub Function		4 – Address 3 (40)	
1	3	4	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
40	4	44	Address 3			
20	44	64	Tail			
64			Total			

11 – Customer Information 5

0 X 11

Explanation: The Customer Information 5 function records more customer information, including the Telephone Number that is recorded in the sub function of the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		11 – Customer	
1	2	3	Sub Function		5 – Telephone (20)	
1	3	4	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
20	4	24	Telephone			
20	24	44	Not Used			
20	44	64	Tail			
64			Total			

13 – SKU

0 X 13

Explanation: The SKU (Stock Keeping Unit) is the PLU code referred to when creating a batch file or making changes to the PLU file, which are made per item record. The transaction sends the SKU, Old Price, New Price, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		13 – Customer	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
11	3	14	SKU			
11	14	25	PLU Code			
4	25	29	Price Old			
4	29	33	Price New			
11	33	44	Reserved			
20	44	64	Tail			
64			Total			

14 – Price Override

0 X 14

Explanation: The Price Override records information when an item with an embedded value has been marked down or changed, allowing the cashier to manually override the original price.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		14 – Customer	
1	2	3	Flag 1			
				bit 0	Markdown	Progressive
				bit 1	Electronic Reduced	Electronic Reduction
				bit 2	Force Price	Indication that the original price is a forced price
				bit 3	Opt Subtract	
				bit 4	Opt Cancel	
				bit 5	Qty if fuel gallons	
				bit 6	Qty is weight	
				bit 7	Qty is decimal qty	
4	3	7	Original Price			
4	7	11	Reduced Price			
4	11	15	Qty			
4	15	19	Different Amount			
7	19	26	Code			
1	26	27	Type			
1	27	28	Reason Number			Progressive
1	28	29	Return Type			
1	29	30	Flag			
				bit 0	Opt Return Price Confirm	
				bit 1	Percent Off Override	
				bits 2-7	Not Used	
1	30	31	Original MSU			
1	31	32	New MSU			
4	32	36	Org amount			Progressive
4	36	40	Percentage Off			
8	40	44	Reserved			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

15 – Cheque Guarantee

0 X 15

Explanation: The Cheque Guarantee records information when customers are paying by Cheque and the guarantee card is displayed. The Cheque Card information recorded in the transaction includes: Issue Date, Expiry Date, Card Range Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		15 – Cheque	
1	2	3	Flag 1			
				bit 0	Issue not used	
				bit 1	Accept issue date	
				bit 2	Accept Exp. date	
				bit 3	MCR used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
10	3	13	Cheque Guarantee Card			
1	13	14	Guarantee Card Length			
2	14	16	Issue Date			
2	16	18	Expiry Date			
1	18	19	Card Range Number			
1	19	20	Issue Number			
1	20	21	Auth Card Range Number			
23	21	44	Reserved			
20	44	64	Tail			
64			Total			

16 – Drive Off

0 X 16

Explanation: The Drive Off function records car details if after fuelling no payment was made. The system then displays the Drive Off alert. The records in the transaction include: Registration Number, Surname, Car Make, Car Year, and Car Color.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		16 – Drive off	
1	2	3	Flag 1			
				bit 0	Ctp	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
11	3	14	Registration Number			
20	14	34	Surname			
5	34	39	Car Make			
2	39	41	Car Year			
3	41	44	Car Color			
20	44	64	Tail			
64			Total			

17 – Bad Accounts

0 X 17

Explanation: The Bad Accounts function records information when a bad account is found during a transaction. The information includes the type of check, whether it is a Bad Account or Enhanced Bad Account, recording the Account Number and Account Length.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		17 – Bad account	
1	2	3	Type		0 – Bad account 1 – Enhanced 3 – ECCA	
10	3	13	Account Number			
1	13	14	Account Len			
30	14	44	Reserved			
20	44	64	Tail			
64			Total			

18 – Reprint Ticket Request

0 X 18

Explanation: The Reprint Ticket Request function records information when there is a request to Reprint Tickets/Receipts. The cashier can request a reprint on a ticket. The POS and Receipt Number are recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function request		18 – Reprint ticket	
1	2	3	Flag 1			
				bit 0	During Ticket	
				bit 1	VAT Receipt	
				bit 2	Buffer Print	To indicate buffer printing
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	POS			
2	4	6	Receipt Number			
38	6	44	Reserved			
20	44	64	Tail			
64			Total			

19 – Assistant

0 X 19

Explanation: The Assistant transaction records when the cashier calls the Assistant during a transaction, recording the Assistant Number, BCD, and Assistant Name on completing the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		19 – Assistant	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
16	3	19	Assistant Number		(In ASCII null terminated)	
6	19	25	BCD		(BCD up to 12 digits)	
19	25	44	Assistant Name			
20	44	64	Tail			
64			Total			

1A – Promotion Information

0 X 1A

Explanation: The Promotion Information function records all the information with reference to the promotion during a transaction, including: Promotion Type, Code, Number, Bucket Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		1A – Promotion	
1	2	3	Flag 1			
				bit 0	Promotion	PROM_CHNG
				bit 1	Member card late swipe	
				bit 2	Information Transaction	MBA
				bit 3	Was Canceled	Void Manual Promotion
				bit 4	Reward by Cashier	Indicates that the reward was entered by the Cashier
				bit 5	Suppress printing	
				bit 6	Last in sequence	
				bit 7	Selection	
1	3	4	Promotion Type			
1	4	5	Extended Promotion Type			
1	5	6	Department Extended Promotion Type			
7	6	13	Code			
1	13	14	Group Type			
1	14	15	Apportionment Type			
1	15	16	Bucket Number			
2	16	18	Extended Promotion Number			
1	18	19	Extended Bucket Number			
3	19	22	Manual Discount Amount			

Bytes	From	To	Data	Bits	Explanation	Remarks
1	22	23	Reward Type			
1	23	24	Extended Reward Type			
1	24	25	Department Extended Reward Type			
4	25	29	Qualify Spent			For recovery
1	29	30	Trigger Scheme			For recovery
4	30	34	Prom Engine Allocated Promotion Number			For Discounts
1	34	35		bits0-1	Promotion Fiscal Reporting Method	Item= 0 Package= 1 Total= 2
				bit 2	Collected promotion	FSD12648 Indicates that this promotion is part of a promotion collector.
				bit 3	Trig by segments	FSD12648 Indicates that this promotion was triggered by segments.
				bit 4	Staff Discount Promotion	
				bit 5	Refund Discount	
				bit 6	Client Discount	True if use discount instead of promotion
				Bit 7	Triggered by Manual Segment Function	
4	35	39	Promotion Number			PROM_CHNG Does not exist in Tesco
4	39	43	Points Redeemed			
1	43	44	Customer Specific			
20	44	64	Tail			
64			Total			

1B – ClubCard

0 X 1B

Explanation: The Clubcard function records when a recognized ClubCard is swiped through at the POS Terminal. The POS Terminal checks the Scheme Number, Card Number, Tender Number, Customer Type, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		1B – Club Card	
1	2	3	Flag 1	bit 0	Card was accepted	
				bit 1	Card was voided	
				bit 2	MCR used	Card was swiped or else keyed in
				bit 3	Staff discount card	Clubcard is a staff discount card
				bit 4	Qualify spend information	
				bit 5	Club Card Re-entry	
				bit 6	Frequent Shopper accepted	Progressive
				bit 7	Processed Late Swipe	
1	3	4	Scheme No.			1-9
20	4	24	Card No.		In ASCII Null terminated	
2	24	26	Tender No.		Card is credit/debit to tender	
1	26	27	Customer Type		Panel flag	
4	27	31	Customer Points to Date			
4	31	35	Customer Redemption Value			
3	35	38	Customer Update Date			
1	38	39	Customer Message			
4	39	43	Qualify Spent			
1	43	44	CRNG_NO		Card Range Number	
20	44	64	Tail			
64			Total			

1C – Points

0 X 1C

Explanation: The Points function records when a Clubcard is used and Points are rewarded. The Scheme Number, Promotion, Qualify Spent, Points Value etc., is recorded with this transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		1C – Points	
1	2	3	Flag 1	bit 0	Information only	
				bit 1	CC Re-entry	
				bit 2	Long Promotion	Prom_Chng
				bit 3	Homestore	
				bit 4	Account update	
				bit 5	Points Correction	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Scheme Number			1 to 9
2	4	6	Promotion No.			2 Lowest bytes (right)
20	6	26	Card Number			Card No. in ASCII null terminated
4	26	30	Qualify Spent			26 QS
4	30	34	Pointable Value		Value for given points	
4	34	38	Points			
4	38	42	Bonus Points			
2	42	44	Promotion No.		PROM_CHNG – 2 highest bytes (left)	
20	44	64	Tail			
64			Total			

1D – Track

0 X 1D

Explanation: The Track function records the information from the number of digits in the Credit Card script, sending the first and last used Track Numbers and Track data in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		1D – Track	
1	2	3	Flag 1			
				bit 0	First	
				bit 1	Last	
				bit 2	Gift card	
				bit 3	CC Deposit	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Continuation	
1	3	4	Track Number			
40	4	44	Track Data			
20	44	64	Tail			
64			Total			

1E – Cash in Drawer

0 X 1E

Explanation: The Cash in Drawer function records the cash amounts in the drawer, recording if there is too much cash, or not enough cash in the drawer, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		1E – Cash in Drawer	
1	2	3	Flag 1			
				bit 0	Too much	Assistance
				bit 1	Not enough	Top up
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
41	3	44	Data			
20	44	64	Tail			
64			Total			

1F – Wrong Password

0 X 1F

Explanation: The Wrong Password function records when the cashier enters a wrong password at the POS Terminal. The Cashier Mode, Cashier Number, Password, and Data are recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		1F – Wrong password	
1	2	3	Mode			
					1 – At sign-on	
					2 – At sign-off	
2	3	5	Cashier Number			
2	5	7	Password			
37	7	44	Data			
20	44	64	Tail			
64			Total			

20 – Frequent Shopper

0 X 20

Explanation: The Frequent Shopper function records details during a transaction made with a Frequent Shopper card. The records include: Reward Check Used, Old Price, New Price, Qty, Save Amount, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		20 – Freq. Shopper	
7	2	9	Code			
1	9	10	Flag 1			
				bit 0	Reward Check Used	
				bit 1	opt_not_net_fs	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	10	14	Old price			
4	14	18	New price			
4	18	22	Qty			
4	22	26	Save Amount			
2	26	28	Short Department			
16	28	44	Reserved			
20	44	64	Tail			
64			Total			

21 – Unlock Update

0 X 21

Explanation: The Unlock Update Opcode sends the update redemption value in the customers file. (#file = 77) file.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		21 – Unlock Update	
1	2	3	Flag 1			
				bit 0	Add value	
				bit 1	Write value	
				bit 2	Unlock	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Continuation	
1	3	4	QDX file			
12	4	16	Index			
2	16	18	Value Offset			
4	18	22	Value			
2	22	24	Unlock Offset			
20	24	44	Reserved			
20	44	64	Tail			
64			Total			

22 – Redemption

0 X 22

Explanation: The Redemption function records the point's customers earned and are redeeming during a transaction. Customers earn points during purchases with a Clubcard and there are often promotions which customers can take advantage of with points earned. The Scheme Number, Card Number, Customer Type, Customer Redemption Value, Customer Redemption Used are fields recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		22 – Redemption	
1	2	3	Flag 1			
				bit 0	Instant Redemption	
				bit 1	Points Updated in Chip Card	
				bit 2	Promotion Redemption	
				bit 3	Member Account Redemption	FSD11780
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Scheme Number			1 to 9
20	4	24	Card Number		Card Number in ASCII null terminated	
1	24	25	Customer Type		Panel flag	
4	25	29	Customer Redemption value			
4	29	33	Customer Redemption Used			
4	33	37	Member Account ID		Used for Redemption	
17	37	44	Reserved			
20	44	64	Tail			
64			Total			

23 – APAC

0 X 23

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		23 – APAC	
1	2	3	Flag 1			
				bit 0	First	
				bit 1	All Depts.	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
20	3	23	Departments Used			
21	23	44	Reserved			
20	44	64	Tail			
64			Total			

24 – Alerts

0 X 24

Explanation: The Alerts function records when a problem is found on the POS Terminal or System. It could be a number of issues or problems that trigger off an alert, which is recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		24 – Alerts	
2	2	4	Flag 1			
				bit 0	Bad Signature	
				bit 1	Force Accept	
				bit 2	POS Line Switch	
				bit 3	PC Request out of Range	
				bit 4	Retransmit	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
				bit 8	Not Used	
				bit 9	Not Used	
				bit 10	Not Used	
				bit 11	Not Used	
				bit 12	Not Used	
				bit 13	Not Used	
				bit 14	Not Used	
				bit 15	Not Used	
2	4	6	POS			
4	6	10	Expected_seq_num			
4	10	14	Rcved_seq_num			
4	14	18	Rejected_seq_num			
26	18	44	Not Used			
20	44	64	Tail			
64			Total			

26 – Total key

0 X 26

Explanation: The Total Key function records when the cashier presses the Total Key to total a transaction. The records include: Items, Amount, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		26 – Total Key	
2	2	4	Items			
4	4	8	Amount			
36	8	44	Reserved			
20	44	64	Tail			
64			Total			

27 – Extra Card Info

0 X 27

Explanation: The Extra Card Info function records when the cashier requests for more customer details at the POS Terminal, sending the information in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		27 – Extra Card Info	
1	2	3	Flag 1			
				bit 0	Funds Guarantee	
				bit 1	Home Shopping	
				bit 2	Credit Card	
				bit 3	Debit card	
				bit 4	Smart Card	
				bit 5	Smart Card Track 2	
				bit 6	t7_eft	EFT
				bit 7	Not Used	
3	3	6	Voucher Time			
1	6	7	Tender EFT Group			
15	7	22	Merchant No.			
1	22	23	Sponsor No.			
4	23	27	Cash Back			
6	27	33	Branch		Branch number, null terminated	
2	33	35	Credit Reentry Receipt			
2	35	37	Credit Reentry Sequence No.			
1	37	38	Smart Card POS Entry Mode			
2	38	40	Smart Card auth_resp_code			
1	40	41	Flag	Bit 0	Immediate Cashback	
				Bits 1-7	Not Used	
3	41	44	Not Used			
20	44	64	Tail			

Bytes	From	To	Data	Bits	Explanation	Remarks
64			Total			

28 – OLA Result

0 X 28

Explanation: The OLA Results record the information returned after the POS Terminals perform authorization checks. The OLA Results include: Message type, Card Type, Transaction Type etc.

Bytes	From	To	Data	Bits	Explanation	Remark
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Request	
1	2	3	Sub Function		0 X OLA Results	
1	3	4	Flag 1			
				bit 0	Card Accepted	
				bit 1	Hot Card	
				bit 2	Guaranteed	
				bit 3	Not Guaranteed	
				bit 4	Referral	
				bit 5	Extra ID	
				bit 6	Extra Transaction	
				bit 7	Not Used	
4	4	8	Message Number			
1	8	9	Card Type			
1	9	10	Transaction Type			
1	10	11	Auth Type			
1	11	12	Auth Reason			
2	12	14	Answer_rtc		0 – OK 1-10 – Host Answer -1 – Bad -6 – Timeout	
10	14	24	Authorization Code			
1	24	25	Confirm Code			
10	25	35	Account		BCD up to 19 digits	
1	35	36	Account Length			
4	36	40	Amount			
3	40	43	Reserved			
1	43	44	Pump			
20	44	64	Tail			
64			Total			

28 – OLA Airtime EXT0 A0

0 X 28

Explanation: The OLA Request A0

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Airtime EXT0	
1	2	3	Sub Function		0 X A0	
21	3	24	PinSerialNumber			
4	24	28	Provider TransSeq Number			
16	28	44	Nu0			
20	44	64	Tail			
64			Total			

28 – OLA Airtime EXT1 A1

0 X 28

Explanation: The OLA Request A1

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Airtime EXT1	
1	2	3	Sub Function		0 X A1	
21	3	24	Provider Order Number			
20	24	44	Nu0			
20	44	64	Tail			
64			Total			

28 – OLA Card Authentication A2

0 X 28

Explanation: The OLA Card Authentication

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Card Authentication	
1	2	3	Sub Function		0 X A2	
1	3	4	Option		1 – Record1 (infl1) 2 – Record2 (infl2)	
Info1						
24	4	28	TransID			
2	28	30	ECI			
2	30	32	Filler			
Info2						
28	4	28	CAVData			
12	32	44				
20	44	64	Tail			
64			Total			

28 – OLA Secure Data A3

0 X 28

Explanation: The OLA Secure Data opcode.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Card Authentication	
1	2	3	Sub Function		0 X A3	
1	3	4	Option		1 – Name 2 – Sponsor 3 – Result	
Info1						
25	4	29	Name			
Info 2						
25	4	29	Sponsor			
Info 3						
25	4	29				
15	29	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Certificate Details A4

0 X 28

Explanation: The OLA Certificate Details

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Certificate Details	
1	2	3	Sub Function		0 X A4	
1	3	4	Option		1 – Merchant 2 – Cardholder 3 – TransStain	
Info1						
24	4	28	Merchant			
4	28	32	Filler			
Info 2						
24	4	28	Cardholder			
4	28	32				
Info 3						
28	4	32				
12	32	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Request 01

0 X 28

Explanation: The OLA Request 01 function records the information required when the POS Terminals perform authorization checks to determine the action the POS Terminal asks the card to perform. The OLA requests Customer details. If off-line, the POS Terminal checks for local customer files on the main Server for authorization.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Request	
1	2	3	Sub Function		0 X 01	
1	3	4	Flag 1			
				bit 0	Open comm failed	
				bit 1	Tx failed	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Message Number			
24	8	32	Card Data			Null terminated
1	32	33	Card type			
1	33	34	Trans Type			
1	34	35	Auth Type			
1	35	36	Auth Reason			
4	36	40	Request Amount		Amount + Cash back	
3	40	43	Reserved			
1	43	44	Pump Number			
20	44	64	Tail			
64			Total			

28 – OLA Ack 02

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub function		0 X 02	
1	3	4	Flag 1			
				bit 0	Timeout	
				bit 1	Message rejected	
				bit 2	Ack rejected	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	ACK message Number			
4	8	12	Timeout Value			
2	12	14	ACK Return Code			
29	14	43	Reserved			
1	43	44	Pump Number			
20	44	64	Tail			
64			Total			

28 – OLA Answer 03

0 X 28

Explanation: The OLA Answer 03 is the function that records the response the POS Terminal receives on performing authorization checks during the OLA transaction. OLA Response Codes are defined.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function		0 X 03	
1	3	4	Flag 1	bit 0	Timeout	
				bit 1	Message rejected	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Answer Message Number			
4	8	12	Timeout Value			
1	12	13	Message Type			
1	13	14	Confirm Code			
2	14	16	Answer Return Code			
10	16	26	Auth Code			
2	26	28	Delay			Project Orange
4	28	32	Club Plus Balance			
6	32	38	Club Plus Date			
5	38	43	Reserved			
1	43	44	Pump Number			
20	44	64	Tail			
64			Total			

28 – OLA Free 04

0 X 28

Explanation: The OLA Free 04 function records the information during the OLA transaction, once there is confirmation that the card is authorized, including: The Confirm Message Number, Code, Authorization Code, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub function		0 X 04	
1	3	4	Flag 1			
				bit 0	With Confirm	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Confirm Message Number			
1	8	9	Confirm Code			
10	9	19	Auth Code			
24	19	43	Reserved			
1	43	44	Pump Number			
20	44	64	Tail			
64			Total			

28 – OLA Results Extra 05

0 X 28

Explanation: The OLA Extra Results 05 function records information once the OLA transaction is made. It is the result of the POS Terminal check process. The POS Terminal receives approval including the Result Message, Approval Number, Terminal ID, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function Extra		0 X 05 – OLA Results extra	OLA Provider Message
20	3	23	Result Message		Message from Authorizer	
12	23	35	Approval Number			
7	35	42	Terminal ID			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Printing 06

0 X 28

Explanation: The OLA Printing function records information on the fields that are printed on the EFT slip. The card name, masking, and layout are recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function		0 X 06 – Trans Info OLA Printing	
10	3	13	Response Code			Message from authorizer
1	13	14	Account Type		0 – Credit, 1- Checking, 2- Savings	
1	14	15	Flag			
				Bit 0	Card Swiped	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
29	15	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Referral Save 07

0 X 28

Explanation: The OLA Referral Save function records information when parameters need to be referred elsewhere in order to save the EFT transaction. For example, when a transaction is manually authorized, and the card is manually swiped, the OLA is referred before receiving authorization and saving.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function		0 X 07 – Trans Info OLA Referral Save	
1	3	4	Flags			
				Bit 0	EFT Save Referral	
				Bit 1	EFT Void	Do Cancel after restore transaction
				Bit 2	EFT Get Authorization	After Get Manual Authorization
				Bit 3	Manual Swipe Required	Required manual swipe of card
				Bit 4	TRS Processed	Indication that transaction was already processed (in case there were several calls)
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
15	4	19	Merchant Telephone			
2	19	21	EFT Tender Number			
4	21	25	Amount			
4	25	29	Cashback Amount			
2	29	31	Session ID			
2	31	33	Save POS Number			
2	33	35	Save Ticket Number			
1	35	36	Card Session Original Tender			

Bytes	From	To	Data	Bits	Explanation	Remarks
8	36	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Trans Ref8

0 X 28

Explanation: The OLA Trans Ref function records information on the parameters used during EFT settlement.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function		0 X 08 – Info OLA Trans Ref	
40	3	43	Trans Ref			
1	43	44	Trans Ref Length			
20	44	64	Tail			
64			Total			

28 – OLA Result 00

0 X 28

Explanation: The OLA Result 00 function records the result of an OLA transaction. The Message Number, Card Type, Transaction Type, Authorization Type are all recorded on transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function		0 X 00	
1	3	4	Flag 1	bit 0	Card accepted	
				bit 1	Hot card	
				bit 2	Guaranteed	
				bit 3	Not guaranteed	
				bit 4	Referral	
				bit 5	Extra ID	
				bit 6	Extra Transaction	Not used
				bit 7	Not Used	
4	4	8	Message No.			
1	8	9	Card Type			
1	9	10	Trans Type			
1	10	11	Auth Type			
1	11	12	Auth Reason			
2	12	14	Return Code			
10	14	24	Auth Code			
1	24	25	Confirm Code			
10	25	35	Account (BCD up to 19 digits)			
1	35	36	Account Length			
4	36	40	Amount			
3	40	43	Not Used			
1	43	44	Pump Number			
20	44	64	Tail			
64			Total			

28 – Club Card Request 11

0 X 28

Explanation: The Club Card Request 11 function is recorded when a Club Card is swiped through at the POS Terminals. The POS Terminal requests information on the Card Number, Data, Length and Type. This is all for authorization purposes.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Answer Start		28 – Club Card	
1	2	3	Sub function		0 X 11	
1	3	4	Flag 1			
				bit 0	Open comm failed	
				bit 1	Tx failed	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Message Number			
10	8	18	Card Data		BCD up to 19 digits	
1	18	19	Card Data Length			
1	19	20	Transaction Type			
24	20	44	Reserved			
20	44	64	Tail			
64			Total			

28 – Club Card Answer Continued 12

0 X 28

Explanation: The Club Card Answer Continued 12 function is the continuation of the Club Card Answer Start 12. The answer to a Club Card request for authorization. The POS Terminal process is completed, and an answer including Promotion Messages, Points, Redemption Threshold, etc. that may be connected to the Club Card are recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Answer Start		28 – Club Card	
1	2	3	Sub function		0 X 12	
1	3	4	Flag 1			
				bit 0	Timeout	
				bit 1	Message Rejected Message Type Std. Message Typed Ext. EOT_Update_Req	
				bit 2	Er Avail	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	4	6	Request Message Number			
2	6	8	Answer Message Number			
20	8	28	Family Favorite Choice			
1	28	29	Customer Type			
4	29	33	Accumulated Points			
4	33	37	Redemption Value			
2	37	39	Operator Message Number			
3	39	42	Customer Update Date			
2	42	44	Reserved			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

28 – Club Card Answer Continued 13

0 X 28

Explanation: The Club Card Answer Continued 13 function is the continuation of the Club Card Answer Start 12. The answer to a Club Card request for authorization. The POS Terminal process is completed, and an answer including Promotion Messages, Points, Redemption Threshold, etc. that may be connected to the Club Card are recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Continued		28 – CC Answer	
1	2	3	Sub Function		0 X 13	
5	3	8	Promotion Message			
20	8	28	Promotion Points			
4	28	32	Redemption Threshold			
4	32	36	Redemption Step			
4	36	40	Second Current Balance			
4	40	44	Reserved			
20	44	64	Tail			
64			Total			

28 – Club Card End Of Ticket 14

0 X 28

Explanation: The Club Card End of Ticket function is recorded at the end of the ticket, once the information provided on the card is passed.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – CC End Of Ticket	
1	2	3	Sub Function		0 X 14	
1	3	4	Flag 1			
				bit 0	Open Com Failed	
				bit 1	Tx failed	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Message Number			
36	8	44	Reserved			
20	44	64	Tail			
64			Total			

28 – Hungary OLA Results 30

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub Function Results		0 X 30 – Hungary OLA	
1	3	4	Flag 1	bit 0	Card Accepted	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Message No.			
1	8	9	Not Used			
1	9	10	Trans. Type		Transaction Type	
1	10	11	Auth Type		Authorization Type	
1	11	12	Not Used2			
2	12	14	Answer Return Code		0 – OK 1-10 Host Answer -1 Bad -6 Timeout	
10	14	24	Auth Code		Authorization Code	
1	24	25	Not Used3			
10	25	35	Account		BCD up to 19 digits	
1	35	36	Account length			
4	36	40	Amount			
3	40	43	Response Code			
1	43	44	Not Used4			
20	44	64	Tail			
64			Total			

28 – Hungary OLA Request 31

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – Transaction OLA	
1	2	3	Sub function Request		0 X 31 - Hungary OLA	
1	3	4	Flag 1			
				bit 0	Not Used	00
				bit 1	Tx failed	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	4	8	Message Number			
24	8	32	Card Data		Null terminated	
1	32	33	Transaction Type			
1	33	34	Authorization Type			
4	34	38	Request Amount		Amount + Cash back	
6	38	44	Reserved			
20	44	64	Tail			
64			Total			

