

# **EMC Phase 3**

**Generic IRD command reference guide for SMS** 

V.1.1



Date	Comment
31/03/2005	samples of IRD commands, the exemples are referenced in the cmd matrix v3.5.  Please note that the exemples point to a given STB model. It is either ADB or P3 STB.
	P3 STB means a STB that is fully compliant with EMC phase 3.
07/04/2005	Correct in all exemple Field4. The values are divided by 2.

## **References:**

- [1] EMC IRD commands definition 1.0.0 for ADB STB
- [2] EMC IRD commands specification 1.3.16e for Phase 3 (P3) compliant STB

## **List of commands:**

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## 1.1 Set Network ID (ADB STB)

CommandHeader = 00900000201000100020000320050324

Field1: 009000002 ---> TransactionNumber
Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

### CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 194 ---> IRD\_command\_id & 0xC2

Field3: 001 ---> IRD\_Operation Field4: 08 ---> IRD\_data\_length

---> IRD\_data ( set network id to 0x0B02 original network id to 0xF041 )



## 1.2 Set Network ID (P3 STB)

CommandHeader = 00900000201000100020000320050324

Field1: 009000002 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

#### CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 198 ---> IRD\_command\_id & 0xC6

Field3: 001 ---> IRD\_Operation Field4: 08 ---> IRD\_data\_length

---> IRD\_data ( set network id to 0x0B02 original network id to 0xF041 )



# 2.1 Set Pin Code (ADB STB)

CommandHeader = 00900000201000100020000320050324

Field1: 009000002 ---> TransactionNumber ---> CommandType = EMM

Field2: 01 ---> Command<sup>-</sup>
Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

#### CommandBody =

> Field1: 0069 ---> SMS Command ID

Field2: 018 ---> IRD command id Ł 0x12

Field3: 001 ---> IRD\_Operation ---> IRD\_data\_length

---> IRD\_data ( PIN code 0x9876)



## 2.2 Set Parental Pin Code (P3 STB)

CommandHeader = 00900000401000100020000320050324

Field1: 009000004 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

#### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 200 ---> IRD\_command\_id = 0xC8

Field3: 001 ---> IRD\_Operation Field4: 06 ---> IRD\_data\_length

---> IRD\_data ( set Parental Pin Code to 1234 )

. . .



## 2.3 Reset Parental Pin Code (P3 STB)

CommandHeader = 00900000501000100020000320050324

Field1: 009000005 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

### CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 200 ---> IRD\_command\_id = 0xC8

Field3: 001 ---> IRD\_Operation Field4: 06 ---> IRD\_data\_length

---> IRD\_data (ird\_data value set to '0000')



## 2.4 Set PIN code for IPPV purchase (P3 STB)

CommandHeader = 00900000701000100020000320050324

Field1: 009000007  $\longrightarrow$  TransactionNumber Field2: 01  $\longrightarrow$  CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

#### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 200 ---> IRD\_command\_id = 0xC8

Field3: 002 ---> IRD\_Operation Field4: 06 ---> IRD\_data\_length

---> IRD\_data ( set IPPV purchase Pin Code to 1234 )



## 2.5 Reset PIN code for IPPV purchase (P3 STB)

CommandHeader = 00900000801000100020000320050324

Field1: 009000008 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

#### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 200 ---> IRD\_command\_id = 0xC8

Field3: 002 ---> IRD\_Operation Field4: 06 ---> IRD\_data\_length

---> IRD\_data ( set IPPV purchase Pin Code to 0000 )



## 3.1 Force Tune (P3 STB)

CommandHeader = 00900000101000100020000320050324

```
Field1: 009000001 ---> TransactionNumber
Field2: 01 ---> CommandType = EMM
```

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

```
---> Normal (Standard broadcasting mode)
Field1: N
```

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

#### CommandBody =

```
---> SMS Command ID
```

Field1: 0069 Field2: 193 ---> IRD\_command\_id = 0