28 – OLA E Pay Result32

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x32	
2	3	5	Session ID			
4	5	9	OLA Date			
2	9	11	OLA Time			
15	11	26	PIN Serial Number			
9	26	35	Authorization code from OLA Response			
2	35	37	Response Code			
1	37	38	Reversal Authorization			
4	38	42	Sequence Number			
1	42	43	Flag			
				Bit 0	Second Extension Trans Exists	
				Bit 1	Filler	
				Bit 2	Filler	
				Bit 3	Filler	
				Bit 4	Filler	
				Bit 5	Filler	
				Bit 6	Filler	
				Bit 7	Filler	
1	43	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA E Pay Result Ext33

0 X 28

Explanation: This opcode is recorded when an online item is sold. In case the pin number size (length) that is received from the encryption dll is bigger than 24, we split the pin number (value) into two fields and another transaction is triggered: 0x60/0x28/0x43.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x33	
2	3	5	Session ID			
1	5	6	Application Option		1 – Card 2 – Voucher	
Union	If Card Information Inf1					
15	6	21	Mobile Number			
12	21	33	Not Used			
OR						
	Voucher Information Inf2					
24	6	30	PIN Number			
3	30	33	PIN Exp Date			
8	33	41	Pin Number		If the pin number length is bigger than 24, then get the right size.	
3	41	44	Identity Number			
20	44	64	Tail			
64			Total			

28 – OLA Gift Card Result 34

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x34	
2	3	5	Session ID			
2	5	7	Expiry Date			MMYY
10	7	17	Account Number			Up to 19 digits
5	17	22	Merchant ID			
4	22	26	Old Amount Balance			
4	26	30	New Amount Balance			
2	30	32	Response Code			
1	32	33	Flag			
				Bit 0	Reversal Authorization	
				Bit 1	PAN Masking	
				Bit 2	Was Cancelled	PPt gift cards printing
				Bit 3	Executed at no sale mode	For PPt gift cards printing
				Bit 4	Executed from balance transfer	For ppt gift cards printing
				Bit 5	Executed from refund or redemption	For ppt gift cards printing
				Bit 6	Not Used	
				Bit 7	Not Used	
4	33	37	Sequence Number			
1	37	38	Mask Char			
1	38	39	Mask End			
1	39	40	Mask Start			
3	40	43	Pan Layout			
1	43	44	Action Type			
20	44	64	Tail			
64			Total			

28 – OLA Bill Payment Result 35

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x35 OLA bill payment results	
2	3	5	Session ID			
2	5	7	Transaction date		BCD format MMY Y	
2	7	9	Transaction time		BCD format MMY Y	
15	9	24	Merchant ID			
2	24	26	Response Code			
1	26	27	Bill Flag			
				Bit 0	Reversal Authorization	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	27	31	Sequence Number			
10	31	41	Bill Number			
1	41	42	Bill type			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Auth Guide 36

0 X 28

Explanation: This opcode is recorded when an online item is added to the ticket. A predefined authorization guide tracks this item throughout the sale: Add item, online request session, approval session, void and reversal session.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x36	
1	3	4	Flag			
				Bit 0	Request session	
				Bit 1	Authorized session	
				Bit 2	Reversal session	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
8	4	12	Not Used			
32	12	44	Guide			
20	44	64	Tail			
64			Total			

28 – OLA Auth Guide 37

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x37	
2	3	5	Session ID			
10	5	15	Account number			
1	15	16	Flag			
				Bit 0	Reversal Authorization	
				Bit 1	Was Cancelled	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	16	20	Sequence No.			
4	20	24	Balance Amount			
4	24	28	New Amount Balance			
16	28	44	Add Info			
20	44	64	Tail			
64			Total			

28 – OLA Serial Number 42

0 X 28

Explanation: This opcode is recorded when an online item is sold and the serial number is bigger than 15 numbers.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x42	
15	3	18	PinSerialNumber Extension			
1	18	19	Online Purchase Provider			Provide ID using the transaction as an extension to Info_Online_Purchase_ Item.
25	19	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Pin Number Ext2 43

0 X 28

Explanation: This opcode is recorded when the pin number (length) received from the encryption dll triggered in opcode 0x60/0x28/0x33 is bigger than 24, it splits the pin number value into 2 fields, and uses this transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x43	
28	3	31	Ext2_PIN Number			
13	31	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Result EXT2 44

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x44	
10	3	13	Response Code			
1	13	14	Account Type			0 – Credit; 1-Checking; 2-Savings
1	14	15	Flags	Bit 0	Card Swiped	
				Bits 1-7	Not Used	
4	15	19	Reward Redeemed			
4	19	23	Actual Reward Redeem Value			
4	23	27	Reward Balance			
4	27	31	Extra Reward Earned			
2	31	33	Standard Reward Earned			
10	33	43	Account Number			BCD
1	43	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Identify Number Extension

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x45	
7	3	10	Identify Number			
30	10	40	Sequence Number			
1	40	41	Sequence Number Length			
1	41	42	Flag			
				bit 0	Confirmation request required	
				bit 1	Received upon confirmation	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Epay Result

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x47	
28	3	31	Pin Serial Number			
13	31	44	Authorization Number			
20	44	64	Tail			
64			Total			

28 – OLA Loyalty Update Result

0 X 28

Explanation: This opcode is recorded when the loyalty server is updated.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x46	
10	3	13	Account Number			
4	13	17	Provider Response Code			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Result Ext2

0 X 28

Explanation: This opcode is recorded as an extension of the OLA Result opcode.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x44	
4	3	7	Device Number			
4	7	11	Amount		Amount added or deducted	
4	11	15	Remaining Value			
4	15	19	Reward Redeemed			
4	19	23	Actual Reward Redeem Value		Actual reward dollar available.	
4	23	27	Reward Balance			
4	27	31	Extra Reward Earned			
2	31	33	Standard Reward Earned			
10	33	43	Account Number		BCD	
1	43	44	Filler/ Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Result Ext2 47

0 X 28

Explanation: This opcode is recorded as an extension of the OLA Result opcode.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28	
1	2	3	Sub function		0 x47	
28	3	31	Pin Serial Number			
13	31	44	Auth Number			
20	44	64	Tail			
64			Total			

28 – OLA Unique ID 48

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0x28	
1	2	3	Sub function		0x48	
16	3	19	Unique ID			
1	19	20	Unique ID Length			
2	20	22	Session ID			In Customer Node
22	22	44	Not Used Unique			
20	44	64	Tail			
64			Total			

28 – OLA Payment Card Result 49

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0x28	
1	2	3	Sub function		0x49	
2	3	5	Session ID			
2	5	7	Expiry date			MMYY
20	7	27	Account Number			
4	27	31	Old Amount Balance			
4	31	35	New Amount Balance			
2	35	37	Response Code			
7	37	44	Not Used			
20	44	64	Tail			
64			Total			

28 – OLA Abort 99

0 X 28

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		28 – OLA Abort 99	
1	2	3	Sub function		0 X 99 Aborted by the User	
4	3	7	Message Number			
36	7	43	Reserved			
1	43	44	Pump Number			
20	44	64	Tail			
64			Total			

28 – OLA PCIDSS_Hashed PAN 4A

0 X 28

Explanation: PCIDSS (Payment Card Industry Data Security Standard)

Bytes	Type	From	To	Data	Bits	Explanation	Remarks
1	Char	0	1	Opcode		60 – Log Information	
1	Char	1	2	Function		28 – HashedPAN	
1	Char	2	3	Sub function		0 – Ola results Value 0 X 4A	
1	Char	3	4	Sequence Num		Transaction sequence number	
1	Char	4	5	Flag			
					Bit 0	Last Sequence Transaction	
					Bit 1	Not Used	
					Bit 2	Not Used	
					Bit 3	Not Used	
					Bit 4	Not Used	
					Bit 5	Not Used	
					Bit 6	Not Used	
					Bit 7	Not Used	
1	Char	5	6	Hashed PAN Value Length			The length – text HashedPAN value
32	Char	6	38	HashedPAN Value			The Hashed PAN Text
6	Char	38	44	Not Used			
20		44	64	Tail			
64				Total			

29 – Auth Price Diff

0 X 29

Explanation: The Auth Price Diff function is recorded when an item at the POS Terminal is sold at a different price to the marked price. The Authorized Prices, Sold Price, Original Price, Qty, Diff Amount, etc are recorded on transaction by the POS Terminal.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		29 – Auth price diff	
7	2	9	Code			
1	9	10	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	10	14	Authorized Price			
4	14	18	Sold Price			
4	18	22	Qty			
4	22	26	Diff Amount			
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

2A – Host Batch

0 X 2A

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 2A	
1	2	3	Option		0 – Start 1 – End 2 – Start rejected 3 – Continues status	
6	3	9	host_batch_ number			
4	9	13	host_records			
4	13	17	accepted_records			
1	17	18	post_batches			
6	18	24	post_batch1			
6	24	30	post_batch2			
6	30	36	post_batch3			
3	36	39	Date			BCD
3	39	42	Time			BCD
2	42	44	Batch Type			
20	44	64	Tail			
64			Total			

2B – Check Fee

0 X 2B

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not Used by Tesco
1	1	2	Function		2B – Check Fee	
7	2	9	Fee Code			
1	9	10	Flag			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	10	14	Fee Price			
4	14	18	Cash Back			
1	18	19	(Fee) Table Number			
2	19	21	Department Number			
2	21	23	Tender Number			
1	23	24	Fee Type			
20	24	44	Reserved			
20	44	64	Tail			
64			Total			

2C – New ECCA

0 X 2C

Explanation: The New ECCA Opcode sends information on the tender used at the POS if the Parameter “ECCA” is set to On.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 2C	
1	2	3	Template			
20	3	23	Account		ASCII null terminated	
1	23	24	Flag			
				bit 0	Second ECCA	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
20	24	44	Reserved			
20	44	64	Tail			
64			Total			

2D – Embedded Price

0 X 2D

Explanation: The Embedded Price function is recorded when an item scanned or keyed by the POS Terminal has a fixed price within the barcode. For each Embedded Price Item the function registers, sending the Original Price, Embedded Price, Quantity, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 2D	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	3	7	Original Price			
4	7	11	Embedded Price			
4	11	15	Quantity			
4	15	19	Different Amount			
7	19	26	Code			
18	26	44	Not Used			
20	44	64	Tail			
64			Total			

2E – EFT Media

0 X 2E

Explanation: The EFT Media function records the Cashier Number, Media Number and Amount Recorded within the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		2E – EFT media	
2	2	4	Cashier			
2	4	6	Media Number			
4	6	10	Amount			
34	10	44	Reserved			
20	44	64	Tail			
64			Total			

2F – EFT Print Reject

0 X 2F

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 2F	
2	2	4	Tender Number			
2	4	6	Error Code			
20	6	26	Account Number			
4	26	30	Balance 1			
4	30	34	Balance 2			
10	34	44	Reserved			
20	44	64	Tail			
64			Total			

30 – Transaction Index

0 X 30

Explanation: The Transaction Index function records an index of all the transactions. The Ticket Totals, Voided Tickets, or Saved Tickets are all fields recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		30 – Transaction Index	
1	2	3	Flag 1	bit 0	Ticket total	
				bit 1	Void ticket	
				bit 2	Save ticket	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Info	
1	3	4	Flag 2	bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	4	5	Flag 3	bit 0	Index Clubcard	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	Index Length			
30	6	36	Index			
8	36	44	Reserved			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

31 – Location (POS Information)

0 X 31

Explanation: The Location function records information on the location of the store, sending: the Store ID, POS Terminal Type, Checkout Bank, EFT Location, POS Terminal Number, Profile, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function SubOpcode		31 – Transaction Index	
1	2	3	Flag 1			
				bit 0	Tender Correction	
				bit 1	Fuel merged recall prepay ticket	Fuel for ALB's
				bit 2	Invoice	Use invoice number field
				bits 3-7	Not Used	
6	3	9	Store ID		Store number (Alphanumeric)	
1	9	10	POS Terminal Type		'O/I/S'	
1	10	11	Checkout Bank Number		(0-99)	
5	11	16	EFT Location		Location as defined on POS configuration	
1	16	17	POS Terminal Profile		Till profile as defined on POS configuration	
1	17	18	Doc Type		El-Salvador Tax Report	
					1 = Ticket	
					2 = Factura	
					3 = Credito fiscal	
2	18	20	POS Terminal No			
2	20	22	Cashier No.			
1	22	23	Wholesale transaction type			
8	23	31	Invoice Number		Wholesale invoice number	
3	31	34	Invoice Date		Invoice generation date	
3	34	37	Invoice Time		Invoice time	
7	37	44	Reserved			Future use
20	44	64	Tail			
64			Total			

32 – Tender Coupon

0 X 32

Explanation: The Tender Coupon function records each time a sale is registered and the payments are made with a Coupon. Coupons are not always defined previously on the system. If the Coupon transacted is defined, the On-file flag is set active. The Code, Value, Threshold Qty and Type are fields recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		32 – Tender coupon	
1	2	3	Flag 1			
				bit 0	Coupon Ticket	
				bit 1	Master Coupon Use	
				bit 2	Cancel Coupon	
				bit 3	Coupon was Canceled	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
7	3	10	Code			
4	10	14	Value			
2	14	16	Threshold Qty			
4	16	20	Minimum Purchase			
1	20	21	Type			
4	21	25	Quantity			
4	25	29	Total Value			
7	29	36	Code Master Coupon			
1	36	37	Option			
7	37	44	Reserved			
20	44	64	Tail			
64			Total			

33 – Training Charge Posting Account

0 X 33

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		33 – Training	
2	2	4	Media Number			
1	4	5	Flag 1			
				bit 0	Charge payment	
				bit 1	Charge reverse	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
12	5	17	CP Account number			
1	17	18	CP Status			
4	18	22	CP Amount			
4	22	26	CP Balance			
4	26	30	CP Limit			
14	30	44	Reserved			
20	44	64	Tail			
64			Total			

34 – Ticket Trailer

0 X 34

Explanation: The Ticket Trailer function records when a receipt, which includes the Trailer on the bottom of the receipt, is printed, including: Date, Time, Ticket Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		34 – Ticket trailer	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
3	3	6	Date		BCD yymmdd	
3	6	9	Time		BCD hhmmss	
4	9	13	Ticket Number			
31	13	44	Reserved			
20	44	64	Tail			
64			Total			

35 – Finish Media

0 X 35

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		35 – Finish media	
4	2	6	Fuel Prepay Sync Number		POSPump – Pre-Pay	
38	6	44	Reserved			
20	44	64	Tail			
64			Total			

36 – Bad External Device Transaction

0 X 36

Explanation: This Opcode registers when it is getting transactions from an external device, recording the External Device Transaction Record Data.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Device Transaction		36 – Bad External	
42	2	44	External Device Transaction Record Data			
20	44	64	Tail			
64			Total			

37 – Q-Length

0 X 37

Explanation: The Q-Length function reports the number of customers waiting in line at the POS. The Q-Length and Q-Length Count fields are recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		37 – Q-Length	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	Q Length			
2	5	7	Q Length alert count			
37	7	44	Reserved			
20	44	64	Tail			
64			Total			

38 – EFT Print Data

0 X 38

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		38 – EFT Print data	
1	2	3	Flag			
				bit 0	Line number	
				bit 1	Line number	
				bit 2	Line number	
				bit 3	Line number	
				bit 4	Line number	
				bit 5	Line number	
				bit 6	First line	
				bit 7	Last line	
41	3	44	Data			
20	44	64	Tail			
64			Total			

39 – Alcohol Restricted

0 X 39

Explanation: The Alcohol Restricted function records all alcohol sales, ensuring the restrictions are taken into account.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function restriction		39 – Alcohol	
1	2	3	Flag1			
				bit 0	Restricted	
				bit 1	Future Restriction	
				bit 2	Sale Restriction	
				bit 3	Void Restriction	
				bit 4	Refund Restriction	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
7	3	10	Code			
2	10	12	Department			
2	12	14	Hour			
2	14	16	Minute			
4	16	20	Amount			
24	20	44	Not Used			
20	44	64	Tail			
64			Total			

3A – Minimum Age Message

0 X 3A

Explanation: The Minimum Age Message function records when an item with restrictions is sold at the POS, for example, a message prompts, checking the customer's age when an alcohol sale is transacted.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 3A	
1	2	3	Minimum Age			
41	3	44	Reserved			
20	44	64	Tail			
64			Total			

3B – Clubcard Extension

0 X 3B

Explanation: The Club Card Extension function records information during a transaction when a Club Card is used, to check further details connected to Club Card Members.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 3B – Clubcard Extension	
1	2	3	Flag	bit 0	Bio FreqShop flag	
				bit 1	Clubcard ext 2	
				bit 2	Nu_001	
				bit 3	Nu_001	
				bit 4	Nu_001	
				bit 5	Nu_001	
				bit 6	Nu_001	
				bit 7	Nu_001	
40	3	43	PBT Customer Name			
1	43	44	Loyalty State			
20	44	64	Tail			
64			Total			

3C – Commission

0 X 3C

Explanation: The Commission function records the tender's service fee. Certain tenders automatically include a service fee charge. The Amount, Tender Amount, Percent, Tender Name are fields recorded once the transaction is completed.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 3C – Commission	
4	2	6	Amount			
4	6	10	Tender Amount			
4	10	14	Percent			
16	14	30	Tender Name			
1	30	31	Flag	bit 0	Cancel	
				bit 1	Subtract	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
13	31	44	Reserved			
20	44	64	Tail			
64			Total			

3D – Fly Buys

0 X 3D

Explanation: The Fly Buys function is used to update Fly Buy Member Companies with the client's points. The transaction sends the Card Number, Amount, etc. (Used in the USA only.)

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 3D	
1	2	3	Flag 1			
				bit 0	Final	
				bit 1	Voided	
				bit 2	Was canceled	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	MCR Used	
				bit 7	Scanned	
20	3	23	Card Number			
4	23	27	Amount			
17	27	44	Reserved			
20	44	64	Tail			
64			Total			

3E – Charge Reverse Balance

0 X 3E

Explanation: The Charge Reverse Balance records when a customer pays for purchases with a charge account held in the Store. Recording CP Name, CP Limit, CP Account Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 3E	
1	2	3	Flag 1			
				bit 0	Payment	
				bit 1	Purchase	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
16	3	19	CP Name			
4	19	23	CP limit			
13	23	36	CP Account Number			
4	36	40	CP Amount			
4	40	44	CP Balance			
20	44	64	Tail			
64			Total			

3F – Clubcard Re-entry

0 X 3F

Explanation: The Clubcard Re-entry function records whenever a Clubcard is swiped or key entered more than once, recording the Card Number, Origin Date, POS Number, Receipt No., etc. There is one byte especially for the Re-entry Reason Code.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 3F	
1	2	3	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	MCR Used	
				bit 7	Scanned	
20	3	23	Card Number		ASCII null terminated	
3	23	26	Origin Date		yymmdd	
1	26	27	POS Number			
2	27	29	Receipt Number			
4	29	33	Qualify Spent			
4	33	37	Points			
1	37	38	Re-Entry Reason Code			
4	38	42	Keys			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

40 – Promotions/Coupons Cross

0 X 40

Explanation: The Promotions/Coupons Cross records information when a coupon is used in combination with a promotion. The transactions sends the Promotion Number, Bucket Number, Promotion Type, Department, Code, Reward Type, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		40 – Promotions/coupons cross	
1	2	3	Flag 1			
				bit 0	Promotion PLU	
				bit 1	Promotion department	
				bit 2	Promotion sub department	
				bit 3	Promotion mmg	
				bit 4	Promotion manufacture	
				bit 5	Promotion Group	
				bit 6	Long Promotion	Promotion_chng
				bit 7	Promotion Internal ID	
2	3	5	Promotion Number			
1	5	6	Bucket Number			
1	6	7	Promotion Type			
2	7	9	Department			
7	9	16	Code			
1	16	17	Reward Type			
4	17	21	Promotion Number			Promotion Change
4	21	25	Apportionment Amount			
19	25	44	Reserved			
20	44	64	Tail			
64			Total			

41 – Deposit

0 X 41

Explanation: The Deposit function records the cash from each POS deposited. Each POS logs the amount of each tender that is bankable or non-bankable at the end of a shift.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		41 – Deposit	
1	2	3	Flag 1			
				bit 0	Request	
				bit 1	Ignore Recovery	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	Tender			
4	5	9	Bankable Amount			
35	9	44	Reserved			
20	44	64	Tail			
64			Total			

42 – Trading Stamps

0 X 42

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		42 – Trading Stamps	
4	2	6	Qualify Trading Stamps			
2	6	8	Trading Stamps Number			
36	8	44	Reserved			
20	44	64	Tail			
64			Total			

43 – Coupon Information

0 X 43

Explanation: The Coupon Information function records when a coupon is used as a tender. The information includes: Type of Coupon, Weight, Price, Amount, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Information		43 – Coupon	
1	2	3	Flag 1			
				bit 0	Weighted coupon	
				bit 1	Dept Store coupon	A's department store coupon
				bit 2	Dept Other Bonus coupon	A's (other) bonus coupon
				bit 3	Dept Vendor coupon	A's department vendor
				bit 4	PLU Store coupon	A's PLU store coupon
				bit 5	PLU Other Bonus coupon	A's PLU other bonus coupon
				bit 6	PLU Vendor coupon	A's PLU vendor coupon
				bit 7	Frequent Shopper Coupon	
4	3	7	Weight			
4	7	11	Price			
4	11	15	Amount			
1	15	16	Return Type			
7	16	23	Link Code			
1	23	24	Flag			
				bit 0	Triple Coupon	
				bit 1	Smart Card Coupon	Electronic smart card coupon
				bit 2	Price Embedded Coupon	
				bit 3	Vendor Coupon modifier	
				bit 4	Tax reversal coupon	
				bit 5	Opt RX	Prescription
				bit 6	Opt Non RX	Non Prescription
				bit 7	Databar Coupon	
4	24	28	Quantity		For balancing Back Office Reports	
7	28	35	PLU Code			
4	35	39	PLU sequence			

Bytes	From	To	Data	Bits	Explanation	Remarks
1	39	40	Flag			
				number		
				Bit 0	Manual Databar Coupon	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	WIC CVV	
				Bit 4	Electronic Databar Coupon	
4	40	44	Reserved	Bit 5	Opt External 2 Coupon	
				Bits 6-7	Reserved	
20	44	64	Tail			
64			Total			

44 – Frequent Shopper Member

0 X 44

Explanation: The POS sends the Frequent Shopper Member transaction after testing parameters, Frequent Shopper Type/Value and Frequent Shopper Type Item Limit during PLU maintenance.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		44 – Frequent Shopper Member Information	
7	2	9	Code		PLU number	
1	9	10	Flag			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	10	14	Old Price		PLU Price	
4	14	18	New Price		New PLU Price	
4	18	22	Quantity			
4	22	26	Save amount		Frequent shop saving	
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

45 – Staff Discount

0 X 45

Explanation: The Staff Discount function records when a staff member is entitled to a discount. The Discount Amount, Staff Tender Number, Staff Discount Card are some of the fields recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		45 – Staff Discount	
4	2	6	Discount Amount			
4	6	10	Discountable Actual			
4	10	14	Total Discount Amount			
4	14	18	Total Discountable			
1	18	19	Staff Tender Number			
1	19	20	Flag			
				bit 0	Staff Discount Card Only	
				bit 1	Substr Staff	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
24	20	44	Not Used			
20	44	64	Tail			
64			Total			

46 – Recall Transaction

0 X 46

Explanation: The Recall Transaction is the function that records when a transaction is recalled to either check for errors, or to make a bad record a proper sale. Records include: the Branch, Checkout Bank, POS Number, Ticket Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		46 – Recall transaction	
2	2	4	Recall Ticket Number			
1	4	5	Recall POS Number			
2	5	7	Recall Cashier			
1	7	8	Flags			
				bit 0	Start	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	8	10	Branch			
2	10	12	Checkout Bank			
32	12	44	Reserved			
20	44	64	Tail			
64			Total			

47 – EFT Settlement (Option 1)

0 X 47

Explanation: The current ‘EFT Last Settle’ pos function has been modified so that the settlement function is available in a PAP environment.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Progressive V7 New Zealand
1	1	2	Function		47 – EFT Settlement	
1	2	3	Sub-Function		0 – Header, 1/2 - Data	
1	3	4	Flag			
				bit 0	Cut over	
				bit 1	In window	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Failed	
5x	1	4	5	Number		TTL
	2	5	7	Count		
	4	7	11	Amount		
	OR					
	8	4	12	Terminal ID		HDR
	15	12	27	Merchant ID		
	4	27	31	Date ddmm		
	6	31	37	Time hhmmss		
	2	37	39	Not Used		
5	39	44	Reserved			
20	44	64	Tail			
64			Total			

47 – EFT Settlement (Option 2)

0 X 47

Explanation: The current ‘EFT Last Settle’ pos function will be modified so that the settlement function is available in a PAP environment.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		47 – EFT Settlement	
1	2	3	Sub-Function		Data	
2	3	5	Tender ID			
1	5	6	Card Type			
1	6	7	Settlement Type			
1	7	8	Account Type			
4	8	12	Amount			
2	12	14	TrxCount			
1	14	15	Flag			
				Bit 0	Update previous day	
				Bit 1	Update same day	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
2	15	17	BIN			
3	17	20	Settlement Date		DDMMYY	PAP Settlement Date
24	20	44	Reserved			
20	44	64	Tail			
64			Total			

48 – EFT WYNID

0 X 48

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		48 – EFT WYNID	
1	2	3	Type		7 – Card E – Cheque	
1	3	4	Option		1 – Debit 2 – Credit	
1	4	5	Status		0,1,2 – OK	
1	5	6	Entry Type			
1	6	7	Card Type			
4	7	11	Amount			
18	11	29	Account		BCD up to 36 digits	
8	29	37	Auth			
1	37	38	MPR Count			
6	38	44	Not Used			
20	44	64	Tail			
64			Total			

49 – Respond Number

0 X 49

Explanation: The Respond Number function records the number of the message displayed when a PLU item is registered at the POS, and a message prompt responds to the specific sale. The PLU Code and Message Number are recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		49 – Respond number	
7	2	9	PLU Code			
1	9	10	Message Number			
34	10	44	Not Used			
20	44	64	Tail			
64			Total			

4A – Cheque Sort Code

0 X 4A

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		4A – Cheque Sort Code	
3	2	5	Cheque Sort Code			
39	5	44	Not Used			
20	44	64	Tail			
64			Total			

4B – Void Report

0 X 4B

Explanation: The Void Report function records when the POS Terminal prints a report of all voided transactions and their status. The Type of Authorization, Voided Amounts, Supervisor/Manager Numbers, PLU Codes, Department Numbers, are all recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		4B – Void report	
1	2	3	Type of Negative Action			
				bit 0	Cancel item	
				bit 1	Subtract item	
				bit 2	Void transaction	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Uses	
1	3	4	Type of Limit			
				bit 0	Item value limit	
				bit 1	Total value limit	
				bit 2	Total count limit	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Uses	
1	4	5	Type of Authorization			
					0 - No authorization	
					2 - Operator key	
					3 - Supervisor key	
					4 - Manager key	
					5 – Technical/Max key	
					9 – Supervisor/Manager privilege	

Bytes	From	To	Data	Bits	Explanation	Remarks
4	5	9	Voided Amount			
4	9	13	Supervisor/ Manager Number			
7	13	20	PLU Code			
2	20	22	Dep Number			
2	22	24	Reason Code			
20	22	44	Not Used			
20	44	64	Tail			
64			Total			

4C – Reorg Print

0 X 4C

Explanation: The Reorg Print Opcode records when Buffer Printing is used during the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		4C – Reorg print	
1	2	3	Flag			
				bit 0	Start	
				bit 1	End	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
41	3	44	Reserved			
20	44	64	Tail			
64			Total			

4D – Family Coupon

0 X 4D

Explanation: The Family Coupon function records when a Family Coupon is used during a transaction. The transaction records the Coupon Code, Type, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		4D – Family Coupon	
7	2	9	Coupon Code			
1	9	10	Type			
1	10	11	Flags			
				bit 0	Voided	
				bit 1	Was voided	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
10	11	21	Card Number			
23	21	44	Not Used			
20	44	64	Tail			
64			Total			

4E – Customer Select

0 X 4E

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		4E – Customer Select	
20	2	22	Customer Selection			
22	22	44	Not Used			
20	44	64	Tail			
64			Total			

4F – Family Promotion

0 X 4F

Explanation: The Family Promotion function records when a customer purchases the items specified in the Family Promotion defined, allowing a discount. The Customer must purchase the specified Quantity and Amount from each Bucket Number to qualify for the discount during the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Promotion		4F – Family Promotion	
2	2	4	Bucket Number (1)			
2	4	6	Quantity (1)			
4	6	10	Amount (1)			
2	10	12	Points (1)			
2	12	14	Bucket Number (2)			
2	14	16	Quantity (2)			
4	16	20	Amount (2)			
2	20	22	Points (2)			
2	22	24	Bucket Number (3)			
2	24	26	Quantity (3)			
4	26	30	Amount (3)			
2	30	32	Points (3)			
2	32	34	Bucket Number (4)			
2	34	36	Quantity (4)			
4	36	40	Amount (4)			
2	40	42	Points (4)			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

50 – Advanced Frequent Shopper

0 X 50

Explanation: The POS sends the Advanced Frequent Shopper Member transaction after testing parameters, Frequent Shopper Type/Value and Frequent Shopper Item Limit during PLU maintenance.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Frequent Shopper		50 – Advanced	
7	2	9	Code			
1	9	10	Flag			
				bit 0	Exceed Limit	
				bit 1	opt_not_net_fs	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	10	14	Old price			
4	14	18	New price			
4	18	22	Quantity			
4	22	26	Save Amount			
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

51 – Frequent Shopper Card

0 X 51

Explanation: The Frequent Shopper Card function transacts the code number of the card when a Frequent Shopper Card is used during a transaction, to ensure that the customer who is using the card benefits from the bonuses given to Frequent Shoppers.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Shopper Card		51 – Frequent	
14	2	16	Code			
28	16	44	Reserved			
20	66	64	Tail			
64			Total			

54 – Retrans

0 X 54

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		54 – Frequent	
1	2	3	Flag	bit 0	Fail	
				bit 1	Ignore	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	Retrans request			
2	5	7	Transaction Fifo size			
2	7	9	Transaction First			
4	9	13	Transaction Pointer			
2	13	15	Transaction Count			
2	15	17	Future Transaction Count			
2	17	19	Transaction Sequence Number		Ignore logging	
2	19	21	Sequence Range Start			
2	21	23	Sequence Range End		Fail logging	
2	23	25	Read_ptr			
2	25	27	Alt_read_ptr			
17	27	44	Reserved			
20	44	64	Tail			
64			Total			

55 – Vouchers

0 X 55

Explanation: The Vouchers function records when the POS terminal issues a Voucher. The Vouchers include specific records. Some of the fields recorded are the Qualifying Spend, Vouchers Due No., etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		55 – Vouchers	
4	2	6	Qualifying Spend			
2	6	8	Vouchers Due (number)			
1	8	9	Flags			
				bit 0	Vouchers accepted by customer	
				bit 1	Not Used	c_key_resp
				bit 2	Not Used	yes_no_resp
				bit 3	Not Used	slct_resp
				bit 4	Not Used	op_disp
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	9	10	slct_choice			Check these
1	10	11	variant			check
1	11	12	msg_num			Check
1	12	13	prom_bkt_num			Check
31	13	44	Not Used			
20	44	64	Tail			
64			Total			

56 – Info Store count

0 X 56

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		56 – Info Store count	
4	2	6	Page Store Count			
38	6	44	Not Used			
20	44	64	Tail			
64			Total			

57 – Info Credit/Debit Reentry

0 X 57

Explanation: The Info Credit/Debit Reentry is the function that records the data when a credit or debit card is reentered, sending the Transaction Date, POS Terminal Number, and POS Terminal Type.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function reentry		57 – Info credit/debit	
3	2	5	Date_TRS			
1	5	6	POS Terminal Number			
1	6	7	POS Terminal Type		Mainstore, PFS, Quick	
37	7	44	Not Used			
20	44	64	Tail			
64			Total			

58 – Info Saving Total

0 X 58

Explanation: The Info Saving Total records the total of savings when a Frequent Shopper Card is used during the transaction, recording the Card Number and Saving Total.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		58 – Frequent Shop Saving	
20	2	22	Card Number		Card Number in ASCII null terminated	
4	22	26	Saving Total Savings		Frequent Shopper	
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

59 – Savings Plus

0 X 59

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		59 – Savings Plus	
1	2	3	Voided			
41	3	44	Reserved			
20	44	64	Tail			
64			Total			

5A – Info Smart Card 01-ICC

Function: 0 X 5A

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		5A – Info Smart Card-ICC	
16	2	18	AID			
2	18	20	AIP			
2	20	22	ATC			
2	22	24	App usage control			
2	24	26	App version number			
5	26	31	Issuer codes – denial			
5	31	36	Issuer codes – online			
5	36	41	Issuer codes – default			
1	41	42	Flag			
				bit 0	Conf_not_req	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	42	44	POS Entry Mode			Not BCD 2 bytes pan entry mode Byte 1 entry mode 1 Byte 2 entry mode 2
20	44	64	Tail			
64			Total			

5B – Info Smart Card 02 - POS terminal

0 X 5B

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		5B – Info Smart Card – POS terminal	
1	2	3	Cryptogram Type			
2	3	5	Currency Code			
2	5	7	Country Code			
4	7	11	Unpredictable Number			
5	11	16	TVR			
3	16	19	Cardholder Verification			
2	19	21	TSI			
1	21	22	EMV Terminal Type			
3	22	25	Terminal Capabilities			
8	25	33	Transaction Cryptogram			
1	33	34	Cryptogram Info Data			
2	34	36	Reason OLA			
3	36	39	OLA Date		DDMMYY	
2	39	41	OLA Time		HH:MM	
3	41	44	Reserved			
20	44	64	Tail			
64			Total			

5C – Info Smart Card 03 - Issuer

0 X 5C

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		5C – Info Smart Card – Issuer	
32	2	34	Issuer App Data			
1	34	35	Issuer App Data Length		The actual length of unpacked issuer application data from 0 to 64.	
4	35	39	Terminal		Terminal Interface Device Serial Number	
4	39	43	Application Sequence Number		Application PAN Sequence Number	
1	43	44	Flags			
				Bit 0	Application Sequence number used	
				Bit 1	Reserved	
				Bit 2	Reserved	
				Bit 3	Reserved	
				Bit 4	Reserved	
				Bit 4	Reserved	
				Bit 5	Reserved	
				Bit 6	Reserved	
				Bit 7	Reserved	
20	44	64	Tail			
64			Total			

5D – Info Sales On Account

0 X 5D

Explanation: The Info Sales On Account records the information on the charge accounts held by customers in the store. The information includes the Name and Account Number of the customer.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		5D – Info Sales On Account	
16	2	18	Charge Posting Name			
12	18	30	Charge Posting Account Number			
10	30	40	Charge Posting Related Account Number			
4	40	44	Reserved			
20	44	64	Tail			
64			Total			

5E – Info Customer Survey Questions

0 X 5E

Explanation: The Info Customer Survey Questions function is recorded when the cashier checks for Customer Information, and the information retrieved is used as a survey to update records.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Survey Question		5E – Info Customer	
2	2	4	Cashier Number			
1	4	5	Checkout Bank		0-99	
4	5	9	Question Number			
1	9	10	Flags			
				bit 0	End Ticket	
				bit 1	Start Ticket	
				bit 2	Yes/No Type	
				bit 3	Numeric Type	
				bit 4	Yes/No Answer (0=No, 1 =Yes)	
				bit 5	Zip type	
				bit 6	Phone type	
				bit 7	By Function	
4	10	14	Numeric Answer			
5	14	19	Zip_Code			
10	19	29	Phone Number			
15	29	44	Reserved			
20	44	64	Tail			
64			Total			

5F – Voucher (Fuel Reward)

0 X 5F

Explanation: The Voucher function is used in conjunction with Albertson's who give a fuel reward in the form of a voucher if the customer accumulates the required number of points. The transaction sends the Program Number, Voucher Number, Key Code etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		5F – Fuel Reward Voucher	Albertson's
4	2	6	Program Number			
10	6	16	Voucher Number			
4	16	20	Key Code			
4	20	24	Points			
2	24	26	Template Type			
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

61 – Info Pre-payment

0 X 61

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		61 – Info Pre-payment	
1	2	3	Flags			
				bit 0	Set/Reset pre-payment	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
41	3	44	Not Used			
20	44	64	Tail			
64			Total			

62 – Info Charge FNB

0 X 62

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		62 – Info Charge FNB	
12	2	14	CP Account Number			
30	14	44	Not Used			
20	44	64	Tail			
64			Total			

63 – Info Promotion Total Stub

0 X 63

Explanation: The Info Promotion Total Stub records the total promotional information transacted during the day from all the promotions defined. The Amounts Sold, Saver Values and Promotion Numbers are all fields recorded in the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Total Stub		63 – Info Promotion	
2	2	4	Promotion Number			
4	4	8	Sell Amount			
4	8	12	Saver Value			
32	12	44	Not Used			
20	44	64	Tail			
64			Total			

64 – Info Easy Shop Restricted Item

0 X 64

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Restricted		64 – Info Easy Shop	
42	2	44	Not Used			
20	44	64	Tail			
64			Total			

65 – Community Partner

0 X 65

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		65 – Community Partner	
1	2	3	Flags			
				bit 0	Final	
				bit 1	Voided	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	MCR Used	
				bit 7	Scanned	
20	3	23	Card Number			
4	23	27	Amount			
17	27	44	Reserved			
20	44	64	Tail			
64			Total			

66 – Info Automatic Refund

0 X 66

Explanation: The Info Automatic Refund records all the information recorded from refunds, including: Customer Number, Transaction Date, POS Terminal Number, Transaction Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Refund		66 – Info Automatic	
6	2	8	Customer Number			
3	8	11	Transaction Date			
1	11	12	POS Terminal No			
4	12	16	Transaction Number			
28	16	44	Not Used			
20	44	64	Tail			
64			Total			

67 – Info CCMS

0 X 67

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		67 – Info CCMS	
1	2	3	CCMS Customer Online			
1	3	4	CCMS Customer Off-Line			
40	4	44	Not Used			
20	44	64	Tail			
64			Total			

68 – TRS Bonus Buy

0 X 68

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		68 – TRS	
1	2	3	Flags			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Cancel Item	
				bit 7	Subtract Item	
7	3	10	PLU Code			
1	10	11	Type			
3	11	14	Valid Date			
4	14	18	BB Value			
4	18	22	Sale Value			
4	22	26	Savings			
4	26	30	Sell Amount			
14	30	44	Reserved			
20	44	64	Tail			
64			Total			

69 – Info Bonus Points Saving

0 X 69

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		69 – Info Bonus Points	
7	2	9	PLU Code			
4	9	13	Bonus Points			
4	13	17	Quantity			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

6A – Info Black Box

0 X 6A

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		6B – Info Black Box	Information on EFT (Philippines)
1	2	3	Flag1			
				bit 0	Black Box Start	
				bit 1	Flag OK	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
3	3	6	Issuer Code			
3	6	9	User Code			
6	9	15	Card Number			
4	15	19	Remaining Balance			
1	19	20	Card Type			
4	20	24	Purchase Amount			
1	24	25	Purpose Code			
4	25	29	Until Date			
1	29	30	Status Code			
4	30	34	Face Value			
10	34	44	Not Used			
20	44	64	Tail			
64			Total			

6B – Balance Inquiry

0 X 6B

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		6B – Info Balance Inquiry	EFT, MTXEPS
4	2	6	EBT Cash Balance			
4	6	10	EBT Food Stamps Balance			
4	10	14	Gift Card Balance			Gift Card Inquiry
5	14	19	Authorization Number			
5	19	24	EFT Reference Number			
2	24	26	Year of Expiration Date			EBT Inquiry
1	26	27	Flags 1			
				bit 0	EBT Cash balance	
				bit 1	EBT Food Stamps balance	
				bit 2	Enhanced MPR voucher print	
				bit 3	Accept Expiration Date	EBT Inquiry
				bit 4	Print Authorization Number	EBT Inquiry
				bit 5	Print Cash Balance	EBT Inquiry
				bit 6	Print Food Stamp Balance	EBT Inquiry
				bit 7	Opt MTX Receipts Retrieved	EBT Inquiry
1	27	28	Flags 2			
				bit 0	Print Gift Card Balance	Gift Card Inquiry
				bit 1	Print Gift Card Balance	Gift Card Inquiry
				bits 2-7	Not Used	
10	28	38	Account Number			EBT Inquiry
1	38	39	Account Length			EBT Inquiry
1	39	40	Card Range Number			EBT Inquiry
4	40	44	Sequence Number			
20	44	64	Tail			
64			Total			

6C – Black Box Data

0 X 6C

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		6C – Black Box Data	Information on EFT (Philippines)
1	2	3	Flags			
				bit 0	Flag Information	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
3	3	6	Issuer Code			
3	6	9	User Code			
6	9	15	Card Number			
4	15	19	Remaining Balance			
1	19	20	Card Type			
1	20	21	Purpose Code			
4	21	25	Until Date			
1	25	26	Status Code			
4	26	30	Face Value			
14	30	44	Not Used			
20	44	64	Tail			
64			Total			

6D – O1 Pay at Pump

0 X 6D

Explanation: The Pay at Pump records when a customer pays directly at the pump for the fuel. It refers to the Pump Mode. The Transaction Date, Time, Invoice Number etc., are registered at the time of the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		6D Pay at Pump	
1	2	3	Sub function		01	
3	3	6	Transaction Date		BCD YMD	
3	6	9	Transaction Time		BCD HMS	
4	9	13	Invoice Number			
12	13	25	Reference Number			
19	25	44	Card Name			
20	44	64	Tail			
64			Total			

6E – Fuel Reward

0 X 6E

Explanation: The Fuel Reward function is used to send data, which refers to promotions on items, connected to fuel sales. The transaction sends the Promotion Number, PLU Code, Price, Points, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		6E – Fuel Reward	Albertson's
4	2	6	Program Number			
4	6	10	Promotion Number			
7	10	17	PLU Code		BCD	
7	17	24	Price			
4	24	28	Points			
2	28	30	Count		Counts the total numbers of promotions given	
2	30	32	Department Number			
1	32	33	Flag	Bit 0	Member Account	
				Bit 1	Info Transaction	
				Bit 2	Manually Triggered	
				Bits 3-7	Not Used	
11	33	44	Reserved			
20	44	64	Tail			
64			Total			

6F – Reward Tender

0 X 6F

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		6F – Reward Tender	
11	2	13	Voucher ID			
5	13	18	Key Code			
4	18	22	Discount Per Quantity			
4	22	26	Total Discount			
4	26	30	Total Gallons			
2	30	32	Fuel Grade			
4	32	36	Price Per Grade			
1	36	37	Flag			
				bit 0	Manual	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
8	37	44	Not Used			
20	44	64	Tail			
64			Total			

70 – Info EFT Nomad Media

0 X 70

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Media		70 – Info EFT Nomad	
2	2	4	Card Type			
2	4	6	Media Number			
4	6	10	Amount			
4	10	14	Cash Back			
21	14	35	EFT Account Number			
1	35	36	Flags			
				bit 0	Enter Account	
				bit 1	Enter Account	
				bit 2	Void tender If EFT Not Confirm	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	36	37	Manual		Card	
					1 – Not MCR Used	
					2 – MCR Used	
7	37	44	Authorization Number		Cheque	
					3 – Not Manual	
					4 – Manual	
20	44	64	Tail			
64			Total			

71 – Info EFT Nomad Print Slip

0 X 71

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Print Slip		71 – Info EFT Nomad	
40	2	42	Key 1 EFT			
2	42	44	Reserved			
20	44	64	Tail			
64			Total			

71 – Info EFT Nomad Print Slip1

0 X 71

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Print Slip		71 – Info EFT Nomad Print Slip1	
40	2	42	KEY1_EFT			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

72 – Info EFT Nomad Owner Name

0 X 72

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Owner Name		72 – Info EFT Nomad	
42	2	44	EFT Owner Name			
20	44	64	Tail			
64			Total			

73 – Info Redemption Points

0 X 73

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Points		73 – Info Redemption	
4	2	6	Redemption Points Program 1			
4	6	10	Redemption Points Program 2			
4	10	14	Redemption Points Program 3			
4	14	18	Redemption Points Program 4			
4	18	22	Redemption Points Program 5			
4	22	26	Redemption Points Program 6			
4	26	30	Redemption Points Program 7			
4	30	34	Redemption Points Program 8			
4	34	38	Redemption Points Program 9			
4	38	42	Redemption Points Program 10			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

74 – Info EFT Nomad Budget

0 X 74

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Budget		74 – Info EFT Nomad	
10	2	12	EFT Transaction Number			
2	12	14	EFT Budget Period			
2	14	16	EFT Expiry Year			
2	16	18	EFT Expiry Month			
4	18	22	EFT Open to buy balance return			
4	22	26	EFT Account Balance return			
4	26	30	EFT Plan 1			
14	30	44	Reserved			
20	44	64	Tail			
64			Total			

75 – Info EFT Nomad Cheque

0 X 75

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Cheque		75 – Info EFT Nomad	
4	2	6	EFT Cheque Clear Code			
16	6	22	EFT Cheque Account Number			
4	22	26	EFT Cheque Number			
18	26	44	Reserved			
20	44	64	Tail			
64			Total			

76 – Info EFT Nomad TRX Key

0 X 76

Explanation: EFT Nomad

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		76 – Info EFT Nomad TRX Key	
33	2	35	EFT TRX Key			
4	35	39	Amount			
5	39	44	Reserved			
20	44	64	Tail			
64			Total			

77 – Scanpoint Save Report

0 X 77

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Report		77 – Scanpoint Save	
4	2	6	Scanpoint Scanned			
4	6	10	Rescanned			
4	10	14	Scanpoint Scanned Weight			
4	14	18	Rescanned Weight			
26	18	44	Not Used			
20	44	64	Tail			
64			Total			

78 – Saved Ticket

0 X 78

Explanation: The Saved Ticket Opcode sends information on the transaction, when the cashier uses the function “Save Transaction” at the POS, recording the Ticket Number, Ticket Amount, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Report		78 – Saved Ticket	
2	2	4	Ticket Number			
1	4	5	Flag			
				bit 0	Save at Sale Mode	
				bit 1	Save at Tender Mode	
				bit 2	Save at Training Mode	
				bit 3	Saved for Payment	Invoice is saved for payment
				bit 4	Saved for Split Payment	Split invoice saved for payment
				bit 5	Pack Transaction	Pack Transaction for bakery tills
				bit 6	Tax Voucher Requested	
				bit 7	Save at Stock Count	
4	5	9	Ticket Amount			
4	9	13	Media Total			
2	13	15	Ticket Items			
2	15	17	Supervisor Number			
8	17	25	Invoice Number			
3	25	28	Invoice Date			
1	28	29	Recalled POS Number			If this ticket number is a recalled ticket
2	29	31	Recalled Ticket Number			If this ticket is a recalled ticket
13	31	44	Reserved			
20	44	64	Tail			
64			Total			

79 – Electronic Smart Card Coupon

0 X 79

Explanation: The Electronic Smart Card Coupon function records coupon information and the information on the PLU attached to the coupon.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Coupon		79 – Electronic Smart Card Coupon + PLU attached	
7	2	9	Coupon Code		Empty (3), Manufacturer Code (6), Family Code (3), Value Code (2)	
6	9	15	Coupon Info		Offer Code (5) Coupon Category Code (2) Medium (1) Vehicle (2) Placement (2)	
3	15	18	Expiration time			
3	18	21	Start Time			
3	21	24	Capture Time			
1	24	25	Re-used counter			
1	25	26	Flags			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Display Capable	
				bit 3	DB Unread or Read	
				bit 4	Source	
				bit 5	Active or Cancel	
				bit 6	Active or Average Status	
				bit 7	Redemption Status	
1	26	27	Flags			
				bit 0	Subtract	
				bit 1	Cancel	
				bit 2	Ext_smart_cpn_trs	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 6	Not Used	
				bit 7	Not Used	
4	27	31	Reward			
7	31	38	PLU Code			
2	38	40	Family Code 1			
2	40	42	Family Code 2			
2	42	44	Reserved			
20	44	64	Tail			
64			Total			

7A – Smart TV Card Information

0 X 7A

Explanation: The Smart TV Card Information Opcode records when the transaction includes general information about the Card and summary variables.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Data		0x7A – Smart TV Card Data	
4	2	6	Wallet ID			
8	6	14	Card Holder ID			
8	14	22	Serial number			
2	22	24	Card Usage Count			
2	24	26	Coupon Redeemed			
4	26	30	Saving Accumulator			
1	30	31	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Dirty	
1	31	32	Flag 1			
				bit 0	Read	
				bit 1	Write	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
12	32	44	Reserved			
20	44	64	Tail			

Bytes	From	To	Data	Bits	Explanation	Remarks
64			Total			

7B – Gift Card Transaction

0 X 7B

Explanation: The Gift Card Transaction function is used by Albertson's when a Gift Card is activated, or recharged (re-activation).

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0x7B – Gift Card Transaction	For Albertsons
1	2	3	Action Type			
11	3	14	Card Number			
9	14	23	Authorization Number			
10	23	33	Reference Number			
4	33	37	Beginning Balance			
4	37	41	Transaction Amount			
1	41	42	Flag	bit 0	Activation	Gift card activation
				bit 1	Recharge gift card	
				bit 2	Opt MTX Receipts Retrieved	
				bit 3	Manually Swiped	Card was manually swiped
				bit 4	Opt External Data	
				bit 5	Allow Deactivation	
				bit 6	Pre-activated Flag	
				bit 7	Activation After Tender	
2	42	44	Tender Number			
20	44	64	Tail			
64			Total			

7C – Smart Card Coupon Information Transaction

0 X 7C

Explanation: The Smart Card Coupon function records when a transaction includes the information related to PLUs attached to the coupon.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Correct fix
1	1	2	Function Report		0x7C – Smart Card Coupon Extension	
7	2	9	PLU Code			
2	9	11	Family Code 1			
2	11	13	Family Code 2			
7	13	20	PLU Code			
2	20	22	Family Code 1			
2	22	24	Family Code 2			
7	24	31	PLU Code			
2	31	33	Family Code 1			
2	33	35	Family Code 2			
9	35	44	Reserved			
20	44	64	Tail			
64			Total			

7D – Return Voucher Issued

0 X 7D

Explanation: The Return Voucher Issued

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0x7D – Return Voucher Issue	ROW
1	2	3	Sub Function		0 – Issue 1 – Redemption 2 – Payment	
10	3	13	VCR Number		Voucher number in BCD	
4	13	17	Voucher Amount			
2	17	19	Redemption Tender Number			
10	19	29	Customer Number			
15	29	44	Filler		Future Use	
20	44	64	Tail			
64			Total			

7E – Information Transaction for Recalled Invoice

0 X 7E

Explanation: The Information Transaction for Recalled Invoice function records when an invoice is recalled. Information registered includes: Invoice Number, Cashier, POS, Ticket Number, Payment Type, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X 7E Info transaction for recalled invoice	
8	2	10	Invoice number		Cashier, Till, Ticket Number	(CCCCTTTNNNNN)
1	10	11	Payment type		0 – Normal payment 1 – Paid through an account payment offline. 2 – Split TRS paid offline 3 – Split TRS paid online See also Invoice_Payment_Type	
3	11	14	inv_issue_dt		Invoice issue date	
3	14	17	inv_issue_tm		Invoice issue date	
27	17	44	Filler		For Future Use	
20	44	64	Tail			
64			Total			

7F – Information on Charge Payments

0 X 7F

Explanation: The Information on Charge Payments records the Tender Numbers and Customer Numbers of customer purchases that are charged to a store account.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0x7F –Payment by all Tenders	ROW: METRO; Sale_Proc: ACC_PAYM_ALL_TENDER
1	2	3	Type of Payment EOT			
4	3	7	Tender Amount			
4	7	11	Amount Total			
2	11	13	Tender Number			
20	13	33	Customer Number			
11	33	44	Not Used			
20	44	64	Tail			
64			Total			

80 – EFT Finland (Request 1)

0 X 80

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		80 – EFT Finland	
12	2	14	Amount		Amount: '1000....' = 10.00	
4	14	18	Transaction Type		Type of transaction (00) + type of tender (05) = "0005"	
19	18	37	Account		Account: '4920567890123455....'	
6	37	43	Authorization Code			
1	43	44	Reserved			
20	44	64	Tail			
64			Total			

81 – EFT Finland (Request 2)

0 X 81

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		81 – EFT Finland	
4	2	6	Expiry Date			
4	6	10	Message Type		0100 = Authorization request 0101 = Repetition of request 0400 = Cancellation of Authorization 0401 = Repetition of Cancellation	
2	10	12	Original Response Code		Used in Cancellations	
1	12	13	Flags			
				bit 0	Request Failed	Request Failed/Not
				bit 1	Cancel Subtract Flag	Cancel/Subtract = True
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
31	13	44	Reserved			
20	44	64	Tail			
64			Total			

82 – EFT Finland (Response 1)

0 X 82

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		82 – EFT Finland	
12	2	14	Amount		Amount: '000000001000' = 10.00	
4	14	18	Transaction Type		Type of transaction + type of tender = "0005"	
19	18	37	Account		Account: '4920567890123455...'	
6	37	43	Authorization Code			
1	43	44	Reserved			
20	44	64	Tail			
64			Total			

83 – EFT Finland (Response 3)

0 X 83

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		83 – EFT Finland	
4	2	6	Message Type		0110 = Response to Authorization 0410 = Response to Cancellation	
2	6	8	Response Code			
6	8	14	Message ID from SOK		Message ID from SOK	
10	14	24	Time Stamp Response		MMDDhhmmss	
6	24	30	Authorization Code Response		Authorization code	
1	30	31	Flags			
				bit 0	Request Failed	Request failed/not
				bit 1	Cancel Subtract Flag	Cancel/subtract = True
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	31	33	Tender Number		EFT_FIN_1	
11	33	44	Reserved			
20	44	64	Tail			
64			Total			

84 – Matthew Clubcard Trigger

0 X 84

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Clubcard Trigger		84 – Matthew	
1	2	3	Trigger Number			
1	3	4	Currency Type			
4	4	8	Qualify Spend			
4	8	12	Award Points			
4	12	16	Award Keys			
28	16	44	Not Used			
20	44	64	Tail			
64			Total			

85 – CC OLA Message

0 X 85

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		85 – CC OLA Message	
1	2	3	Flags			
				bit 0	Op Message	
				bit 1	Elong	
				bit 2	Type 1	
				bit 3	Type 2	
				bit 4	Type 3	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
41	4	44	Data			
20	44	64	Tail			
64			Total			

86 – Department Additional Data

0 X 86

Explanation: The Department Additional Data function records additional information on departments, including: Return Types per Department, Quantities, Amounts, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Additional Data		86 – Department	
1	2	3	Flags			
				bit 0	Opt Subtract	
				bit 1	Opt Cancel	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Return Type			
4	4	8	Qty			
4	8	12	Amount			
7	12	19	Item for Department Additional Data			
25	19	44	Not Used			
20	44	64	Tail			
64			Total			

87 – Promotion Coupon Required

0 X 87

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Coupon Required		87 – Promotion	
5	2	7	Promotion Number		BCD//PROM_CHNG (Was 2)	
7	7	14	No Coupon Required			
1	14	15	Flags			
				bit 0	Delayed Promotion	
				bit 1	Coupon Required Return	PROM_CPN_REQ1
				bit 2	Coupon Physical Scan	Coupon was physically scanned by cashier
				bit 3	Ext Transaction	
				bit 4	External Validation LPE	
				bit 5	Was Cancelled	
				bit 6	Cancel	
				bit 7	Master Coupon	
7	15	22	Attached PLU		For coins PLU attached	
2	22	24	Count			
7	24	31	Coupon code			
1	31	32	Coupon Code Length			
8	32	40	Supplemental Data			Supplement data to the promotion coupon
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

88 – OLA Day Totals

0 X 88

Explanation: The OLA Day Totals records the authorized credit totals and counts, debit totals and counts at the end of the day, when cashing up.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		83 – EFT Finland	
4	2	6	Credit Total		1 – Write	
2	6	8	Credit Count			
4	8	12	Debit Total			
2	12	14	Debit Count			
30	14	44	Not Used			
20	44	64	Tail			
64			Total			

89 – Pump Totals

0 X 89

Explanation: The Pump Totals records all the information from each pump at the end of a shift, including: the Grade, the Nozzle used, the Shift Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		89 – Pump Totals	
2	2	4	Nozzle		1 – Write	
2	4	6	Grade			
4	6	10	Index Number			
4	10	14	Pump			
4	14	18	Active Read Number			
4	18	22	Shift Number			
4	22	26	Volume			
4	26	30	Value A			
4	30	34	Value B			
4	34	38	Date Time			
6	38	44	Not Used			
20	44	64	Tail			
64			Total			

8A – Message 5 PLU

0 X 8A

Explanation: The Message 5 PLU records the links to the PLU Code, and the description message connected to the PLU.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		8A – Message 5 PLU	
1	2	3	Flag 1			
				bit 0	Subtract	
				bit 1	Canceled	
				bit 2	Department Sale	
				bit 3	Item Sold	
				bit 4	Recall Report	
				bit 5	Refund	
				bit 6	Post Void	
				bit 7	Recall Sale Not Allowed	
20	3	23	Describe Message PLU			
7	23	30	Link PLU Code			
2	30	32	Department Number			
12	32	44	Reserved			
20	44	64	Tail			
64			Total			

8C – Cash Withdrawal EFT

0 X 8C

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		8C – Cash Withdrawal EFT	
1	2	3	Flag 1			
				bit 0	Cash Withdrawal EFT	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
41	3	44	Reserved			
20	44	64	Tail			
64			Total			

8D – Information on Delivery Charges

0 X 8D

Explanation: The Information on Delivery Charges function records all the information on deliveries received by the store. The information recorded includes: Tax Rates, Tax Numbers, Delivery Amounts, Tax on Delivery Amounts, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		8D	
4	2	6	Tax Rate			
2	6	8	Tax Number			
4	8	12	Delivery Amount			
4	12	16	Tax on Delivery Amount		Tax amount into delivery amount	
28	16	44	Not Used			
20	44	64	Tail			
64			Total			

8E – Information Segment

0 X 8E

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		8E	
10	2	12	Card Number		Card number in BCD	
1	12	13	Flags 1	bit 0	Segment Insert 1	Delete segment value
				bit 1	Segment Insert 2	Insert value into segment
				bit 2	Segment Insert 3	
				bit 3	Segment Insert 4	
				bit 4	Segment Insert 5	
				bit 5	Segment Insert 6	
				bit 6	Segment Insert 7	
				bit 7	Segment Insert 8	
1	13	14	Flags 2	bit 0	Segment Insert 9	
				bit 1	Segment Insert 10	
				bit 2	Segment Updated In Chip Card	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	14	16	Segment 1			
2	16	18	Segment 2			
2	18	20	Segment 3			
2	20	22	Segment 4			
2	22	24	Segment 5			
2	24	26	Segment 6			
2	26	28	Segment 7			
2	28	30	Segment 8			
2	30	32	Segment 9			
2	32	34	Segment 10			
10	34	44	Reserved			
20	44	64	Tail			
64			Total			

8F – Chip Card Information

0 X 8F

Explanation: The Chip Card Information records the information read from the chip that reads the credit card status, sending the Card Number, Data, Card Type, Status, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		8F –Chip Card Information	
10	1	12	Card Number		Chip Card Number in BCD	
24	12	36	Data			
1	36	37	Card Type			
2	37	39	Status			
4	39	43	Amount			
1	43	44	Not Used			
20	44	64	Tail			
64			Total			

91 – PLU Stock Count – 7.3.4

0 X 91

Explanation: This Opcode registers information on items during the transaction, for PLU Stock Counting.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		91 – PLU Stock Count	
7	1	8	Code			
1	8	9	Flags			
				bit 0	Ext record	
				bit 1	Subtract	
				bit 2	Cancel	
				bit 3	Negative	
				bit 4	Was Canceled	
				bit 5	Supplier promotion	
				bit 6	Staff discountable	
				bit 7	Accept price override	
1	9	10	Flags			
				bit 0	Item on Sale	
				bit 1	Price Override	
				bit 2	Manual price	
				bit 3	Manual price allowed	
				bit 4	Weight from scale	
				bit 5	Quantity is weight	
				bit 6	Quantity is decimal quantity	
				bit 7	Quantity is liter	
1	10	11	Flags			
				bit 0	Chained from previous item	
				bit 1	Promotion	
				bit 2	Reduction	
				bit 3	Offer	
				bit 4	Non-merchandise	
				bit 5	Store coupon	
				bit 6	Vendor coupon	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 7	Item discount flag	
1	11	12	Flags	bit 0	Scanned item	
				bit 1	Read from PC	
				bit 2	Next info	
				bit 3	Saver	
				bit 4	Extended Promotion	
				bit 5	Price embedded	
				bit 6	FF drags modifier	
				bit 7	FF modifier	
1	12	13	Flags	bit 0	Offer discount	
				bit 1	Offer continue	
				bit 2	Offer first	
				bit 3	Counter department	
				bit 4	Return to stock	
				bit 5	Cost Plus	
				bit 6	Frequent Shopper discount	
				bit 7	Food Stamps payment	
2	13	15	Department			
1	15	16	Multi sell unit			
1	16	17	Return type			
1	17	18	Tax pointer			
4	18	22	Quantity			
4	22	26	Price			
4	26	30	Amount			
4	30	34	No-tax price			
4	34	38	No-tax amount			
4	38	42	Return surcharge percent			
1	42	43	Product code			
1	43	44	Flags	bit 0	FF modifier price	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 1	Markdown	
				bit 2	Member discount	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
20	44	64	Tail			
64			Total			

92 – Card Deposit

0 X 92

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		92 – Card Deposit	
21	2	23	Account			
9	23	32	Print Authorization number			
1	32	33	Issue No			
2	33	35	Issue Date Year			
2	35	37	Issue Date Month			
2	37	39	Expiry Date Year			
2	39	41	Expiry Date Month			
1	41	42	Flags		bit 0 – Issue Not Used	
				bit 1	MCR Used	
				bit 2	Smart Card Used	
				bit 3	Accept Expiry Date	
				bit 4	Accept Issue Date	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

93 – Ticket Times

0 X 93

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		93 – Ticket Times	
1	2	3	Flags			
				bit 0	Ticket with exception	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	3	7	Time For All Ticket			
4	7	11	Time Accept Cards			
4	11	15	Time Scan Items			
4	15	19	Time Finish Ticket			
4	19	23	Time Supervisor			
4	23	27	Time Call Assistant			
4	27	31	Time Supervisor Menu			
13	31	44	Not Used			
20	44	64	Tail			
64			Total			

94 – Ticket Exceptions

0 X 94

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		94 – Ticket Exceptions	
1	2	3	Flag1			
				bit 0	Ticket with exception	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	All Items			
2	5	7	Items With Exceptions			
2	7	9	Cancel Exception			
2	9	11	Items With Manual Exception			
2	11	13	Items With Not On File Exception			
2	13	15	Items With Not For Sale Exception			
2	15	17	Items With Manual Price Exception			
2	17	19	Items With Price Verify Exception			
2	19	21	Items With Age Restricted Exception			
2	21	23	Items With Video Sale Exception			
2	23	25	Items With Time Restrict Exception			

Bytes	From	To	Data	Bits	Explanation	Remarks
2	25	27	Maximum Customer Age			
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

95 – Info EFT Nomad Print Slip2

0 X 95

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Print Slip		95 – Info EFT Nomad Print Slip2	
40	2	42	KEY2_EFT			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

96 – Info EFT Nomad Print Slip3

0 X 96

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function Print Slip		96 – Info EFT Nomad Print Slip3	
40	2	42	KEY3_EFT			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

97 – Pump Post Dec

0 X 97

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		97 – Pump Post Dec	
10	2	12	Account			
2	12	14	Media Number			
4	14	18	Amount			
4	18	22	Volume			
2	22	24	Decline Code			
1	24	25	Pump Number			
3	25	28	Date			
3	28	31	Time			
13	31	44	Reserved			
20	44	64	Tail			
64			Total			

98 – Pump Grade Price ID

0 X 98

Explanation: The Pump Grade Price ID records the information from the Pump when recognizing that the Price ID and Grade ID correlate with the price of the fuel.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		98 – Pump Grade Price ID	
2	2	4	Price ID			
1	4	5	Grade ID			
4	5	9	Price			
35	9	44	Reserved			
20	44	64	Tail			
64			Total			

99 – Chipcard Handle Message

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0x99	
10	2	12	Card Number		2 Chip Card Number in BCD	
1	12	13	Message Level			
2	13	15	Message Number			
2	15	17	Update Status			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

9F – Invoice Reprint

0 X 9F

Explanation: The Invoice Reprint records the information on invoices that are reprinted. The transaction sends Invoice Number, Invoice Issue Date, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		9F – Invoice Reprint	
8	2	10	Invoice Number			
3	10	13	Invoice Issue Date			
4	13	17	Amount			Invoice Value
4	17	21	Supervisor			
23	21	44	Filler			For Future Use
20	44	64	Tail			
64			Total			

A0 – EJ Info Bad Account

0 X A0

Explanation: The EJ Info Bad Account records all the information on bad accounts in the Electronic Journal, sending the Account Number, Account Length, Card Range Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		A0 – Electronic Journal Information on Bad Accounts	
10	2	12	Account Number		(BCD 19)	
1	12	13	Account Length			
1	13	14	Card Range Number			
1	14	15	Flags			
				bit 0	MCR Used	Magnetic Card Reader used.
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
9	15	24	Bank Number			
20	24	44	Reserved			
20	44	64	Tail			
64			Total			

A1 – EJ Info Price Inquiry

0 X A1

Explanation: The EJ Info Price Inquiry records all price inquiries recorded in the Electronic Journal, sending the PLU Code, Inquire Amount, Promotion Amount, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		A1 – Electronic Journal Information on Price Inquiry	
7	2	9	PLU Code			
4	9	13	Inquiry Amount		Total Inquiry	
4	13	17	Promotion Amount		Total Promotion	
4	17	21	Discount Amount		Total Discount	
4	21	25	PLU Price			
4	25	29	Original Price			
4	29	33	Count			
4	33	37	Decimal Count			
1	37	38	Mult Sell Unit			
4	38	42	Weight			
1	42	43	Flags			
				bit 0	Execute Inquiry	
				bit 1	Store Coupon	
				bit 2	Vendor Coupon	
				bit 3	Other Coupon	
				bit 4	WIC Item	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	43	44	Reserved			
20	44	64	Tail			
64			Total			

A2 – EJ Info Control Check

0 X A2

Explanation: During a transaction where a control check is used, the data is transferred to the EJ (Electronic Journal). The EJ Info Control Check transaction records the control check Numbers and the status of the control check.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not Used by Tesco
1	1	2	Function Check		A2 – EJ Info control	
2	2	4	Control Check Number			
1	4	5	Flag 1			
				bit 0	Accepted	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	Flag 2			
				bit 0	Ask Yes No	
				bit 1	Manager Key	
				bit 2	Stop Activity	
				bit 3	Supervisor Key	
				bit 4	Warning Only	
				bit 5	Valid Record	
				bit 6	Delayed Authorization	
				bit 7	Value at Text	
1	6	7	Privilege			
2	7	9	Cashier Number			
2	9	11	Template Number			
1	11	12	POS Status			
1	12	13	TLOG reporting level		Reporting Level	
31	13	44	Reserved			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

A3 – EJ Info Age ID

0 X A3

Explanation: The EJ Info Age ID records the data that prompts an Age ID check. The data is recorded in the Electronic Journal.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not Used by Tesco
1	1	2	Function		A3 – EJ Info Age ID	
1	2	3	Current Age			
3	3	6	Birthday Date			
1	6	7	Flag 1			
				bit 0	Bypass Age	
				bit 1	Check Age	
				bit 2	Bypass or Check Accepted	
					0 – Not	
					1 – Yes	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
37	7	44	Reserved			
20	44	64	Tail			
64			Total			

A4 – Add Loss Report (Item On Sale)

0 X A4

Explanation: This Opcode registers any added information on the different items on sale, at the end of the transaction, recording Code Number, Original Price, Quantity Price, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not Used by Tesco
1	1	2	Function		A4 – Item on sale	
7	2	9	Code			
1	9	10	Flag 1			
				bit 0	Qty is Weight	
				bit 1	Qty is Decimal Qty	
				bit 2	Qty is Fuel Gallons	POSPump. TESCO field name is Qty is Liter
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	10	14	Original Price			
1	14	15	Original Qty			
4	15	19	On Sale Price			
1	19	20	On Sale Qty			
4	20	24	Amount			
4	24	28	Quantity			
16	28	44	Reserved			
20	44	64	Tail			
64			Total			

A5 – Tank Reading Header

0 X A5

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		A5 – Tank Reading Header	
1	2	3	Flag 1			
				bit 0	End Of Day Read	
				bit 1	Force Read	
				bits 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Reserved			
20	44	64	Tail			
64			Total			

A6 – Tank Reading Detail

0 X A6

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		A6 – Tank Reading Detail	
1	2	3	Tank Number			
1	3	4	Status 1			
1	4	5	DataMap			
4	5	9	Fuel Level			
4	9	13	Water Level			
2	13	15	Temperature			
1	15	16	Status 2			
4	16	20	Volume			
4	20	24	Value			
4	24	28	Price Per Liter			
16	28	44	Reserved			
20	44	64	Tail			
64			Total			

A7 – Pump Reading Header

0 X A7

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not Used by Tesco
1	1	2	Function		A7 – Pump Reading Header	
1	2	3	Flag 1			
				bit 0	End Of Day Read	
				bit 1	Force Read	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Number of Pump Recs			
40	4	44	Reserved			
20	44	64	Tail			
64			Total			

A8 – Pump Reading Detail

0 X A8

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		A8 – Pump Reading Detail	
1	2	3	Pump Number			
1	3	4	Status			
1	4	5	Status Nozzle 1			
4	5	9	Volume 1			
1	9	10	Status Nozzle 2			
4	10	14	Volume 2			
1	14	15	Status Nozzle 3			
4	15	19	Volume 3			
1	19	20	Status Nozzle 4			
4	20	24	Volume 4			
20	24	44	Reserved			
20	44	64	Tail			
64			Total			

A9 – Delivery Reading Header

0 X A9

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		A9 – Delivery Reading Header	
1	2	3	Flag 1			
				bit 0	End Of Day Read	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Number Of Delivery Recs			
40	4	44	Reserved			
20	44	64	Tail			
64			Total			

AA – Delivery Reading Detail

0 X AA

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		AA – Delivery Reading Detail	
1	2	3	Tank Number			
5	3	8	Start Date Time			
5	8	13	End Date Time			
4	13	17	Start Volume			
4	17	21	End Volume			
4	21	25	Adjusted Delivery Volume			
4	25	29	Adjusted Temperature			
15	29	44	Reserved			
20	44	64	Tail			
64			Total			

AB – Alarm Reading Header

0 X AB

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		AB – Alarm Reading Header	
1	2	3	Flag 1			
				bit 0	End Of Day Read	
				bit 1	Force Read	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Number Of Alarm Recs			
40	4	44	Reserved			
20	44	64	Tail			
64			Total			

AC – Alarm Reading Detail

0 X AC

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		AC –Alarm Reading Detail	
2	2	4	Category			
2	4	6	Code			
5	6	11	Start Date Time			
5	11	16	End Date Time			
28	16	44	Reserved			
20	44	64	Tail			
64			Total			

AD – Tank Config Reading Header

0 X AD

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		AD – Tank Reading Header	
1	2	3	Flag 1			
				bit 0	End Of Day Read	
				bit 1	Force Read	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Tank Gauge Fit			
1	4	5	Reconciliation Needed			
1	5	6	Card Number			
1	6	7	Gauge Type			
2	7	9	Fuel Reconciliation Period			
1	9	10	Interlock Modes			
1	10	11	End Of Day Report Required			
1	11	12	Number Of Tanks			
32	12	44	Reserved			
20	44	64	Tail			
64			Total			

AE – Tank Config Reading Detail

0 X AE

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		AE – Tank Config Reading Detail	
1	2	3	Tank Number			
1	3	4	Grade In Tank			
1	4	5	Mapped Tank Number			
1	5	6	Tank Gauge Line			
38	6	44	Reserved			
20	44	64	Tail			
64			Total			

AF – Pump Config Reading Header

0 X AF

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		AF– Pump Config Reading Header	
1	2	3	Flag 1			
				bit 0	End Of Day Read	
				bit 1	Force Read	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	3	7	Site Volume Limits			
4	7	11	Site Value Limits			
1	11	12	Number Of Pumps			
32	12	44	Reserved			
20	44	64	Tail			
64			Total			

B0 – Pump Config Reading Detail

0 X B0

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not Used by Tesco
1	1	2	Function		B0 – Pump Config Reading Detail	
1	2	3	Pump Number			
1	3	4	Card Number			
1	4	5	Card Channel Number			
1	5	6	Type			
1	6	7	Nozzle 1 Grade			
1	7	8	Nozzle 1 Tank			
1	8	9	Nozzle 2 Grade			
1	9	10	Nozzle 2 Tank			
1	10	11	Nozzle 3 Grade			
1	11	12	Nozzle 3 Tank			
1	12	13	Nozzle 4 Grade			
1	13	14	Nozzle 4 Tank			
30	14	44	Reserved			
20	44	64	Tail			
64			Total			

B1 – Information Sundry Product

0 X B1

Explanation: The Information Sundry Product function is recorded when a sundry item transaction is transacted. Item Prices and Descriptions are captured at the POS.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B1 – Info Sundry Product	
7	2	9	PLU Code		Item number (BCD)	
20	9	29	PLU Description		Item description	
1	29	30	Flags			
				bit 0	Liquor Item	
				bit 1	Tobacco Item	
				bit 2	Standard Item	Not liquor or tobacco
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	30	32	Liquor Capacity		Liters in item unit	
4	32	36	Tax Amount			
4	36	40	PLU Price		Item price	
4	40	44	Quantity		Quantity sold	
20	44	64	Tail			
64			Total			

B2 – Information Grid Calculation

0 X B2

Explanation: The Information Grid Calculation Opcode sends information on Item Prices from the Price Grid Table if the parameter “Price_Grid” is set to On. The transaction describes the process of ‘Search Minimum Item Price’.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B2 – Info Grid Calculation	
7	2	9	PLU Code			
1	9	10	Comparative Number			
1	10	11	Flag 1			
				bit 0	Comparative flag	
				bit 1	Special Price	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	11	13	Price Code			
4	13	17	Tax on Extra Fee 1			
4	17	21	Service Fee			
4	21	25	Finance Fee			
4	25	29	Extra Fee1			
4	29	33	Broken Pack			
4	33	37	Extra Fee 2			
4	37	41	Promotion Number			
1	41	42	cp_prc_indicator			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

B3 – Information Price Calculation

0 X B3

Explanation: This Opcode is a continuation of the previous Opcode B2 – Information Grid Calculation. The transaction describes the pricing calculation process for price getting from the Price Grid Table.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B3 – SubOpcode – Price calculations	ROW – wholesale price calculation information
7	2	9	PLU Code		Item number	
2	9	11	Department Number			
1	11	12	Flag 1	bit 0	Staff discount given	
				bit 1	Customer discount given	
				bit 2	Manager discount given	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	12	16	Long Milk levy		Levy on this item	
4	16	20	Wet tax amount			
4	20	24	Liquor Subsidy Amount			
4	24	28	Discount Amount		Discount amount for staff, customers, managers	
4	28	32	Tax on this Item			
4	32	36	Case Discount Amount			
4	36	40	Surcharge Rate In Percents			
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

B5 – Priceline Abn

0 X B5

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B5 – Price line ABN	The Number ABN on ticket (Priceline).
15	2	17	abn_nu			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

B6 – Staff Card

0 X B6

Explanation: The Staff Card records the card information when a staff card is used, granting staff benefits if relevant. The data recorded includes: Scheme Number, Card Number, Tender Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B6 – Staff Card	
1	2	3	Flag 1			
				bit 0	MCR used	Card was Swiped/Keyed
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Scheme Number			1 to 9
20	4	24	Card Number		Card No. in ASCII null terminated	
2	24	26	Tender Number		Card is credit/debit to Tender Number	
1	26	27	CRNG_NO		Card Range Number	
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

B7 – Info TPF Recall

0 X B7

Explanation: This transaction records the data for self scan save and recall transactions.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B7 – Item Data for recall	
7	2	9	PLU Code		PLU Number	
Union						
First data						
1	9	10	Type		Struct takes up 10 bytes	
					2 – Date	
					3 – Integer	
					4 – Decimal	
					5 – Alpha requests	
1	10	11	Number			
Second data						
1	11	12	Date			
	12	13	Number			
Third data						
	13	14	Integer			
	14	15	Number			
Fourth data						
	15	16	Decimal			
	16	17	Number			
Fifth data						
	17	18	Alpha Request			
	18	19	Number			
10	19	29	Field			
1	29	30	Flag 1			Message number that was used from e-topup variant
				bit 0	Refund TPF Item	
				bit 1	Price currency	0 – default 1 – Euro

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 2	RTC	0 – Norma 1 – RTC item
				bit 3	Void Item	0 – scanned 1 – voided
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
6	30	36	Quantity			
5	36	41	Amount			
3	41	44	Reserved			
20	44	64	Tail			
64			Total			

B9 – Information OEM Points

0 X B9

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B9 –OEM Points Transaction	
20	2	22	Member Card Number			
4	22	26	Current Points Earned			
4	26	30	Points Accumulated			
14	30	44	Not Used			
20	44	64	Tail			
64			Total			

BB – Information Repeat Code

0 X BB

Explanation: The Information Repeat Code function is a Representative Code Transaction. The transaction gives information on representative codes against which sales can be recorded, for reporting and commission purposes.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		BB – Rep Code Transaction	
1	2	3	Sub Opcode		1 – Trans 2 – Item	
7	3	10	PLU Code			
4	10	14	Quantity			
1	14	15	Flag1			
				Bit 0	Automatic Repeat Code	
				Bit 1	Force Entry	
				Bit 2	Cancel Item	
				Bit 3	Subtract Item	
				Bit 4	Void Repeat Code	
				Bit 5	Manual Entry	
				Bit 6	Not Used	
				Bit 7	Not Used	
2	15	17	Repeat Code			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

BC – Customer at SOT

0 X BC

Explanation: The Customer at SOT (Start of Ticket) is the transaction that records the information at the beginning of the ticket. Sending information on the status of the Payment Type, Customer Category, Cheque Limits, Credit Limits, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		BC –Customer at SOT	
1	2	3	Sub Function		1 – Inf1 2 – Inf2 3 – Inf3 4 – Inf4	
41	3	44	Data			
			Inf1			
1	3	4	Payment Type			
2	4	6	Customer Category			
4	6	10	Rep Code			
2	10	12	Liquor Type			
3	12	15	Liquor Type Expiry Date			
1	15	16	Flags			
				bit 0	Rounding	
				bit 1	Case Discount	
				bit 2	First Recall Invoice	
				bit 3	Wet Tax	
				bit 4	Not Used2	
				bit 5	Foreign	
				bit 6	Not Used	
				bit 7	Not Used	
1	16	17	Flags			
				bit 0	Vat Exempt	Inv_RRP Invoice Markdown Invoice Barcode
				bit 1	Credit Card fee	
				bit 2	Delivery Charge	
				bit 3	Not Used	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 4	Not Used	
				bit 5	Invoice Not Used	
				bit 6	Invoice Not Used	
				bit 7	Invoice Not Used	
2	17	19	Home State			
1	19	20	Customer Status			
4	20	24	Cheque Limit			
4	24	28	Credit Limit			
2	28	30	Block Code			
1	30	31	Discount CD			
4	31	35	Surcharge Percent			
2	35	37	Customer at SOT MCR			
1	37	38	Flags			
				bit 0	Customer Charge Posting	
				bit 1	Customer Offline	
				bit 2	Customer Not Found	
				bit 3	Customer Tax Exempt	
				bit 4	Customer Branch	Sale Proc
				bit 5	Customer Reserve	
				bit 6	Customer Reserve	
				bit 7	Customer Reserve	
1	38	39	Staff Type			
1	39	40	Price Exception			
1	40	41	Price Type			
1	41	42	Type of Payment at SOT			Sale Proc
1	42	43	Type Return		Start up menu return	
1	43	44	Reserved			
Inf2						
12	3	15	Liquor License			
10	15	25	Tax ID			
4	25	29	Postal Code			
4	29	33	Cheque Amount			
4	33	37	Credit Amount			
7	37	44	Reserved			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

BD – Gift Basket

0 X BD

Explanation: Gift Basket

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		BD – Gift Basket	
2	2	4	Gift Number			
1	4	5	Flags			
				bit 0	Start	
				bit 1	End	
				bit 2	Void Gift	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
39	5	44	Reserved			
20	44	64	Tail			
64			Total			

BE – EFT Handle Transaction

0 X BE

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function –Sub Opcode		BE – EFT Handle Transaction	EFT_NMD_CLICKS
4	2	6	Handle Number			
1	6	7	Flags			
				bit 0	Invoice	(Ticket) handle
				bit 1	Item	(Elec. Voucher) handle
				bit 2	Media	EFT Handle, not really used: handle send in media_ext2
				bit 3	Cancel	Cancel Handle
				bit 4	Not Used	Future Use
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
37	7	44	Reserved		Not Used	
20	44	64	Tail			
64			Total			

BF – PRN_NMD

0 X BF

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		BF – PRN_NMD	EFT_NMD_CLICKS
1	2	3	Sub Function		Number of string	
41	3	44	Data			
20	44	64	Tail			
64			Total			

C0 – Loyalty Message

0 X C0

Explanation: The Loyalty Message

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C0 – Information Loyalty Messages	
1	2	3	Not Used			
1	3	4	Language ID			
2	4	6	SMS Number		BCD – Message ID	
20	6	26	Card Number		0 – Customer Specific Message 1 – All Loyalty 2 – Non-Loyalty Customers	
1	26	27	Destination			
1	24	25	Flag 1			
				bit 0	Remove Specific Link	
				bit 1	Message Expired	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
16	25	44	Data			
20	44	64	Tail			
64			Total			

C0 – Foreign Currency/DCC Transaction Detail (TESCO)

0 X C0

Explanation: The Foreign Currency/DCC Transaction records all DCC (Dual Currency Conversion) and all foreign currency transactions when a foreign credit card is tendered. The customer is charged in the home currency according to the current conversion rate.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	TESCO ONLY
1	1	2	Function		C0 – Item Data Capture	
3	2	5	Currency code		Currency code	
3	5	8	Currency Mnemonic		Currency Mnemonic	
13	8	21	Currency Rate		Currency Conversion rate used	
6	21	27	Currency Date		Applicable date for the conversion rate	
4	27	31	Home value		Tender value charged in the home currency	
13	31	44	Not Used			
20	44	64	Tail			
64			Total			

C1 – Loyalty Customer

0 X C1

Explanation: The Loyalty Customer function records the information on Customer Points earned from using a Loyalty Card.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C1 – Information Loyalty Customer	
10	2	12	Card Number		Loyalty Card Number in BCD	
4	12	16	Customer Points		Points up to date	
4	16	20	Today Earned Points		Points earned during the day – From the Server	
4	20	24	Today Redeemed Points		Points redeemed during the day from the Server.	
1	24	25	Flag 1			
				bit 0	Record In Server	Customer in server cust.qdx file
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
19	25	44	Not Used19			
20	44	64	Tail			
64			Total			

C2 – EFT Information Data

0 X C2

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X C2 Trans Info EFT Data	
2	2	4	Session ID			
1	4	5	Customer Wait Time			
1	5	6	Total Network Time			
1	6	7	Flag			
				bit 0	Communication timeout	
				bit 1	Offline Authorization	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	7	8	Card Type		0 – Cheque card 1 – Debit card 2 – Credit card 3 – Charge card 4 – Fuel card 6 – Security card 7 – Loyalty card 8 – Staff discount 9 – Consumer panel	Includes check cards
2	8	10	Card Range Number			
9	10	19	XAuthCode		BASE24 “0000” if online authorization source BASE24 “IHCF” if only checked in bad account list	

Bytes	From	To	Data	Bits	Explanation	Remarks
1	19	20	Separator Place			
1	20	21	Length			
20	21	41	Data			
1	41	42	Authorize Source		Same as Below	
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

C3 – Information Additional Credit Limit

0 X C3

Explanation: This Opcode is used to send information on the Customers and their Credit Card Limits, during the transaction. It is used for the “METRO” project.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C3 – Transaction: Allow additional credit/check limit	ROW: METRO
1	2	3	Type Limit		1 – Credit Limit 2 – Check Limit	
4	3	7	Amount			
20	7	27	Customer Number			
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

C4 – Clubcard Information

0 X C4

Explanation: The Clubcard Information function records the information read from a Clubcard during the transaction, recording the Card Number, Expiry Year, Expiry Month, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C4	
10	2	12	SCard No		Card number in BCD	
2	12	14	shExpYear			
1	14	15	chExpMonth			
1	15	16	chIssue Number			
1	16	17	Flags	Bit 0	Secondary ID	
				Bit 1	Chip Card Used	
				Bit 2	Octopus Loyalty Card	
				Bit 3	Loyalty Issue Only	
				Bit 4	Rocks Loyalty Card	
				Bit 5	Master Card From Barcode	
				Bit 6	Void Barcode When Scheme Voided	
				Bit 7	Not Used	
10	17	27	Master Account Number			
2	27	29	CardStoreNum		Member Card Store Number	
1	29	30	Loyalty Type			
2	30	32	Tender Number			
12	32	44	Reserved			
20	44	64	Tail			
64			Total			

C5 – External Charge Payment

0 X C5

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C5 – Transaction External Charge Payment	
10	2	12	Account		BCD of account, without check digit, with leading zeros	
1	12	13	Flag	bit 0	is_reversal_charge_payment	Is it reversal charge payment
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	13	17	Amount		Always positive	
27	17	44	Reserved			
20	44	64	Tail			
64			Total			

C6 – Self-Scanning Recovery

0 X C6

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C6 – Self-Scanning Recovery Information Transaction	
1	2	3	Flags			
				bit 0	Additional Item Selling	
				bit 1	Self-scanning Ticket Execution	
				bit 2	Self-scanning Ticket Parsed	
				bit 3	Self-scanning Rescan Execution	
				bit 4	Self-scanning Return Ticket	
				bit 5	Ticket Finished	Ticket Parsed Successfully
				bit 6	Order Number as Trans Number	
				bit 7	Not Used	
1	3	4	Self System Type		1 – Fast_Track 2 – Home_Shopping	
8	4	12	Order Number			
32	12	44	Not Used			
20	44	64	Tail			
64			Total			

C7 – Information on Invoice Recall

0 X C7

Explanation: The Information on Invoice Recall Opcode sends on-line information to indicate to the Back Office that the invoice was recalled, and eliminates the chances of the POS trying to simultaneously recall the invoice.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	(METRO)
1	1	2	Function		C7 – Information on Invoice Recall	
8	2	10	Invoice Number			
3	10	13	Invoice Date			
1	13	14	Flags			
				bit 0	Use Original POS Number	
				bit 1	Void Recalled Invoice	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	14	15	Original POS Number			
29	15	44	Not Used			
20	44	64	Tail			
64			Total			

C9 – Customer Language

0 X C9

Explanation: Multi-Language.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		C9	
2	2	4	Customer Language			
1	4	5	Flags			
				bit 0	Manual Language Change	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
39	5	44	Not Used			
20	44	64	Tail			
64			Total			

CB – Information on Non-Merchandise

0 X CB

Explanation: The Information on Non-Merchandise function records Information on Non-Merchandise item sales. **Note:** This is relevant to ISS45, however, in ROW it refers to wholesale item sales.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		CB – Info_non_merchandise	
7	2	9	PLU Code		Item number	
2	9	11	Department Number			
1	11	12	Flags			
				bit 0	Non-merchandise Item	
				bit 1	Tax Exclusive	Tax is GST exclusive
				bit 2	Not Used	For Future Use
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	12	16	Tax Amount		Tax on this item	
28	16	44	Reserved			
				Frequent Shopper Type		
20	44	64	Tail			
64			Total			

CC – Loyalty Mail Information

0 X CC

Explanation: The Loyalty Mail Information records the customers mailing details. The transaction sends the Card Number and Mail Delivery Status.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		CC – Loyalty Mail Information	
10	2	12	Card Number		Card Number in BCD	
1	12	13	Mail Delivery Status			
31	13	44	Not Used			
20	44	64	Tail			
64			Total			

CD – Information Exclusive Calculation

0 X CD

Explanation: Wholesale GST calculation information.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		CD – SubOpcode	
7	2	9	PLU Code		Item number	
2	9	11	Department Number			
4	11	15	Tax on Customer Discount			
4	15	19	Tax on Staff Discount			
4	19	23	Tax on Case Discount Amount			
4	23	27	Tax on Surcharge Amount			
4	27	31	Tax on Broken Pack			
4	31	35	Tax on Service Fee			
4	35	39	Tax on Extra Fee 1			
4	39	43	Tax on Extra Fee 2			
1	43	44	Not Used			
20	44	64	Tail			
64			Total			

CE – Information Supplementary Data

0 X CE

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		CE – Information Supplementary Data	
2	2	4	Tender Number			
1	4	5	Type			
8	5	13	Data			
31	13	44	Reserved			
20	44	64	Tail			
64			Total			

CF – Information on Barcode Program

0 X CF

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		CF – Information on Barcode Program	
2	2	4	Barcode Type			
2	4	6	Segments			
4	6	10	Points			
34	10	44	Reserved			
20	44	64	Tail			
64			Total			

D0 – Information Invoice Request

0 X D0

Explanation: The Information Invoice Request is recorded when there is an invoice request from the Front Office.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D0 – Invoice Request	
1	2	3	Flag 1			
				bit 0	1 - Immediate 0 - Delayed	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Invoice Type		1 – Belgium VAT 2 – Phone number 3 – Foreign VAT	
10	4	14	Invoice Number		Belgium VAT/Phone number/Foreign VAT	
2	14	16	Ticket Number			
1	16	17	POS_No			
27	17	44	Filler		For Future Use	
20	44	64	Tail			
64			Total			

D1 – Information Transaction

0 X D1

Explanation: The Information Transaction function indicates that a secondary ID has been added to the member card (OEM – USA). Information recorded includes: Member Card No., Alternative ID, Previous Alternative ID, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D1 – Info transaction	
15	2	17	Member card No.			
10	17	27	Alternative ID			
10	27	37	Previous Alternative ID			
2	37	39	Rc			
2	39	41	Club Comb to Join			Holds the clubs as bits
2	41	43	Club Comb to Quit			Hold the clubs as bits
1	43	44	Reserved			
20	44	64	Tail			
64			Total			

D2 – Create Clubcard

0 X D2

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D2 – Create Clubcard	
10	2	12	Card Number		Card Number in BCD	
1	12	13	General Status			
31	13	44	Not Used			
20	44	64	Tail			
64			Total			

D3 – Information Coupon Redemption

0 X D3

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 X D3 Information OEM Club Data	
20	2	22	Card Number			Card no. in ASCII null terminated
20	22	42	Coupon Number			
2	42	44	Message Id			
20	44	64	Tail			
64			Total			

D4 – Bookkeeping PLU Sale

0 X D4

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D4 – Info Book keeping PLU Sale	
7	2	9	PLU code		BCD	
1	9	10	Flag 1			
				Bit 0	Extended Record	Trans 0x11 will follow
				Bit 1	Subtract Item	
				Bit 2	Cancel Item	
				Bit 3	Negative Item	
				Bit 4	Was Canceled Item	
				Bit 5	Supplier Promotion	
				Bit 6	Staff Discountable	
				Bit 7	Accept Price Override	
1	10	11	Flag 2			
				Bit 0	Item on sale	
				Bit 1	Price Override	
				Bit 2	Manual Price	Price was keyed
				Bit 3	Manual Price Allowed	Manual Price allowed for item
				Bit 4	Weight From Scale	No manual weight entry
				Bit 5	Quantity is Weight	Weighted item sold
				Bit 6	Quantity is Decimal Quantity	
				Bit 7	Quantity is Fuel Gallons	PosPump
1	11	12	Flag 3			
				Bit 0	Chained Previous Item	
				Bit 1	Promotion	Item Promotion Flag
				Bit 2	Reduction	
				Bit 3	Offer	
				Bit 4	Non Merchandise	
				Bit 5	Store Coupon	
				Bit 6	Vendor Coupon	
				Bit 7	Item Discount Flag	
1	12	13	Flag 4			
				Bit 0	Scanned Item	

Bytes	From	To	Data	Bits	Explanation	Remarks
1	13	14	Flag 5	Bit 1	Read from PC	
				Bit 2	Next Info	
				Bit 3	Non RX	
				Bit 4	Extended Promotion	
				Bit 5	Price Embedded	
				Bit 6	FF drags Modifier	Coffee shop great 8 item
				Bit 7	WIC CVV	
				Bit 0	Offer Discount	03 will follow
				Bit 1	Offer Continue	Continuation offer
				Bit 2	Offer First	01 & 03 will follow
				Bit 3	Counter Dept	Taken from dep struct
				Bit 4	Return to Stock	Taken from return struct
				Bit 5	Cost Plus	
				Bit 6	Frequent Shopper Discount	
				Bit 7	Food Stamp payment	
2	14	16	Dept			
1	16	17	Multiple Sell Unit			
1	17	18	Return Type			
1	18	19	Tax Ptr			
4	19	23	Quantity			
4	23	27	Price			
4	27	31	Amount			
4	31	35	Non Tax Price			
4	35	39	Non Tax Amount			
4	39	43	Return Surcharge Percent			
1	43	44	Flag 6			
				Bit 0	FF modifier price	Coffee great 8 modifier + price
				Bit 1	Markdown	progressive
				Bit 2	Member discount	progressive
				Bit 3	Bottle deposit	
				Bit 4	Bottle refund	
				Bit 5	Opt RX	FSA Legal requirements for USA, prescription item

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 6	Limit quantity promotion	
				Bit 7	Reward check	ROW (Case item Sales)
20	44	64	Tail			
64			Total			

D5 – Online Information Script Sales

0 X D5

Explanation: The Online Information Script Sales function sends on-line information during the transaction that a prescription was selected during the sale/return. The transaction indicates that the script was prescribed, and the POS terminal locks the option of it being accepted again on another POS terminal. The Opcode records the Status of the Prescription, Surname, Patient Number, Script Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D5	Pharmacy Project
1	2	3	Status		Status of Prescription 0 – Uncommitted 1 – Committed	
18	3	21	Surname		Patients Surname	
3	21	24	Patient Number		BCD – Patients Number	
3	24	27	Script Number		BCD	
1	27	28	Flag			
				bit 0	Original POS Number	
				bit 1	Void Script	Script is voided
				bit 2	Return Script	Script is returned
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	28	29	Original POS Number			
15	29	44	Not Used			
20	44	64	Tail			
64			Total			

D6 – Payment Information Transaction For Script

0 X D6

Explanation: The Payment Information Transaction for Script function sends on-line information during a transaction that a pharmaceutical script was selected, recording information about the patient, prescription, and drug that was selected.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D6	Pharmacy Project
1	2	3	Sub Function		1 – Inf 1 2 – Inf 2	
			Inf 1			
1	3	4	Status		Status of Prescription 0 – Uncommitted 1 – Committed	
18	4	22	Surname		Patients Surname	
3	22	25	Patient Number		BCD – Patients Number	
3	25	28	Script Number		BCD	
1	28	29	Flag			
				bit 0	Void Script	Script is voided
				bit 1	Return Script	Script is returned
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
15	29	44	Not Used			
			Inf 2			
14	3	17	Drug Description			
10	17	27	Strength of Drug			
4	27	31	Price of Drug			
1	31	32	Tax Code			
12	32	44	Not Used			
20	44	64	Tail			
64			Total			

D7 – Transaction Information Points

0 X D7

Explanation: The Transaction Information Points Opcode records the Message ID sent, reporting how many points a customer earned during a transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Report		D7	
2	2	4	Message ID			
4	4	8	Points			
7	8	15	PLU/Dep code			BCD
1	15	16	Flag	Bit 0	Item is Department	
				Bit 1	Adjust is Credit	
				Bit 2	Barcode Points	
				Bit 3	Original Points	
				Bit 4	Option was cancelled	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
28	16	44	Reserved			
20	44	64	Tail			
64			Total			

D8 – Phone Card Action

0 X D8

Explanation: The Phone Card Action is the information recorded when the customer is adding Air-Time to a Phone Card. The Cashiers Action, Card Number, and Authorization Number are recorded during the transaction.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D8	
1	2	3	Action Type			
22	3	25	Card Number			
9	25	34	Authorization Number			
1	34	35	Flag			
				Bit 0	Manually Swiped	Card was swiped manually
				Bit 1	Phone card return	
				Bit 2	Phone card void	
				Bit 3	Deactivation allowed	
				Bit 4	MTX Receipts Retrieved	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	35	36	Activation type			
5	36	41	Sequence Number			
3	41	44	Not Used			
20	44	64	Tail			
64			Total			

D9 – Barcode Programming Information

0 X D9

Explanation: The Barcode Programming Information function is sent each time a barcode is scanned or keyed, and then found in the barcode programming maintenance.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D9 – Barcode Programming Information	
1	2	3	Type		Barcode Type	
					0 – PLU	
					1 – Tender	
					2 – Department	
					3 – Promotion	
					4 – Loyalty	
					5 – Points	
					6 – Segment	
					7 - Save\Recall	
					8 – Utility	
1	3	4	Barcode Length			
4	4	5	Flags	bit 0	Opt_scan	
				bit 1	Opt_key_entered	
				bit 2	Opt_ignore	
				bit 3	Produced	
				bit 4	Validated	
				bit 5	Catalina Coupon	
				bit 6	Coupon Rejected	
				bit 7	Cancel	
30	5	35	BCD – Barcode Buffer			Right justify, leading zeroes
1	35	36	Unique Key Identifier			
4	36	40	Barcode Value			
1	40	41	Ext Validation			
3	41	44	Not Used			
20	44	64	Tail			
64			Total			

DA – Information Ticket Points

0 X DA

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DA – Information Ticket Points	
4	2	6	Promotion No.			
4	6	10	Points			
1	10	11	Redeeming flag			
33	11	44	Reserved			
20	44	64	Tail			
64			Total			

DB – Information Service Desk Voucher

0 X DB

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DB – Information Service Desk Voucher	
7	2	9	PLU Code			
2	9	11	Department		Department number	
4	11	15	Points		Points accumulated on Voucher	(Apology Voucher)
4	15	19	Tender amount		Amount accumulated to tender voucher	
1	19	20	Point Return Type		Return type of points voucher	(Apology Voucher)
1	20	21	Tender Return Type		Return type of tender voucher	
1	21	22	Reason Code		Reason code of point voucher	(Apology Voucher)
1	22	23	Transaction type		The type of transaction – Tender/Points/Tender and Points	
1	23	24	Flag	Bit 0	Option to cancel	
				Bit 1	Option was cancelled	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
20	24	44	Reserved			To be filled
20	44	64	Tail			
64			Total			

DC – Signature Capture HDR

0 X DC

Explanation: Header Record

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DC – Signature Capture	
1	2	3	Sub Function		0x01 Header Record	
2	3	5	Buffer type		1 = MTX 2 = INGENICO (2 byte BIN)	
2	5	7	Unzipped buffer size			
2	7	9	Number of Signature Capture			
35	9	44	Not Used			
20	44	64	Tail			
64			Total			

DC – Signature Capture Data

0 X DC

Explanation: Data Record

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DC – Signature Capture	
1	2	3	Sub Function		0x02 Data Record	
1	3	4	Sequence number		0x00 to 0x99	
40	4	44	Data			
20	44	64	Tail			
64			Total			

DD – Information Order Number

0 X DD

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DD – Information Order Number	
6	2	8	Order Number			
10	8	18	Extended ID		Order ID	
1	18	19	Sequence		Sequence of the transaction (1,2,3.)	Required due to the fact that several order numbers will be sent in a ticket
23	19	42	Not Used			
1	42	43	Flags	Bit 0	Ignore	Ignore flag (for cancel home delivery/parcel pickup)
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	43	44	Order Type		1 – Home Delivery 2 – Parcel Pickup	
20	44	64	Tail			
64			Total			

DE – Information Price List ID

0 X DE

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DE – Information Price List ID	
2	2	4	Price List ID			
1	4	5	Source		1 from checkout bank 2 from customer scheme	
39	3	44	Not Used			
20	44	64	Tail			
64			Total			

DF – Information Customer Account ID

0 X DF

Explanation: The Information Customer Account ID supports the customer center functionality, and when this function is triggered during the POS process of customer identification, the POS can verify if a customer center Id is detected. If the customer is identified as an account owner, the Account Number, Account Limit, Account Payment Type, etc. are all recorded. This enables the user to maintain one customer with various selected types of registrations such as, Loyalty, Credit, and ECCA Accounts.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		DF – Information Customer Account ID	
10	2	12	Account Number			
4	12	16	Account Limit			
1	16	17	Account Payment Type			
1	17	18	Flags	Bit 0	Loyalty related	
				Bit 1	Offline	
				Bit 2	Force Account	
				Bit 3	Charge control per item	
				Bit 4	Offline account as cash only	
				Bit 5	Void Customer Account	
				Bit 6	Next Appearance Notice Displayed	
				Bit 7	Not Used	
4	18	22	Previous Balance			
2	22	24	Postponed pay period			
1	24	25	Surcharge Type			
4	25	29	Surcharge Rate			
1	29	30	Customer Type			
1	30	31	Scheme no.			Member Scheme number from barcode definition
4	31	35	Customer Account surcharge rate			Percentage from reward enter by cashier promotion (Extra reward from customer account type)

Bytes	From	To	Data	Bits	Explanation	Remarks
4	35	39	Discount Percentage			
5	39	44	Reserved			
20	44	64	Tail			
64			Total			

E0 –Information Order Status

0 X E0

Explanation: The Information Order Header function sends information on orders, retrieved from tickets that are received from the electronic sales file. It is part of the Electronic Sales Project.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E0 – Transaction Information/Customer order status record	Electronic Sales Project
1	2	3	Sub Function		1 – Order Header Status 2 – Item Line Status	
5	3	8	Order Number			
5	8	13	Customer Reference Number			
3	13	16	Order Date			
1	16	17	Error Code		Error Table (Errors 1-255)	
IF Order Header Status:						
10	17	27	Customer number			
7	27	34	Error Data			
8	34	42	Invoice Number			
1	42	43	Order Status		0 – Successful 1 – Errors during process	
Inf1						
IF Item Line Status						
7	17	24	Item code			
19	24	43	Not Used			
Inf2						
1	43	44	Flags			
				Bit 0	Customer Order on Till	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
20	44	64	Tail			
64			Total			

E1 –Information Fuel Discount Coupon

0 X E1

Explanation: The Information Fuel Discount Coupon Opcode is recorded when the Rebate Coupon is printed once the transaction is completed. Supermarkets are introducing fuel as an initiative to increase sales by offering cents per liter discounts on fuel, based on purchase where the value is above a given qualifying threshold. The POS sends the Rebate Number for Barcode, Rebate Expiry Date, Rebate Qualifier Amount, Rebate Discount, Transaction total, and Qualifier ID. The BO uses Rebate File ID and ID reference numbers.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E1 – New Information Transaction	
2	2	4	Rebate File ID			
4	4	8	ID Reference			
1	8	9	Qualifier ID			
3	9	12	Rebate Number		BCD; Pak/unpak	
3	12	15	Rebate Expiry Date		BCD; Pak/unpak	
4	15	19	Rebate Qualifier amount			
2	19	21	Rebate Discount			
4	21	25	Transaction Total			
2	25	27	Error code		1 – Error code 0 – OK	
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

E2 – Car Wash

0 X E2

Explanation: The Information Car Wash function.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E2 – Car Wash	
7	2	9	PLU			
10	9	19	Car Wash Code			
8	19	27	Exp Date			
1	27	28	Car Wash Type			
1	28	29	Flags			
				Bit 0	Voided	
				Bit 1	Returned	
				Bit 2	Opt info ext	
				Bit 3	Car wash only	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
5	29	34	Device Number			
4	34	38	Pump transaction number			
6	38	44	Data			
20	44	64	Tail			
64			Total			

E3 – Tax Discount

0 X E3

Explanation: USA

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E3 – Tax Discount	
1	2	3	Flags			
				Bit 0	Tax Discount	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
41	3	44	Not Used			
20	44	64	Tail			
64			Total			

E6 – Information Barcode Coupon

0 X E6

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E6 – Transaction Information	
7	2	9	Code			
7	9	16	Original Code			
4	16	20	Count			
4	20	24	Promotion Number			
2	24	26	Reward			
1	26	27	Flags			
				Bit 0	Rx award bonus	
				Bits 1-7	Not Used	
17	27	44	Reserved			
20	44	64	Tail			
64			Total			

E7 – Information Offline EFT

0 X E7

Explanation: The Information Offline EFT Opcode records the customer's account details, card expiry date, the tender amount, the authorization number, etc. for the transaction when the EFT server is offline. This information is relevant to the Offline Tender Report.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E7 – Transaction Information	
2	2	4	Number		Tender number	
1	4	5	Flags	Bit 0	Offline credit	
				Bit 1	Offline EBT	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
10	5	15	Account number			
2	15	17	Expiry Date			
4	17	21	Amount		Tender amount or Cashback	
4	21	25	Authorization number			
11	25	36	EBT Voucher No.			
1	36	37	Account length			
1	37	38	Flag	Bit 0	Authorization Number Length	
				Bit 1	Authorization Number Length	
				Bit 2	Authorization Number Length	
				Bit 3	Authorization Number Length	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
6	38	44	Not Used			
20	44	64	Tail			
64			Total			

EF – Information Confirmed Promotion

0 X EF

Explanation: The Information Confirmed Promotion transaction for redeemable promotions is used specifically for recovery. It is a customer specific enhancement that is available for general use.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		0 x EF –Information Confirmed Promotion	
7	2	9	PLU Code			
5	9	14	Promotion		Promotion number	
7	14	21	Price		Item Price (ASCII)	
2	21	23	Count		Number of promotions given (+) or taken (-).	
21	23	44				
20	44	64	Tail			
64			Total			

F2 – Information Net Gross Price – PRJ USA ONLY

0 X F2

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F2 –Information Net Gross Price	
1	2	3	Flag			
				Bit 0	Simple Type	Transaction contains simple promotion data
				Bit 1	Member Type	Transaction contains member promotion data
				Bits 2-6	Reserved	
				Bit 7	Promo Exist	Does the promo exist?
10	3	13	Promotion Number			ASCII
10	13	23	Promotion Price			ASCII
10	23	33	Adjusted PLU Price			ASCII
7	33	40	Reserved			
2	40	42	Attached Sequence Number			Sequence number of attached transaction
2	42	44	This Sequence Number			Sequence number of this transaction
20	44	64	Tail			
64			Total			

F6 – Information Order Promotion Apportionment

0 X F6

Explanation: The Information Order Promotion Apportionment opcode is used to record....

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F6	
1	2	3	Flags	Bit 0	First	
				Bit 1	Last	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	3	7	Promotion number			
Struct			Item			
1	7	8	Flags	Bit 0	Department	
				Bit 1	Not Used 9	
				Bit 2	Not Used 10	
				Bit 3	Not Used 11	
				Bit 4	Not Used 12	
				Bit 5	Not Used 13	
				Bit 6	Not Used 14	
				Bit 7	Not Used 15	
7	8	15	Code			
4	15	19	Apportionment amount			
1	43	44	Reserved			
20	44	64	Tail			
64			Total			

X3

F7 – StoreNext

0 X F7

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F7	
1	2	3	Template Printed flag	bit 0	Will be set if custom template printed at end of every X ticket	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used`	
41	3	44	Reserved			
20	44	64	Tail			
64			Total			

F9 – Information Tare

0 X F9

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F9	
1	2	3	Sub info		0x01	
1	3	4	Tare		Entry in tare table	
4	4	8	Tare weight		Weight of the tare	
4	8	12	Item weight			
1	12	13	Flags			
				Bit 0	Manual tare	Manually entered tare
				Bits 1-7	Not used	
4	13	17	Tare pointer		Tare number in Gen table	
27	17	44	Not used			
20	44	64	Tail			
64			Total			

FA – Scanned Image Information

0 X FA

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		FA	
2	2	4	POS Number			
2	4	7	Ticket Number			
3	7	10	Transaction Date			
3	10	13	Transaction Time			
10	13	23	Account Number			
4	23	27	Image Width			
4	27	31	Image Height			
2	31	33	Account Length			
11	33	44	Reserved			
20	44	64	Tail			
64			Total			

FD – Extended Gift Card Data

0 X FD

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		FD – Gift Card Act Ext.	
10	2	12	Template			
1	12	13	Activation Type			
20	13	33	Barcode Description			
5	33	38	Sequence Number			
4	38	42	index			
1	42	43	Flag	Bit 0	Delayed Card activated	
				Bit 1	Account Length 16	
				Bit 2	Account Length 19	
				Bit 3	Print Balance Flag	
				Bit 4	Print Template in Receipt	
				Bit 5	Opt External Data	
				Bits 6-7	Not Used	
1	43	44	SuspendTranCC			
20	44	64	Tail			
64			Total			

FE – Info EFT Decline

0 X FE

Explanation: Opcode used when Log declines to T-log.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		FE	
3	2	5	Response code			
2	5	7	Tender number			
4	7	11	Declined amount			
33	11	44	Not Used			
20	44	64	Tail			
64			Total			

FF – Information Denomination

0 X FF

Explanation: The Information Denomination opcode is used when tenders are declared, added to the float, removed from the POS terminal, paid out, or received when performing cash office functions on the Front Office. The denomination, tender type, amount, and quantity are each recorded. (When a declaration is performed at the POS, without denominations, the transaction 0x70 0x52 is used.)

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		FF –Information Denomination	
2	2	4	Denomination ID			
2	4	6	Tender ID			
4	6	10	Amount			
4	10	14	Count			
1	14	15	Cash Office Type		1 Declare 2 Float 3 Cash lift 4 Paid Out 5 Receipt	
1	15	16	Flags	Bit 0 Bit 1 Bit 2 Bit 3 Bit 4 Bit 5 Bit 6 Bit 7	Informative Pickup First Tender Void Opt Info Change Order Not Used Not Used Not Used	Spot check, informative only, ignore this record. Flag for change order
2	16	18	Ticket No			
1	18	19	Denomination count			
2	19	21	Denomination Entry ID			
23	21	44	Reserved			
20	44	64	Tail			
64			Total			

Opcode 63 Alerts

Below is the general structure for alerts. Where alerts have different structures, they are individually described. Alerts are logged to inform of problems on the system. Warning messages are sent from the POS Terminals to the Back Office servers. These messages are parameter driven, triggered by specific events on the POS Terminals, for example, when a POS terminal cash drawer is too full, the appropriate message is sent to the Back Office server.

Alert Type	Range
POS generated	1 – 199
Back Office generated	200 – 500
User-defined	1000 and greater

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Alert number			
					POS-generated alerts (10 - 199)	
					10 – Printer error	
					11 – Drawer error	
					12 – Scanner error	
					13 – Customer display error	
					14 – Swipe keyboard error	
					20 – Till Sent All Trs Before EOD	
					21 – POS start EOD	
					22 – POS EOD in trans	
					30 – Power up reboot	
					31 – Store Open	
					32 – POS off-line	
					33/1 – Load PLU start, foreground	
					34/1 – Load PLU start, background	
					34/2 – Load PLU end, background	
					35 – Cold start	

Bytes	From	To	Data	Bits	Explanation	Remarks
					39 – Flashing Dollar	
					40 – Drawer full (assistance)	
					41 – Topup (not enough cash change)	
					42 – Q length	
					45 – Password violation	
					50 – OLA off-line	
					80 – POS software version	
					81 – Release Version No Match	
					88 – File Load	Tesco
					89 – File refresh	
					90/1 – Start RS batch	
					90/2 - End RS batch	
					91 – Program corrupt	
					92 – Quick Terminal Call	
					93 – Quick Battery Low	
					94 – Quick Abandon	
					95 – Quick Fail Position	
					96 – Quick Charge Timeout	
					97 – Dock Paper Low	Docking
					98- Dock Printer Offline	Docking
					99 – CCMS Offline	COREMA
					100 – TOSCA Bad Com	Tesco
					102 – Fiscal Error	Tesco
					103 – Start Fiscal EOD	Tesco
					104 – Baud Rate	Tesco
					106 – Fiscal EOD OK	Tesco
					110 – Message received	
					111 – Load Hybrid Reader	Smartcard
					112 – CCMS QDX full	Corema
					113 – Post Mail	
					114 – POS Not Sign As Active	Pos not sign as Active during POS configuration.
					115 – POS Disk Limit	Disk Size Limit
					116- Transaction QDX Problem	Transaction QDX problem
					120 – Switch OLA Main Provider to Sub Provider	

Bytes	From	To	Data	Bits	Explanation	Remarks
					121 – Switch OLA Sub Provider to Main Provider	
					122 – Switch OLA Sub Provider1 to Sub Provider2	
					123 – Switch OLA Main Provider to offline	
					124 – Switch OLA Sub Provider to offline	
					125 – Switch OLA Offline to Main Provider	
					126 – Switch OLA Offline to Sub Provider	
					130 – Grade Price Change Failed	
					140 – Printer Okay	
					141 – Drawer Okay	
					142 – Scanner Okay	
					143 – Scale Okay	
					144 – Payment Term Okay	
					145 – TV number Okay	
					146 – Wrong DLL Version	New alert for wrong pos dll version.
					147 – Check Scanner Error	
					148 – New Mensys Loaded	
					191 – Promotion Engine Communication Failed	
					BACK OFFICE-generated alerts (200-1000)	
					201 – EOD start	
					202 – EOD finish	
					203 – EOD POPS off-line	
					206 – Not all transactions sent by POS before EOD	
					207 – Not all maintenance received by POS before EOD	
					222 – Package	
					230 – Program version	
					232 – No communication to POS	
					233 – Secure password violation	
					236 – Error While executing PLU Batch	

Bytes	From	To	Data	Bits	Explanation	Remarks
					239 – MFS2 did not receive QDX files (PLUTODAY.ZIP)	
					300 – General Text transaction	
					301 – CRC error. Difference between QDX and SQL.	
					302 – SQL Administrator password has been changed.	
					303 – Wrong SQL Administrator Password	
					601 – Disk Space below limit	
					602 – CDM	
					1000 – Grade Price changes pending.	
					17001 – Printer unable to scan the check.	
					17008 – Invalid Dept or PLU for Uncollected Change	
					17009 – EBT WIC Error File Found	
					18103 – Extract Engine Info	
					18104 – NCR Copient Offline	
					20001 – Need Help	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message on PCs	
				bit 1	Popup alert message from background	
				bit 2	Move alert to saved file (ignore)	
				bit 3	Use original POS number (for on-line alerts, FC47)	
				bit 4	Get text message	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
37	5	42	Alert data			
1	42	43	Original POS number			
1	43	44	Original PC number			
20	44	64	Tail			
64			Total			

Transaction Alert (general)

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	2	3	Sub Opcode			
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
37	5	42	Data			
1	42	43	Original POS number			
1	43	44	Original PC number			
20	44	64	Tail			
64			Total			

Alert INDYME

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	2	3	Sub Opcode			
1	3	4	Function		INDYME	
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	5	9	Virtual Key			
2	9	11	INDYME_RTC			
31	11	42	Data			
1	42	43	Original POS Number			
1	43	44	Original PC Number			
20	44	64	Tail			
64			Total			

Unbalanced POS

Explanation: This alert notifies when the cash at a specific POS is unbalanced, indicating there are differences in the totals found.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub function		205 – Unbalanced POS	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message	
				bit 1	DRV file popup	
				bit 2	Ignore alert	
				bit 3	Use POS number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	POS-no			
1	6	7	PC_no			
8	7	15	yesterday_ grand_total			
8	15	23	today_grand_ total			
8	23	31	diff_grand_total			
4	31	35	gross_sales			
4	35	39	diff_sales			
5	39	44	Not Used			
20	44	64	Tail			
64			Total			

Program Version

Explanation: This alert notifies the system that the Program Versions on the POS are not compatible.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub function		230 – Program Version	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message	
				bit 1	DRV file popup	
				bit 2	Ignore alert	
				bit 3	Use POS number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
12	5	17	prog_name			
3	17	20	compile_date			
3	20	23	compile_time			
8	23	31	Version			
1	31	32	POS_no			
1	32	33	PC_no			
11	33	44	Not Used			
20	44	64	Tail			
64			Total			

POST Version Alert

Explanation: This Alert provides information on the Pos.exe/PosW32.exe.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	SubOpcode		80 – Post Version	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
12	5	17	Program Name			
3	17	20	Compile Date			
3	20	23	Compile Time			
8	23	31	Version			
11	31	42	Data			
1	42	43	Original POS Number			
1	43	44	Original PC Number			
20	44	64	Tail			
64			Total			

File Refresh

Explanation: This alert notifies the system that a specific POS needs file refreshing.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub_opcode		89 – File Refresh	
1	3	4	Function			
1	4	5	Flag 1	bit 0	Not used	
				bit 1	Not used	
				bit 2	Not used t	
				bit 3	Use original POS number	
				bit 4	Not used	
				bit 5	Not used	
				bit 6	Not used	
				bit 7	Not used	
1	5	6	QDX File		File Number. 0 represents all files	
1	6	7	Status		1 – Start refresh checksum fails 2 – Start refresh TV problem 3 – Suspend load user abort 4 – Resume load 5 – Start refresh force request 6 – Start refresh CFM request 7 – File refreshing completed 8 – POS menu QDX file refreshing fails	
35	7	42	Data			
1	42	43	Original POS Number			
1	43	44	Original PC No.			
20	44	64	Tail			
64			Total			

Alert Batch

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub function		90 – Alert Batch	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
6	5	11	host_batch_ number			
4	11	15	host_records			
4	15	19	accepted_ records			
3	19	22	Date			BCD
3	22	25	Time			BCD
2	25	27	Batch Type			
15	27	42	Data			
1	42	43	org_pos_no			
1	43	44	org_pc_no			
20	44	64	Tail			
64			Total			

Wrong Version Alert

Explanation: Versions Control On POS

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub Opcode		165 – Wrong Version Alert	
1	3	4	Function			
22	4	26	Component Name			
8	26	34	Expected Version			
8	34	42	Actual Version			
1	42	43	POS Number			
1	43	44	PC Number			
20	44	64	Tail			
64			Total			

Alert Trans Send

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub Opcode		166 – Alert Trans Manager Stuck	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	5	9	Send Pointer			
4	9	13	Write Pointer			
29	13	42	Data			
1	42	43	Original POS No.			
1	43	44	Original PC No.			
20	44	64	Tail			
64			Total			

Package DE

Explanation: This alert notifies the system of a new code deploy package to be installed.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub function			
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message	
				bit 1	DRV file popup	
				bit 2	Ignore alert	
				bit 3	Use POS number	
				bit 4	Get text message	
				bit 5	Manual package	
				bit 6	Not Used	
				bit 7	Not Used	
12	5	17	Package number			
14	17	31	Data			
1	31	32	Opener result			
2	32	34	Previous rel a			
1	34	36	Previous rel b			
1	36	38	Previous rel c			
1	38	40	Previous rel d			
2	40	42	Error			
1	42	43	POS number			
1	43	44	PC number			
20	44	64	Tail			
64			Total			

Check Card 51

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub opcode			
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message	
				bit 1	DRV file popup	
				bit 2	Ignore alert	
				bit 3	Use original POS number	
				bit 4	Get text message	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	New OLA Provider1		0 = mean offline 1-10 MFS1-MFS10	
1	6	7	Old OLA Provider1		0 = Mean offline 1-10MFS1-MFS10	
35	7	42	Data			
1	42	43	POS number			
1	43	44	PC number			
20	44	64	Tail			
64			Total			

Alert Host Lookup

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts	
2	1	3	Sub Opcode		165 (xA5)	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message	
				bit 1	Drvfile popup	
				bit 2	Ignore alert	
				bit 3	Original POS Number	
				bit 4	Get Text Message	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used17	
1	5	6	Reason		0 - Host Unavailable 1 – Unknown to host 2 – Action Cancelled	
7	6	13	BCD Unknown Item			
29	13	42	Data			
1	42	43	Original POS number			
1	43	44	Original PC number			
20	44	64	Tail			
64			Total			

Alert CFM

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		0 X 63 – Alerts CFM	
2	1	3	Sub function		237 – Alerts CFM	
1	3	4	Function		0 – Alert CFM 1 – Alert CFM Update 2 – Alert CFM Recovery 3 – Alert CFM File 4 – Alert CFM End 5 – Alert Emergency CFM Fail Sync	
1	4	5	Flag 1	bit 0	Display message	
				bit 1	DRV file popup	
				bit 2	Ignore alert	
				bit 3	Use POS number	
				bit 4	Get text message	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	QDX File			
1	6	7	No Files			
35	7	42	Data			
1	42	43	POS number			
1	43	44	PC number			
20	44	64	Tail			
64			Total			

Disk Space Info

Explanation: This alert notifies the system when there is not enough free space left on the disk. The POS Number, PC Number, etc. are specified.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alerts package	
2	1	3	Sub function		238 – Disk Space Info	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display message	
				bit 1	DRV file popup	
				bit 2	Ignore alert	
				bit 3	Use POS number	
				bit 4	Get text message	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	5	9	Free Space in Disk			
4	9	13	Free Space Minimum (needed)			
29	13	42	Data			
1	42	43	POS Number			
1	43	44	PC Number			
20	44	64	Tail			
64			Total			

Storeboard Message

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert Storeboard Message	
2	1	3	SubOpcode		110	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	Message Number			
1	6	7	Cashier Answer		1 – No, 2 – Yes	
35	7	42	Message Text		First 35 bytes of text	
1	42	43	Original POS Number			
1	43	44	Original PC Number			
20	44	64	Tail			
64			Total			

Post Mail

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Post Mail	
2	1	3	SubOpcode		113	
1	3	4	Function			
2	4	6	From Address			
4	6	10	Mail Message Number			
1	10	11	Send To All			
31	11	42	Data			
1	42	43	Original POS Number			
1	43	44	Original PC Number			
20	44	64	Tail			
64			Total			

Transaction Error

Explanation: Transaction Error alerts the system when a QDX problem occurs within a transaction, recording FIFO size, Pointer, Count, Sequence Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert Transaction QDX Problem	
2	1	3	SubOpcode		116	
1	3	4	Function			
1	4	5	Flags	bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	5	7	Transaction FIFO Size			
2	7	9	Transaction First			
4	9	13	Transaction Pointer			
2	13	15	Transaction Count			
2	15	17	Future Transaction Count			
2	17	19	Transaction Sequence No.			
23	19	42	Data			
1	42	43	Original POS No.			
1	43	44	Original PC No.			
20	44	64	Tail			
64			Total			

Code Distribution

Explanation: The Code Distribution alerts the system that a new package will be received, recording the Package Name, Data, Opener Results, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert Package – Code Distribution	
2	1	3	SubOpcode		0xDE	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display Message	
				bit 1	Drive File Pop Up	
				bit 2	Ignore alert	
				bit 3	Use Original POS Number	
				bit 4	Get Text Message	
				bit 5	Manual Package	
				bit 6	Not Used	
				bit 7	Not Used	
12	5	17	Package Name			
14	17	31	Data			
1	31	32	Opener Result			
2	32	34	Prev_Rel_a			
2	34	36	Prev_Rel_b			
2	36	38	Prev_Rel_c			
2	38	40	Prev_Rel_d			
2	40	42	Error			
1	42	43	POS Number			
1	43	44	PC Number			
20	44	64	Tail			
64			Total			

OLA

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – OLA Alert	
2	1	3	SubOpcode			
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	5	6	New OLA Provider		0 – Means Offline 1 – 10 - MFS1 – LFS10	
1	6	7	Old OLA Provider		0 – Means Offline 1 – 10 MFS1 – LFS10	
35	7	42	Data			
1	42	43	Original POS Number			
1	43	44	Original PC Number			
20	44	64	Tail			
64			Total			

QDX Problem

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – OLA Alert	
2	1	3	SubOpcode		Alert Transaction QDX Problem	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use Original POS Number	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	5	7	Transaction Fifo size			
2	7	9	Transaction First			
4	9	13	Transaction Pointer			
2	13	15	Transaction Count			
2	15	17	Future Transaction Count			
2	17	19	Transaction Sequence Number			
23	19	42	Data			
1	42	43	Original POS Number			
1	43	44	Original PC Number			
20	44	64	Tail			
64			Total			

Gift Card Enquiry

Explanation: This alert is triggered during gift card enquiry failures. It holds the details of the gift card enquire failure.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert	
2	1	3	SubOpcode		Alert Transaction Gift Card Enquire	
1	3	4	Function			
1	4	5	Flag 1			
				bit 0	Display Message	
				bit 1	Drvfile popup	
				bit 2	Ignore alert	
				bit 3	Use POS No	
				bit 4	Get Text Message	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
5	5	10	Gift Card Batch Number			
11	10	21	Gift Card Batch Card Number			
4	21	25	Gift Card Batch Card Amount			
2	25	27	Gift Card Batch Card Number Length			
17	27	44	Original POS Number			
20	44	64	Tail			
64			Total			

Alert File Distribution

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert	
2	1	3	SubOpcode		Alert File Distribution	
1	3	4	Function			
1	4	5	File ID			
1	5	6	File Operation Type			
36	6	42	Data			
1	42	43	Original POS No			
1	43	44	Original PC No.			
20	44	64	Tail			
64			Total			

AlarmSrv

Explanation: AlarmSrv alerts txn, written only from ExtTrs32 and not from the POS.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert	
2	1	3	SubOpcode		AlarmSrv 800 (0x320)	
1	3	4	Function			
2	4	6	Category			
2	6	8	Sub Category			
2	8	10	AlarmID			
2	10	12	Device No.			
32	12	44	Not Used			
20	44	64	Tail			
64			Total			

Auto Fuel Management 176

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert	
2	1	3	SubOpcode		Auto Fuel Management 176	
1	3	4	Function		Alert number	
1	4	5	Flag			
				Bit 0	Display message	
				Bit 1	Drv file popup	
				Bit 2	Ignore alert	
				Bit 3	UseOriginalPOS No.	
				Bit 4	Get Text Message	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	5	9	Batch Number			
4	9	13	Store ID			
1	13	14	Price change type			
28	14	42	Data			
1	42	43	Original POS No.			
1	43	44	Original PC No.			
20	44	64	Tail			
64			Total			

Combined User Security

Explanation: This alert is triggered for alerting password violation and unknown user ID.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert	
2	1	3	SubOpcode		45 (wrong password) 119 (Unknown User)	
1	3	4	Function			
1	4	5	Flag	Bit 0	Opt Not Used	
				Bit 1	Opt Not Used	
				Bit 2	Opt Not Used	
				Bit 3	Opt Not Used	
				Bit 4	Opt Not Used	
				Bit 5	Opt Not Used	
				Bit 6	Opt Not Used	
				Bit 7	Opt Not Used	
2	5	7	Cashier No.			
2	7	9	POS No.			
35	9	44	Not Used			
20	44	64	Tail			
64			Total			

Uncollected Change

Explanation: This alert is triggered for alerting change not collected from fuel prepays

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		63 – Alert	
2	1	3	SubOpcode		17008 -Alert invalid dep or PLU for uncollected change)	
1	3	4	Function			
1	4	5	Flag	Bit 0	Opt Not Used	
				Bit 1	Opt Not Used	
				Bit 2	Opt Not Used	
				Bit 3	Opt Org Pos Number	
				Bit 4	Get Text Message	
				Bit 5	Opt Not Used	
				Bit 6	Opt Not Used	
				Bit 7	Opt Not Used	
37	5	42	Data			
1	42	43	Original POS No.			
1	43	44	Original PC No.			
20	44	64	Tail			
64			Total			

Opcode 64 Printout

Transaction Printout

Explanation: This is the Opcode used when all the transactions are printed to the Electronic Journal. The transaction information is picked up daily from the transaction file.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		64 – Transaction printout	Not compressed
1	1	2	Flag 1			
				bit 0	End	End of ticket text
				bit 1	Start	Start of ticket
				bit 2, 3	Pre blank lines (up to three)	Inset
				bit 4	Print only to Electronic Journal	Not on receipt
				bit 5	Cut paper	
				bit 6	Print Emphasized	
				bit 7	Print Enlarged	
40	2	42	Text			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

Opcode 65 Fuel System

Debug Transaction

Explanation: In a situation where incorrect data is received on the RS232 line, or a problem is detected in Pump Logic, the PFS will log a debug transaction in order to analyze it afterwards.

Bytes	Description	Contents
	SYS_DEBUG_LARGE_SALE	0x65, 0x01
	SYS_DEBUG_COMPLETE_NO_INFO	0x65, 0x02
	SYS_DEBUG_WRONG_PUMP_STAT	0x65, 0x03
	SYS_DEBUG_WRONG_TRANSAC_STAT	0x65, 0x04
	SYS_DEBUG_WRONG_PUMP_MODE	0x65, 0x05
	SYS_DEBUG_WRONG_PUMP_NUMBER	0x65, 0x06

Note: We recommend that you make a daily or weekly batch to search for these transactions, to find problems as well as prevent future problems.

Opcode 66 Fuel Reconciliation

Site Controller Raw Data

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		66 – Site controller raw data message	
1	1	2	Flags		Not used	
2	2	4	Command comm*		Original message code, taken from the message header	
2	4	6	Parameter		Source message parameter, taken from comm* message header	
2	6	8	Number comm*		Source message number, taken from the message header	
1	8	9	Current block number			
1	9	10	Total number of blocks			
1	10	11	Block length		Length of the block data	
32	11	43	Block data			
1	43	44	Not used			
20	44	64	Tail			
64			Total			

Notes:

1. The fields “Command”, “Parameter” and “Number” are the most important fields in the message header received from the site controller. The “Number” has no use in the current implementation but might have in the future.
2. The “Command” field contains the original message code.
In fuel reconciliation it should be one of the following:
FUEL_DATA_1_CMD 0 X 7031
FUEL_DATA_2_CMD 0 X 7032
3. The “Parameter” field contains the original message parameter.
In fuel reconciliation this field is used as a sequence number. (For more information, refer to “MPS – NEXT GEN FUEL RECONCILIATION INTERFACE SPEC” section 3).

4. Using the “Current block number”, and “Total number of blocks”, the UNIX software can identify start and end of each message.

In the first block: Current block number = 1

In the last block: Current block number = Total number of blocks

* Refers to comms with Site Controller via RS-232 line.

68 – Zip Printout

0 X 68

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		0x68 – Zip Printout	
1	1	2	Bytes			
42	2	44	Data			
20	44	64	Tail			
64			Total			

69 – Zip Printout Wide

0 X 69

Explanation: The Wide Printout Zip is used for invoices by Australia.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		0x69 – Zip Printout	
1	1	2	Bytes			
42	2	44	Data			
20	44	64	Tail			
64			Total			

Opcode 70, Sub-Opcodes: 0 X 01 to 0 X FB

The Opcode number 70 is a continuation of the Opcode 60. It also refers to all the events logged by the POS that do not belong to any specific type of transaction registered. It is a general transaction. A Sub Opcode defining the function differentiates each one of the Opcode numbers 70.

01 – Manual Settlement

0 X 01

Explanation: This opcode is recorded when an EFT transaction is performed and waiting to go to the bank, before the OLA is verified. The transaction is settled manually, recording the Account type, Transaction type, Purchase amount, Total amount, Tender type in which the transaction was finalized and the POS number on which the transaction was performed.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 01	
1	2	3	EFT Payment Status			
2	3	5	Transaction Number			
2	5	7	Session ID			
3	7	10	Trs Date		YMD	
3	10	13	Trs Time		HMS	
10	13	23	Card No.		In BCD	
2	23	25	Expiry Date			
4	25	29	Auth Number		Authorization number in BCD.	
1	29	30	Issue Number			
1	30	31	Account Type			
1	31	32	Transaction Type			
4	32	36	Purchase Amount			
4	36	40	Total Amount			
1	40	41	Tender		The Tender in which the transaction was finalized with (manual).	
1	41	42	POS Number			
2	42	44	Error Code			
20	44	64	Tail			

Bytes	From	To	Data	Bits	Explanation	Remarks
64			Total			

02 – Info Sequence

0 X 02

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 02	
1	2	3	Entity			
1	3	4	Sequence Type			
4	4	8	Sequence			
1	8	9	Flags			
				Bit 0	New	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	9	10	Sequence Sub Type			
34	10	44	Not Used			
20	44	64	Tail			
64			Total			

03 – Unknown Item

0 X 03

Explanation: This Sub Opcode is based on the sub opcode 60 0x01. The structure is the same, however, it points to a different function.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		03 – Unknown Item	
7	2	9	Code		Item number	
1	9	10	Flag 1	bit 0	Scanned Item	Item was scanned
				bit 1	Inquiry	Item was looked up via inquiry
				bit 2	Info record	Informative record
				bit 3	Dep Sale Unknown	
				bit 4	Extra Code	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	10	11	Flag 2	bit 0	POS Offline	Indicates POS offline
				bit 1	Unknown item logic	If using the unknown item logic.
				bit 2	Unitmsrv_alive	If POS got ACK for the unknown item request
				bit 3	Received PLU info	If POS got ANS for the unknown item request
				bit 4	Invalid PLU details	Answer not valid
				bit 5	External _srv_alive	Cyber not alive
				bit 6	Not Used	
				bit 7	Not Used	
20	11	31	Extra Code			
13	31	44	Not Used			
20	44	64	Tail			
64			Total			

04 – PLU Sale Ext 3

0 X 04

Explanation: The PLU Sale Ext 3 opcode is generated when extra PLU data in the transaction is declared.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 04 Trans Info Extra PLU Data	
6	2	8	Sub Department		Sub Department number in BCD.	
4	8	12	Cost Price		Cost Price	
4	12	16	Comparison Price		Comparison Price	
2	16	18	Promotion Number			
7	18	25	PLU Code			
7	25	32	Internal Code			
1	32	33	Flag			
				Bit 0	Prohibited Sale Item	Indicates if a prohibited item was sold by the approval of a control check
				Bit 1	Rtc Embedded Barcode	Indicates if a barcode is an RTC embedded barcode.
				Bit 2	Follows linked item child	
				Bit 3	Exclude Price Modified form Promotion	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
7	33	40	Unknown item Replacement PLU Code			
1	40	41	Price Type			This field is used for layby functionality.
1	41	42	Charge Related Tender			The field is used to link items to tenders that are used as 'Charge' tenders. This is required during

Bytes	From	To	Data	Bits	Explanation	Remarks
						layby. For example, if an item is linked to this tender, when the customer purchases this item, the tender is used to charge the amount paid by the customer towards the item.
2	42	44	Subtracted Qty			
20	44	64	Tail			
64			Total			

05 – Transaction Info Parcel

0 X 05

Explanation: The Transaction Info Parcel opcode is generated when a customer uses the parcel pickup or home delivery service. The opcode records the type of service, a description of the parcels, as well as the number of parcels.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 05 Trans Info Parcel	
2	2	4	Parcel ID			
1	4	5	Flags			
				Bit 0	Home Delivery	
				Bit 1	Parcel Pickup	
				Bit 2	Void	
				Bit 3	Return	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
20	5	25	Description			
1	25	26	Quantity			
1	26	27	Parcel Type			
2	27	29	Minor Location		Used for Lay by parcels	
15	29	44	Not Used			
20	44	64	Tail			
64			Total			

06 – Transaction Info Charge Data

0 X 06

Explanation: The Transaction Info Charge Data opcode is generated when a customer uses the parcel pickup or home delivery service. The opcode records the number of parcels, the value of the parcels and the fee charged by the store for the service. The flag “ignore” is used when there is no charge for the service. In addition, any layby processing is recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 06 Trans Info Charge Data	
1	2	3	Sub Function		1 Home Delivery 2 Parcel Pickup	
1	3	4	Charge Type			
4	4	8	Charge Value			
2	8	10	Parcel Qty			
4	10	14	Total Amount			
10	14	24	Fee Code			
1	24	25	Flags			
				Bit 0	Ignore	
				Bit 1	Return	Added for layby processing
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
19	25	44	Not Used			
20	44	64	Tail			
64			Total			

07 – Transaction Info RSS (Reduced Space Symbology) Data 1

0 X 07

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 07 Trans Info RSS Data1	
1	2	3	Weight Digits			
3	3	6	Weight			
1	6	7	Embedded Price Digits			
8	7	15	Embedded Price			
4	15	19	Quantity			
3	19	22	Packaging Date		YYMMDD	
3	22	25	Sell By Date		YYMMDD	
3	25	28	Expiration Date		YYMMDD	
6	28	34	Production Date			
10	34	44	Reserved			
20	44	64	Tail			
64			Total			

08 – Transaction Info RSS (Reduced Space Symbology) Data 2

0 X 08

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 08 Trans Info RSS Data2	
20	2	22	Batch Lot Number			
20	22	42	Serial Number			
2	42	44	Country of origin			
20	44	64	Tail			
64			Total			

09 – Transaction Info Cash Lift

0 X 09

Explanation: Transaction Info Cash Lift supports big numbers.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 09 Trans Info Cash Lift	
1	2	3	Sub Function		1 Regular 2 POST Pickup	
IF						
Big_Number						
4	3	7	Amount			
2	7	9	Count			
1	9	10	Tender		PC Generated options	
1	10	11	Flags			
				Bit 0	Previous period	
				Bit 1	Employee update	
				Bit 2	Reprocess	B/O use
				Bit 3	Remote	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	11	12	POS Number			
1	12	13	PC Number			
4	13	17	Supervisor number			
2	17	19	Cashier Number			
25	19	44	Not Used			
Else						
8	3	11	Amount			
2	11	13	Count			
1	13	14	Tender		PC Generated options	
1	14	15	Flags			
				Bit 0	Previous period	
				Bit 1	Employee update	

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 2	Reprocess	B/O use
				Bit 3	Remote	
				Bit 4	Int64	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	15	16	POS number			
1	16	17	PC number			
4	17	21	Supervisor number			
2	21	23	Cashier number			
21	23	44	Not Used			
20	44	64	Tail			
64			Total			

0C – Info MobileLime Data Loyalty – Loyalty Record

0 x 0C

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 0C	
1	2	3	Sub function		0x01	Loyalty Record
1	3	4	Status			1: OK, 2:Denied, 3:Pending/Timeout
5	4	9	Mobile number			BCD
20	9	29	Segments			
15	29	44	Not Used			
20	44	64	Tail			
64			Total			

0C – Info MobileLime Data Loyalty – EFT record

0 X 0C

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 0C	
1	2	3	Sub function		0x02	EFT record
1	3	4	Status			1: OK, 2:Denied, 3:Pending/Timeout
5	4	9	Mobile number			BCD
4	9	13	Net amount			
4	13	17	Discount amount			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

0D – Info MobileLime Data Loyalty – Comments Header

0 X 0D

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 0D	
1	2	3	Sub function		0x01	Header Record
2	3	5	Number of MobileLime Comments			
2	5	7	MobileLime Comments Size			
37	7	44	Not Used			
20	44	64	Tail			
64			Total			

0D – Info MobileLime Data Loyalty – Comments Data

0 X 0D

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 0D	
1	2	3	Sub function		0x02	Comments Record
1	3	4	Sequence number			BCD 0x00 to 0x99
40	4	44	Data			
20	44	64	Tail			
64			Total			

12 – Info Zipped Text

0 x 12

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 11	
1	2	3	Data Type			
1	3	4	Filled Bytes			
38	4	42	Compressed Text			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

17 – Info2 Fuel Voucher

0 X 17

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 17 Sub opcode	
1	2	3	Action			Set to 0 = create record
4	3	7	Barcode			BCD
4	7	11	Promo number			Promotion number pulled from template
4	11	15	Discount amount			Summed up total that will be rewarded when redeemed
3	15	18	Expire date			Date the voucher will expire
26	18	44	Reserved			
20	44	64	Tail			
64			Total			

31 – Info2 Local Barcode

0 X 31

Explanation: This opcode is recorded when the barcode is scanned.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 31 Trans Info2 Local Barcode	
1	2	3	Sub Function		0 – Barcode printed (issued) 1 – Barcode used	
20	3	23	Barcode		BCD format – barcode buffer (right justify, leading zeroes)	
4	23	27	Amount			
3	27	30	Issued Date		BCD format YYMMDD	
3	30	33	Expiry Date		BCD format YYMMDD	
1	33	34	Barcode length			
1	34	35	Flag			
				Bit 0	Manual Accept For Limit Start Day	
				Bit 1	Manual Accept For Limit End Day	
				Bit 2	Manual Accept of Coupon	
				Bit 3	Returned	
				Bit 4	Not used	
				Bit 5	Not used	
				Bit 6	Not used	
				Bit 7	Not used	
1	35	36	Flag			
				Bit 0	NOT_USED	
				Bit 1	NOT_USED	
				Bit 2	External TRS Present	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	

Bytes	From	To	Data	Bits	Explanation	Remarks
3	36	39	Date YYMMDD			
1	39	40	External Tender Number			
1	40	41	Redemption Type			
1	41	42	POS No.			
2	42	44	Store No.			
20	44	64	Tail			
64			Total			

32 – Info2 Member Account

0 X 32

Explanation: This opcode is recorded when a member account transaction is performed. Member accounts are required for loyalty customers who accumulate points or credits within accounts during purchases, or promotions on offer. The member's opening balance, closing balance, name, etc. are all recorded.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 32 Trans Info2 Member Account	
1	2	3	Sub Function		1 – Member Account open balance info 2 – Member Account closing balance info 3 – First Name 4 – Surname 5 – Server Date 6 – Member account manually updated info 7 – Member account immediate reward 8 – Member Account redemption 9 – Member account triggers promotion 10 – Member account rewarded by promotion 11 – Member account accumulated by promotion	
4	3	7	Member Account ID			
Inf 1						
4	7	11	Open Balance			
4	11	15	Session ID			
22	15	37	Not Used			
Inf 2						
4	7	11	Earned Value			
4	11	15	Redeemed Value			
4	15	19	Closing Balance			
4	19	23	Session Id			
4	23	27	Open Balance			

Bytes	From	To	Data	Bits	Explanation	Remarks
4	27	31	Earned Value from Zero			
1	31	32	Flag	Bit 0	Instant Redemption	
				Bit 1	Written From Recover	
				Bit 2	Not Used Info2	
				Bit 3	Not Used Info2	
				Bit 4	Not Used Info2	
				Bit 5	Not Used Info2	
				Bit 6	Not Used Info2	
				Bit 7	Not Used Info2	
5	32	37	Not Used			
Inf 3						
30	7	37	Loyalty Member First Name			

Bytes	From	To	Data	Bits	Explanation	Remarks
Inf 4						
30	7	37	Member Surname			
Inf 5						
12	7	19	Server Date			
18	19	37	Not Used			
Inf 6						
4	7	11	Manually added value			
1	11	12	Flag			
				Bit 0	Loyalty Card Required	
				Bit 1	Update Promotion Server	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
20	12	32	Barcode			
2	32	34	Original Barcode length			Need this field due to pak/unpack change for the barcode length.
3	34	37	Not Used			
Inf 7						
4	7	11	Points			
1	11	12	Flags			
				Bit 0	Barcode Points	
				Bit 1	Was Cancelled	
				Bit 2	Extract Reward Coupon	
				Bit 3	Update Member Account Balance	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	12	16	Promotion ID			

Bytes	From	To	Data	Bits	Explanation	Remarks
2	16	18	Promotion Trigger Count			The number of times a promotion was triggered
19	19	38	Not Used17			
Inf 8						
7	7	14	PLU Code			
2	14	16	Department Number			
4	16	20	Promotion Number			
4	20	24	Value			
4	24	28	Sequence Number			
1	28	29	Flag			
				Bit 0	Return Flag	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
8	29	37	Reserved			
End						
5	37	42	Promotion ID			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

33 – Info2 Ticket Type

0 X 33

Explanation: This opcode records information regarding the ticket type. External Data Transactions (0x95) will follow this transaction type. The data in the 0x33 transaction will hold the number of External Data Transaction to expect.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 33 Trans Info2 Ticket Type	
2	2	4	Ticket Type		1 – Add Customer	
					2 – Modify Customer (includes delete)	
					3 – Add Layby	
					4 – Modify Layby (includes delete)	
					5 – Layby Payment	
					6 – Finalize Layby	
					7 – Cancel Layby (customer)	
					8 – RTS Confirmation	
					9 – Refund Unclaimed deposit	
					10 – Payment reversal	
					11 – Cancel Layby (store)	
					12 – Loyalty Message Ticket	
					13 – Delivery Ticket (Stock Management DLL)	
					14 – Stock Provider Request (Stock Management DLL)	
					15 – Third Party Loyalty Active	
					18 – NCR Copient Loyalty Comm Log	
					19 – XML ticket data	
					20 – Dynamic Receipt Printing Data	
					21 – RX information – PDX Pharmacy	

If you are going to add another struct to this union, that will be a link to a 0x95 transaction (Zipped XML), please make sure that the first 4 fields are as specified in the following bytes.

Loyalty Message Header

1	0	1	Loyalty Message Type
2	1	3	Message Quantity

Bytes	From	To	Data	Bits	Explanation	Remarks
4	3	7	Uncompressed Message Size			
4	7	11	Compressed Message Size			
1	11	12	Flag			
				Bit 0	Offline	
				Bit 1	Retroactive	
				Bit 2	Not Retroactive in Wrong Ticket	This is to specify unusual transactions from RTAPS
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
2	12	14	Original Ticket Not Used			
26	14	40	Not Used			
Struct Stock Message Header						
1	0	1	Stock Message Type			
2	1	3	Message Qty			
4	3	7	Uncompressed Message Size			
4	7	11	Compressed Message Size			
29	11	40	Not Used			
Struct TicketData						
1	0	1	Stock Message Type			
2	1	3	Msgs Quantity			
4	3	7	Uncompressed Msg Size			
4	7	11	Compressed Msg Size			
29	11	40	Not Used			

Bytes	From	To	Data	Bits	Explanation	Remarks
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

3B – End of Ticket Apportionment

0 X 3B

Explanation: This opcode is used at the end of a ticket apportionment that data has been requested from the promotion engine.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 3B End of Ticket Apportionment	
42	2	44	Not Used			
20	44	64	Tail			
64			Total			

45 – Trans Info2 External Loyalty Reward

0 X 45

Explanation: This opcode sends external loyalty reward information. For example, it records reward information, general information, and information such as the redemptions counter, service code, security code, loyalty transaction counter info, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Sub Opcode		0 x 45	
1	2	3	Type			From here reward information
7	3	10	PLU Code			
2	10	12	Department Number			
4	12	16	No. of rewards			
1	16	17	Flags			From here General information
				Bit 0	Response OK	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	17	21	Total rewards per ticket			
4	21	25	Previous Balance			
4	25	29	Open Balance			From here Rocks information
4	29	33	Loyalty redemptions counter			
4	33	37	Loyalty Trx Counter			
2	37	39	Service code			
5	39	44	Security code			
20	44	64	Tail			
64			Total			

4B – Phone Card Act Ext

0 X 4B

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 4B Phone Card Act Ext	
10	2	12	Template			
20	12	32	Barcode Description			
7	32	39	Item Expiry Date			
4	39	43	Transaction Amount			
1	43	44	Suspend Transaction CC			
20	44	64	Tail			
64			Total			

51 – Trans Info2 Add Segment

0 X 51

Explanation: This transaction sends information segments to the pos terminal in order to enable the promotion engine to trigger rewards.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 51	
4	2	6	Segment			
1	6	7	Segment top code			
1	7	8	Flag			
				Bit 0	Ignore	
				Bit 1	Third Party Report	
				Bit 2	Desc on Customer Display	
				Bit 3	Desc on Operator Display	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	8	9	Trigger Type		0 – Barcode Programming 1 – Manual Function	
1	9	10	Barcode Length			
10	10	20	Barcode			Barcode in BCD
1	20	21	Number of Rewards Triggered			
23	21	44	Reserved			
20	44	64	Tail			
64			Total			

76- Transaction Info2 Local Barcode Issued EXT

0 X 76

Explanation: This opcode records the rewards in the local barcode issued.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 76 Transaction Info2 Local Barcode Issue Ext	
10	2	12	Reference Number			
Struct						
1	12	13	Type	} X3		The condition under which the barcode is issued.
4	13	17	Value			
1	27	28	Number of Valid Conditions			
2	28	30	Reward1			
2	30	32	Reward2			
2	32	34	Reward3			
2	34	36	Reward4			
2	36	38	Ticket Number			
2	38	40	Barcode Progress Reference			Reference number from the barcode programming
4	42	44	Not Used			
20	44	64	Tail			
64			Total			

77- Transaction Info2 Voucher Reward

0 X 77

Explanation: This opcode records the voucher reward triggered in the ticket.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 77Transaction Info2 Voucher Reward	
5	2	7	Promotion ID			
4	7	11	Promotion Count			
4	11	15	Reward Amount			
4	15	19	Quantity Spent			
1	19	20	Type		0 – voucher Voucher reward transaction voucher 1 – coupon Voucher reward transaction coupon 2 – external Voucher reward transaction coupon	
24	20	44	Not Used			
20	44	64	Tail			
64			Total			

7A- Transaction Info2 Promotion Extension

0 X 7A

Explanation: This opcode records the additional information received in apportionment response from the LPE (Loyalty Promotion Engine). Promotion complexity indicates if the promotion triggered was Simple/Complex. Simple Promotion - indicates that the triggering items in a promotion are the same item (barcode). A Complex Promotion – indicates that the triggering items in a promotion are different items (barcodes).

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 7A Transaction Info2 Promotion Extension	
20	2	22	Description			
1	22	23	Flag 1			
				Bit 0	Promotion Complexity	
				Bit 1	Item already triggered promotion	
				Bit 2	Triggered Promotion	
				Bit 3	Cashier Invoked	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	23	24	Discount Allocation Printing			
4	24	28	New Quantity			Added for Organized receipt quantity, and can be 0 on re calculation. Unlike the quantity field on 03, which is always bigger than 0, even on recalculation.
4	28	32	Plu Dep Amount			
4	32	36	Org Reward Value			Organized receipt reward value.
4	36	40	WghDecimalVal			Store the weight\decimal\volume value
1	40	41	ORScheme			
1	41	42	Apportionment algorithm			

Bytes	From	To	Data	Bits	Explanation	Remarks
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

84- Transaction Info 2 Head Trigger

0 X 84

Explanation: This opcode records the number of times a promotion was triggered at the end of a ticket. This occurs when the same promotion is triggered more than once. This data is then sent to the database and can then be used to view the promotion's information.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 84 Transaction info2 Head Trigger	
5	2	7	Promotion ID			
4	7	11	Promotion Count			
4	11	15	Qualify Spent			
29	15	44	Not Used			
20	44	64	Tail			
64			Total			

86 - Transaction Info2 RX Sale

0 X 86

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 86 Info 2 RX Sale	
5	2	7	RX Number			BCD
1	7	8	Flags			
				Bit 0	RX E-Ticket	
				Bit 1	Is voided	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
4	8	12	RX Quantity			
2	12	14	RX Fill Number			
4	14	18	RX Partial Fill			
1	18	19	Received Price Request			
4	19	23	RX Third Party Pay Amount			
4	23	27	RX Co-pay Amount			
4	27	31	RX Bonus Points			
7	31	38	RX PLU			
1	38	39	Flags			
				Bit 0	Print Plu Key Flg	
				Bit 1	Print Rx Num Key Flg	
				Bit 2	Print Copay Amt Flg	
				Bit 3	Print Adjudicated Pay Amt Flg	
				Bit 4	Print Points Key Flg	
				Bit 5	Print Rx Qty Key Flg	
				Bit 6	Print Rx Fill Num Key Flg	
				Bit 7	Print Rx Partial Fill Key Flg	
5	39	44	Not Used			

Bytes	From	To	Data	Bits	Explanation	Remarks
20	44	64	Tail			
64			Total			

87- Transaction Info2 FSA

0 X 87

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 87	
6	2	6	RX Amount			
4	6	10	Non Rx Amount			
10	10	44	Not Used			
20	44	64	Tail			
64			Total			

8C Transaction Info 2 Member Account Update

0 X 8C

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 8C	
10	2	12	Loyalty Card Number			
1	12	13	Operation Source		Member Account Transaction Source POS Member Account Transaction Source FO Member Account Transaction Source External	
1	13	14	Type		Member Account TRS Type Earn Member Account TRS Type Redeem Member Account TRS Type Manual Update	
1	14	15	Redeem Type		Member Account Redeem type Gift Member Account Redeem Type Voucher Member Account Redeem Type Prom Member Account Redeem Gift Start Member Account Redeem Type Voucher Start	
4	15	19	Member Account ID			
4	19	23	Value			Can be positive or negative (for voiding)
Info1 20	23	43	POS BCD Dest			Size equal to Member Account Max Redeem Dest
Info2 16	23	39	BCD Dest			Destination
4	39	43	Batch Number			

Bytes	From	To	Data	Bits	Explanation	Remarks
1	43	44	Reason Code			
20	44	64	Tail			
64			Total			

99 – Transaction Info EBTWIC Ticket End

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Sub Function			
2	3	5	POS Number			Pos Number BCD (0-9999)
10	5	15	PAN			PAN Number BCD
1	15	16	PAN Length			PAN number length (0-99)
2	16	18	State Code			
1	18	19	szStateFIPS			State FIPS (HEX)
2	19	21	State Code Length			
4	21	25	Session Date			BCD YYYYMMDD
3	25	28	Session Time			BCD HHMMSS
16	28	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 01

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x01 EBTWIC INFO TRAN TICKET FRAME	
2	3	5	POS No.			Pos Number
10	5	15	PAN			Pan Number
1	15	16	PAN Length			PAN number length (0-99)
2	16	18	State Code			State Code
1	18	19	State FIPS			State FIPS (hex)
2	19	21	State Code Length			
4	21	25	Session Date			BCD YYYYMMDD
3	25	28	Session Time			BCD HHMMSS
16	28	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 02

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x02 EBTWIC INFO TRANS ITEM SALE	
7	3	10				BCD PLU Code of item
2	10	12	Category			WIC Category
2	12	14	Sub Category			WIC sub category
4	14	18	Quantity			
2	18	20	Count			Item count
4	20	24	Price			
4	28	28	Sell Amount			
7	28	35	Link UPC			BCD
1	35	36	PLU/UPC Indicator			
4	36	40	Count			
4	40	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 06

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x06 EBTWIC INFO TRANS Error	
10	3	13	PAN			BCD PAN Number
1	13	14	PAN Length			PAN number length (0-99)
2	14	16	Error Code			Error Code BCD (0-9999)
2	16	18	State Code			
1	18	19	State FIPS			Hex
25	19	44	Not Used			Not used EBTWIC error.
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 08

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x08 EBTWIC INFO TRANS Ticket Total	
4	3	7	Tender Amount			
4	7	11	WIC Coupon Total			
4	11	15	WIC Promotion Total			
4	15	19	WIC Discount total			
4	19	23	WIC Item Total			
4	23	27	WIC Item Count			
4	27	31	WIC Net Total			Item ttl – cpn ttl + disc ttl + prom ttl
13	31	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 09

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x09 EBTWIC INFO TRANS Benefit Details	
15	3	18	Issuer ID			
4	18	22	Start Date			BCD YYYYMMDD
4	22	26	End Date			BCD YYYYMMDD
18	26	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 0A

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x0A EBTWIC INFO TRANS Sign	
1	3	4	TransSignLen			Length 0-99
1	4	5	Number of records			How many trans sign data records total
1	5	6	Record Number			
38	6	44	TransSignData			Data can be up to 99 byte total, so we need to support continuation records.
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 0B

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x0B EBTWIC INFO TRANS Ticket Tax	
1	3	4	Tax Number			
4	4	8	Taxable amount			
4	8	12	Tax Amount			
32	12	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 0C

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x0C EBTWIC INFO TRANS Ticket Tax Details	
7	3	10	PLU Code			BCD
1	10	11	Flag			
				Bit 0	FS payment	
				Bit 1	Cost Plus	
				Bit 2	Non Merchandise	
				Bit 3	Negative	
				Bit 4	Discount Allowed	
				Bits 5-7	Not Used	
1	11	12	Tax Ptr			
1	12	13	Multi Sell Unit			
4	13	17	Amount			
4	17	21	Return Surcharge Percent			
4	21	25	Quantity			
2	25	27	Department			
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 20

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x20 EBTWIC INFO Benefits List	Data is used to rebuild class C BenefitsList to print reports (at EOT or recover ticket)
1	3	4	Type		0x01 Original benefits 0x02 eligible benefits 0x03 Ending Benefits 0x04 Next period benefits	Benefits List Benefits Worlarea Benefits Balance Next Benefits List
1	4	5	Sub Type		0x01 Header 0x02 Details	
Info1			EBTWIC benefits header			
2	5	7	Number of detail Recs			Length 0-9999
10	7	17	PAN			PAN BCD
1	17	18	PAN Length			PAN number length (0-99)
2	18	20	State Code			
4	20	24	End Date			BCD YYYYMMDD
2	24	26	Block Count			
2	26	28	Compressed Buffer Size			
2	28	30	Uncompressed Buffer Size			
14	30	34	Not Used			
Info2			EBTWIC Benefits Details compressed			
2	5	7	Record Number			
1	7	8	Number of bytes			
36	8	44	Benefits list data			
20	44	64	Tail			
64			Total			

99 – Transaction Info2 EBTWIC 99

0 X 99

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x 99	
1	2	3	Subopcode		0x99 EBTWIC INFO TRANS Ticket End	
2	3	5	POS Number			BCD
10	5	15	PAN			BCD
1	15	16	PAN Length			0-99
2	16	18	State Code			
1	18	19	State FIPS			(hex)
2	19	21	State Code Length			
4	21	25	Session Date			
3	25	28	Session Time			
16	28	44	Not Used			
20	44	64	Tail			
64			Total			

A0 – Transaction Info2 Promotion Ext2

0 x A0

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x A0	
10	2	12	Organized Receipt Scheme Template			
1	12	13	Last Triggered Promotion			
4	13	17	Config Reward Amount			We need to know promotion reward amount
1	17	18	Decimal Place in Reward		The value should be consistent with how the promotion is configured: 0 – System Default Decimal 9 – NO Decimal Point 1-3 – this means 1 to 3 decimal points	We need to know the decimal places in the reward
19	18	28	External Ref ID			
16	28	44	Not Used			
20	44	64	Tail			
64			Total			

A4 – Transaction Info2 ORC Reward Split by Redemption Info

0 X A4

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x A4	
7	2	9	PLU Code			Item Number BCD
1	9	10	Flag			
				Bit 0	Item Was Subtracted	
				Bit 1	Item Was Cancelled	
				Bit 2	Manual Discount	
				Bit 3	Percentage Discount	
				Bit 4	Points Reward	Points given as reward
				Bit 5	Discount Flag	Item/department 'discount allowed' Used in cases of promotions
				Bit 6	Prom Complexity	
				Bit 7	Item Already Triggered promotion	
2	10	12	Department Number			
1	12	13	Tax Comb			
4	13	14	Return Type Number			
4	14	18	Quantity			
4	18	22	Price			
4	22	26	Amount			
4	26	30	Redemption Number			
4	30	34	Promotion Number			
1	34	35	Apportionment type			
1	35	36	Reward type			
1	36	37	Group type			
1	37	38	Flag	Bit 0	Dep trans Disc	
				Bit 1	PLU trans Disc	
				Bit 2	Multisaver	
				Bit 3	Rewarded Item	

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
6	38	44	NU_38			
20	44	64	Tail			
64			Total			

B0 – Transaction Info2 ORC Reward Split By Redemption Info Ext

0 X B0

Explanation: Records Organized Receipt information.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		Opcode value 0xB0	
20	2	22	Description		Promotion description	
22	22	44	Not Used			
20	44	64	Tail			
64			Total			

B2 – Transaction Info 2 FSA

0 X B2

Explanation: The FSA transaction is a new transaction type designed to accommodate the new FSA Government regulations. The FSA transaction records will indicate only the FSA amounts.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x B2 Transaction info2 FSA	
4	2	6	RX Amount		Prescription amount	
4	6	10	Non RX Amount		Non Prescription Amount	
10	34	44	Not Used			
20	44	64	Tail			
64			Total			

C2 – Info 2 MTX Receipts

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x C2 MTX Receipts	
1	2	3	Sub Type		0x01 MTX Receipt Header 0x02 MTX Receipt Data	
Info1			MTX Receipt Header			
1	3	4	Receipt Type			
4	4	8	Receipt Lines Count			
4	8	12	Compressed Buffer Size			
4	12	16	Uncompressed Buffer Size			
2	16	18	Num of Data Sequence			
5	18	23	Sequence Number			
4	23	27	ERC Required Data Option			
17	27	44	Not Used			
Info2			MTX Receipt Data			
1	3	4	Sequence Number			BCD 0x00 to 0x99
1	4	5	Number of bytes			
39	5	44	Data			
20	44	64	Tail			
64			Total			

CC – Info 2 Copient Logix

0 X CC

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xCC Trans Info 2 Copient Logix	
1	2	3	Copient transaction opcode			
Union						
First data		Opcode 0				
40	3	43	Raw			
User extension 3		Opcode 1				
7	3	10	Id		Promotion id	BCD
1	10	11	Status			i.e. issued, redeemed, claimed
4	11	15	Reward amount per gallon			
4	15	19	Reward amount			
4	19	23	Abandoned amount			
4	23	27	Gallon limit			
4	27	31	Computed redeemed amount			
4	31	35	Computed breakage amount			
7	35	42	Card number			BCD
1	42	43	ID type		External id type	
Fuel Savings Offer		Opcode 2				
4	3	7	Id		Promotion number	
4	7	11	Entry id		Promotion entry id	
4	11	15	Item entry id		Attached item entry id	
4	15	19	Amount		Reward amount	Per gallon
5	19	24	Aux id			BCD

Bytes	From	To	Data	Bits	Explanation	Remarks
1	24	25	Amount flag		Ext price flag	
1	25	26	Amount flag reason		Ext price flag reason	
1	26	27	Flag		Reward flag	
1	27	28	Type		Reward type	
4	28	32	Count		Quantity	
1	32	33	Count type		Quantity type	
2	33	35	Volume limit			
1	35	36	Discount type			
1	36	37	Detailed		Detailed reward	
1	37	38	Summary		Summary Reward	
3	38	41	Expiration			BCD
1	41	42	Vendor		Vendor flag	
1	42	43	Flag			
				Bit 0	Opt ext 1	Extended transaction present (description)
				Bits 1-2	Opt ext 2	Extended transaction present (extended text up to 4)
				Bit 3	Opt ext 3	Extended transaction present
				Bits 4-7	Reserved	
Fuel savings offer ext 1			Opcode 3			
40	3	43	Description			
Fuel savings offer ext 2			Opcode 4			
1	3	4	Id		Message id	
38	4	42	Message			
1	42	43	Reserved			
Ticket summary			Opcode 5			
1	3	4	Status		Ticket status	0-online, 1-offline logix host, 2- offline logix local server
4	4	8	Coupon count		Number of logix coupons processed	
4	8	12	Coupon amount		Amount of logix coupons processed	

Bytes	From	To	Data	Bits	Explanation	Remarks
10	12	22	Card number			BCD
17	22	39	Reserved			
2	39	41	Pos number			
2	41	43	Ticket number			
User extension 3 ext 1			Opcode 6			
20	3	23	Serial		Internal logix id	
3	23	26	Expiration			BCD
7	26	33	Parent id		Promotion parent id	BCD
5	33	38	Aux id			BCD
5	38	43	Reserved			
1	43	44	reserved			
20	44	64	Tail			
64			Total			

D0 – Info 2 Gift Card Activation Extension 2

0 X D0

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Sub Opcode		0xD0 Trans Info 2 Extension Gift Card 2	
6	2	8	Ext POS form EFT Account Types			
36	8	44	Not Used			
20	44	64	Tail			
64			Total			

D8 – Info 2 Phone Card Activation Extension 2

0 X D8

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Sub Opcode		0xD8 Trans Info 2 Phone Card Activation Extension 2	
5	2	7	Sequence Number			
37	7	44	Not Used			
20	44	64	Tail			
64			Total			

DF – Info 2 Update Transaction

0 X DF

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xDf Trans Info Update Transaction	
4	2	6	Updated item reference number			Sequence number of the item/dep being voided
4	6	10	Current item reference number			Sequence number of the void
4	10	14	Ticket start reference number			
4	14	18	Quantity removed			Add quantity of this line that was removed by either cancel or subtract
4	18	22	Quantity removed sell amount			Add sell amount of this line that was removed by either cancel or subtract
4	22	26	Sub updated Item Reference number			
18	26	44	Not Used			
20	44	64	Tail			
64			Total			

E5 – Info 2 Recovery

0 X E5

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xE5 - Recovery	
1	2	3	Recovery trans opcode			
36	3	39	Reserved			
1	39	40	Flag	Bit 0	Execute	Execute flag
				Bits 1-7	Reserved	
2	40	42	Recover mode			
2	42	44	Merge fuel prepay			
20	44	64	Tail			
64			Total			

F0 – Info 2 Databar Coupon

0 X F0

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xF0	
1	2	3	SubOpcode		DATABAR_CPN_TRANS_TICKET_FRAME 0x01 DATABAR_CPN_TRANS_BARCODE0x02 DATABAR_CPN_TRANS_PRIMARY_PURCHASE 0x03 DATABAR_CPN_TRANS_SECOND_PURCHASE 0x04 DATABAR_CPN_TRANS_THIRD_PURCHASE 0x05 DATABAR_CPN_TRANS_DATA_1 0x06 DATABAR_CPN_TRANS_DATA_2 0x07 DATABAR_CPN_TRANS_DATA_3 0x08 DATABAR_CPN_TRANS_ITEM_LINKS 0x09 DATABAR_CPN_TRANS_TICKET_END 0x89 DATABAR_CPN_TRANS_MANUAL_ENTRY 0x99 //When one record is broken up into header and associated data records TRS_DATABAR_CPN_HEADER 0x01 TRS_DATABAR_CPN_DATA 0x02	
Union						
	Coupon Ticket Frame		0x01			
1	3	4	Flag			
				Bit 0	Was Cancelled	
				Bit 1	Not Used	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
40	4	44	Not Used			

Bytes	From	To	Data	Bits	Explanation	Remarks
			Coupon trans Barcode		0x02	
1	3	4	Type			
Union						
			Barcode Header		Type = 0x01	
4	4	8	Number of Data records			There will be a maximum of 2 records – max barcode is 70 characters
36	8	44	Not Used			
			Barcode Data		Type = 0x02	
1	4	5	Record No.			
39	5	44	Data			
			Primary Purchase		0x03	
13	3	16	Company prefix			
3	16	19	Family Code			
4	19	23	Purchase Requirement			
4	23	27	Purchase requirement code			
17	27	44	Not Used			
			Second Purchase		0x04	
13	3	16	Company Prefix			
3	16	19	Family Code			
4	19	23	Purchase Requirement			
4	23	27	Purchase Requirement Code			
17	27	44	Not Used			
			Third Purchase		0x05	
13	3	16	Company Prefix			
3	16	19	Family Code			
4	19	23	Purchase Requirement			

Bytes	From	To	Data	Bits	Explanation	Remarks
4	23	27	Purchase Requirement code			
17	27	44	Not Used			
	Trans Data 1		0x06			
4	3	7	Amount			
4	7	11	Qty			
6	11	17	Offer Code			
4	17	21	Save Value			
4	21	25	Additional Purchase Rules Code			
6	25	31	Expiration Date			YYMMDD
6	31	37	Start Date			YYMMDD
7	37	44	Not Used			
	Trans Data 2		0x07			
15	3	18	Serial Number			
13	18	31	Retailer GS1 Company Prefix			
4	31	35	Save Value Code			
4	35	39	Save Value Applies To			
4	39	43	Store Coupon Flag			0 = Not Store Coupon 1-9 = Store Coupon, value is limit qty
1	43	44	Not Used			
	Trans Data 3		0x08			
4	3	7	Multiply allowed flag			0 = allowed 1 = Not allowed
4	7	11	Checker intervention required flag			0 = no cashier intervention required 1 = cashier intervention required
4	11	15	General error flag			
4	15	19	Start Date Status			
4	19	23	Expiry Date Status			

Bytes	From	To	Data	Bits	Explanation	Remarks
4	23	27	Svat Qualifier Field			
17	27	44	Not Used			
	Trans Item Links		0x09			
1	3	4	Type			
Union	Header		Type = 0x01			
2	4	6	Num of links			Repeat this data record for the number of item links
38	6	44	Not Used			
	Data		Type = 0x02			
14	4	18	PLU Code			
4	18	22	Sequence			
4	22	26	Sub Sequence			
4	26	30	Item Qualifier			
14	30	14	Not Used			
	Trans Manual Entry		0x99			
18	3	21	Databar Number			
2	21	23	Dept			
4	23	27	Amount			
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

F3 – eWIC

0 X F3

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xF3	
1	2	3	SubOpcode		0x01: EWIC_INFO_TRANS_TICKET_FRAME 0x02: EWIC_INFO_TRANS_ITEM_SALE 0x03: EWIC_INFO_TRANS_XREF 0x06: EWIC_INFO_TRANS_ITEM_ERROR 0x08: EWIC_INFO_TRANS_TICKET_TOTAL 0x09: EWIC_INFO_TRANS_RX_DETAILS 0x0B: EWIC_INFO_TRANS_TICKET_TAX 0x0C: EWIC_INFO_TRANS_ITEM_TAX_DETAILS 0x20: EWIC_INFO_BENEFITS_LIST 0x99: EWIC_INFO_TRANS_TICKET_END	
Union						
	Transaction Ticket Frame		0x01			
2	3	5	POS Number		Pos number (BCD) (0-9999)	
10	5	15	PAN Number		PAN number (BCD)	
1	15	16	PAN Length		PAN number length (0-99)	
2	16	18	State Code			
1	18	19	State FIPS		State FIPS (hex)	
4	19	23	Session Date			BCD MMDDYY
3	23	26	Session Time			BCD HHMMSS
18	26	44	Not Used			
	Transaction Item Sale		0x02			
7	3	10	Plu Code		PLU Code of Item (BCD)	
2	10	12	Category		WIC Category	
2	12	14	Subcategory		WIC Subcategory	
4	14	18	Quantity			

Bytes	From	To	Data	Bits	Explanation	Remarks
2	18	20	Item Action Code		Item action code returned from HOST	
4	20	24	Price			
4	24	28	Amount		Sell Amount	
7	28	35	Link UPC		Linked PLU Code (BCD)	
1	35	36	PLU Indicator		PLU/UPC Indicator	
4	36	40	Count		Item count	
4	40	44	Approved Price		Approved item price per the host	
		Transaction Cross Reference	0x03			
2	3	5	Sequence No		Sequence # of the eWic transaction - used for voids	
39	5	44	Not Used			
		Transaction Item Error	0x06			
7	3	10	Plu Code		PLU Code of Item (BCD)	
2	10	12	Category		WIC Category	
2	12	14	Subcategory		WIC Subcategory	
2	14	16	Item Action Code		Item action code returned from HOST	
4	16	20	Quantity		Approved Quantity	
4	20	24	Item Price		Approved Price	
4	24	28	Original Item Price			
4	28	32	Original Quantity			
12	32	44	Not Used			
		Ticket Total	0x08			
4	3	7	Tender Amount		Tender amount	
4	7	11	WIC Coupon Total			
4	11	15	WIC Promotion Total			
4	15	19	WIC Discount Total			
4	19	23	WIC Item Total			

Bytes	From	To	Data	Bits	Explanation	Remarks
4	23	27	WIC Item Count			
4	27	31	WIC Net Total			
13	31	44	Not Used			
		Transaction RX Details	0x09			
4	3	7	End Date			BCD YYYYMMDD
37	7	44	Not Used			
		Ticket Tax	0x0B			
1	3	4	Char tax no			
4	4	8	Taxable Amount			
4	8	12	Tax Amount			
32	12	44	Not Used			
		Item Tax Details	0x0C			
7	3	10	Plu Code		PLU Code of Item (BCD)	
1	10	11	Flag			
				Bit 0	FS Payment	
				Bit 1	Cost Plus	
				Bit 2	Non Merch	
				Bit 3	Negative	
				Bit 4	Discount allowed	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
1	11	12	Tax Ptr			
1	12	13	Mult Sell Unit			
4	13	17	Amount			
4	17	21	Retn Surcharge Percent			
4	21	25	Quantity			
2	25	27	Department			
17	27	44	Not Used			
		Benefits List	0x20			
1	3	4	Type		0x01 Original benefits 0x02 Eligible benefits 0x03 Ending Benefits	Benefits List Benefits Worlarea Benefits Balance

Bytes	From	To	Data	Bits	Explanation	Remarks
					0x04 Next period benefits	Next Benefits List
1	4	5	Sub Type		0x01 Header	
					0x02 Details	
Info1			eWIC benefits header			
2	5	7	Number of detail Recs			Length 0-9999
10	7	17	PAN			PAN BCD
1	17	18	PAN Length			PAN number length (0-99)
2	18	20	State Code			
4	20	24	End Date			BCD YYYYMMDD
2	24	26	Block Count			
2	26	28	Compressed Buffer Size			
2	28	30	Uncompressed Buffer Size			
14	30	34	Not Used			
Info2			EBTWIC Benefits Details compressed			
2	5	7	Record Number			
1	7	8	Number of bytes			
36	8	44	Benefits list data			
			eWIC Ticket End		0x99	
2	3	5	POS Number		Pos number (BCD) (0-9999)	
10	5	15	PAN Number		PAN number (BCD)	
1	15	16	PAN Length		PAN number length (0-99)	
2	16	18	State Code			
1	18	19	State FIPS		State FIPS (hex)	
4	19	23	Session Date			BCD MMDDYY
3	23	26	Session Time			BCD HHMMSS
18	26	44	Not Used			
20	44	64	Tail			
64			Total			

F4 – External 2 Coupon

0 X F4

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xF4 – External 2 Coupon	
20	2	22	Electronic Coupon Description			
22	22	44	Reserved			
20	44	64	Tail			
64			Total			

F5 – External Coupon Data

0 X F5

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information	
1	1	2	Function		0 x F5 External Coupon Data	
1	2	3	Sub Function		0x01 Consumer ID 0x02 Coupon Not Sold 0x03 Transaction ID 0x04 Message 2 Error	
Union			Consumer ID		0x01	
20	3	23	Consumer ID			
1	23	24	Opt Was Cancelled			
20	24	44	Not Used			
			Coupon Not Sold		0x02	
1	3	4	Type		Coupon Barcode Header Type = 0x01	
4	4	8	Number of Data Records			
36	8	44	Not Used			
1	3	4	Type		Coupon Barcode Data Type = 0x02	
1	4	5	Record Number			
39	5	44	Data			
			Transaction ID		Type = 0x03	
40	3	43	Transaction ID			
1	43	44	Transaction ID Length			
			Message 2 Error		Type =0x04	
4	3	7	Message 2 Status			
37	7	44	Not Used			
20	44	64	Tail			
64			Total			

F7 – Info 2 Lane Manual Add Item

0 X F7

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xF7	
1	2	3	Action		0 = Exact UPC Match 1 = Manufacturer Code Match 2 = Generic Match	
7	3	10	PLU Code			BCD
7	10	17	Display Code		Matching Code from LH List	BCD
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

F9 – Info 2 DPS

0 X F9

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xF9	
1	2	3	Sub Opcode		0x01 Fuel CC Info 0x02 MTX Pan Hash 0x03 CC Owner Name	
1	3	4	Type			
Union						
		Variable Data	0x01			
39	4	43	Data			
1	43	44	Data Length			
		Variable Data Small	0x02			
37	4	41	Record No.			
1	41	42	Data Length			
1	42	43	Count			
1	43	44	Index			
		Variable Data Large	0x03			
35	4	39	Data			
1	39	40	Data Length			
2	40	42	Count			
2	42	44	Index			
		Fixed Data 320	0x04			
40	4	44	Data			
		Fixed Data	0x05			

Bytes	From	To	Data	Bits	Explanation	Remarks
		256				
32	4	36	Data			
8	36	44	Reserved			
		Fixed Data	0x06			
		128				
16	4	20	Data			
24	20	44	Reserved			
20	44	64	Tail			
64			Total			

FA – Info 2 Lane Hawk Clear Item

0 X FA

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xFA	
7	2	9	PLU Code			BCD
35	9	44	Not Used			
20	44	64	Tail			
64			Total			

FB – Info 2 Promotion Tax Info

0 X FB

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 – Log Information Trans Info 2	
1	1	2	Function		0xFB	
1	2	3	Flags			
				Bit 0	Opt plu	
				Bit 1	Opt dep	
				Bit 2	Opt disc dept	
				Bit 3	Opt pay credit or FS item	
				Bit 4	Opt cost plus	
				Bit 5	Opt return item	
				Bits 6-7	Reserved	
1	3	4	Tax comb			
4	4	8	Return surcharge percent			
4	8	12	Amount			
2	12	14	Dept			
7	14	21	Plu			
23	21	44	Reserved			
20	44	64	Tail			
64			Total			

FD – Info 2 WIC CVV Info

0 X FD

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 –Trans Info 2	
1	1	2	Function		0xFD	
2	2	4	WIC CVV Index			
4	4	8	WIC CVV Total Voucher Value			
1	8	9	CVV Issue Day			
1	9	10	CVV Issue Month			
2	10	12	CVV Issue Year			
1	12	13	CVV Exp Day			
1	13	14	CVV Exp Month			
2	14	16	CVV Exp Year			
28	16	44	Reserved			
20	44	64	Tail			
64			Total			

FE – Info 2 WIC CVV Tax Info

0 X FE

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 –Trans Info 2	
1	1	2	Function		0xFE	
1	2	3	Tax Number			
4	3	7	WIC CVV Forgive Taxable Amount			
4	7	11	WIC CVV Forgive Tax Amount			
33	11	44	Not Used			
20	44	64	Tail			
64			Total			

FF –Info 2 Fuel Voucher Redeemed

0 X FF

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		70 –Trans Info 2	
1	1	2	Function		0xFF	
4	2	6	Barcode			BCD
4	6	10	Promotion Number			
34	40	44	Reserved			
20	44	64	Tail			
64			Total			

88 – Transaction QDX Update

0 X 88

Explanation: The QDX Update function is to write and increment the QDX database, recording the QDX Number, Position within the record, File Size, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode			
1	1	2	SubOpcode			
1	2	3	Function		1 – Write 2 – increment (according to size)	
1	3	4	QDX number			
12	4	16	Index			If relative file then record number left justified
2	16	18	Position		Position within the record	
1	18	19	Size			
1	19	20	Flag			
				bit 0	Send_maint	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	20	21	org_pos_no			
23	21	44	Data			
20	44	64	Tail			
64			Total			

95 – Transaction External Data

0 X 95

Explanation: This opcode is used to send external messages via the T-LOG. Prior to this transaction a Info 2, ticket type (0x33) transaction will be written to indicate Ticket type.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode			
1	1	2	Data Type		1 – Loyalty Message (zipped XML) 2 – Stock Messages 3 – Stock Print Messages 4 – Copient (Logix) NCR Loyalty Transaction Log 5 – POS transaction schema in XML format 6 – POS transaction data in XML format 7 – Reserved IL 8 – PDX Sold Request 9 – MDot Msg3	Next data types here
41	2	43	Data			
1	43	44	Flag	Bit 0 Bit 1 Bits 2-6	Start Bit End Bit Data Length	
20	44	64	Tail			
64			Total			

0A – Cashier Time/Performance Statistics

0 X 0A

Explanation: This Opcode represents the POS Mode and the time that each item is registered by the cashier. For each POS terminal the following data is recorded: time in which the cash register is in Tender Mode, Secure Mode, or in Maintenance. Other times, e.g., Sign On and Sign Off are also registered.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		0A – Cashier Time/ Performance statistics	
1	1	2	POS Mode		Logs the mode the POS was in (Sale, Tender, Idle, etc.)	
2	2	4	Item Registration Time		The following log is the total time during the cashier shift	
2	4	6	Idle time		Total idle time	
2	6	8	Secure Time		Total secure time	
2	8	10	Tender Time		Total tender time	
2	10	12	Wait Time		Total wait time	
2	12	14	Inquiry time		Total inquiry time	
2	14	16	Other Time		Total other time	
1	16	17	Flag 1			
				bit 0	Quarter – hour	TESCO
				bit 1	Sign off	TESCO
				bit 2	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Express Order	Express Ticket (less than 10 times)
						Delta time: time since last 0x0A TRS
2	17	19	delta_item_reg_time;		Item registration time	
2	19	21	delta_idle_time		Idle time	
2	21	23	delta_secure_time		Secure time	
2	23	25	delta_tender_time		Tender time	
2	25	27	delta_wait_time		Wait time	
2	27	29	delta_inq_time		Inquiry time	

Bytes	From	To	Data	Bits	Explanation	Remarks
2	29	31	delta_other_time		Other time	
2	31	33	Sign on time		Total sign on time	
2	33	35	Delta sign on time		Delta sign on time	
4	35	39	Maintenance 1		Maintenance received statistics	
4	39	43	Maintenance 2		Maintenance received statistics	
1	43	44	Local_maint_Q		Pending Maintenance records	
20	44	64	Tail			
64			Total			

0B – Cashier Declaration

0 X 0B

Explanation: The Cashier declaration records the amount of cash that the cashier declares at the beginning and end of a shift, recording the Amount, Cashier No., Count, Tender Number, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode declaration		0B – Cashier	
1	1	2	Function		01 – Regular 02 – POST declaration 10 – Safe declaration	
4	2	6	Amount		Total amount declared in period	DOS Systems.
2	6	8	Count		Total quantity declared for this tender	DOS Systems
1	8	9	Tender Number			
4	9	13	Total		PC generated option	
1	13	14	Flag			
				bit 0	Previous period	Declaration for previous period
				bit 1	Do not update employee record	
				bit 2	Reprocess	B/O Use Process only if in reprocess mode.
				bit 3	Additive	B/O Use Additive declaration: add “this time” to existing values
				bit 4	Remote	Remote declaration
				bit 5	Int64	Amount is stored in int64 field. This bit is used when performing declaration at the POS (Drawer Accountability)
				bit 6	First	
				bit 7	Information	Informative only, ignore this record.
4	14	18	Amount this time		Amount declared this time.	
2	18	20	Count this time		Quantity declared this time.	

Bytes	From	To	Data	Bits	Explanation	Remarks
1	20	21	POS Number		POS number (POS accountability)	
2	21	23	Cashier Number			
21	23	44	Not Used			
20	44	64	Tail			
64			Total			

B0 – New Sequence Number

0 X B0

Explanation: The New Sequence Number Opcode is used when testing for problems with the sequence number in the transaction file.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		B0 – Transaction New Sequence Number	
1	1	2	Type		1 - New Seq After EOD 2 – New Seq After Cold Start 3 – New Seq After Reset Transaction	
42	2	44	Data			
20	44	64	Tail			
64			Total			

C5 – Transaction Media Extension 6

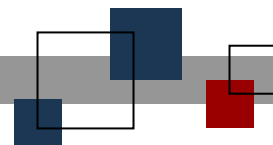
0 X C5

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		C5 Transaction Media Extension	
42	1	43	EFT Owner Name			
1	43	44	Flag	Bit 0	Opt Media Ext 7	
				Bit 1	Not Used	
20	44	64	Tail			
64			Total			

C9 – Transaction General Long Data

0 X C9

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		C9 Transaction General Long Data	
1	1	2	Function		Possible value: 1 – general data encrypted password	
1	2	3	Current Transaction Position			
1	3	4	Total Transaction Count			
4	4	8	Data Length			
36	8	44	Data			
20	44	64	Tail			
64			Total			



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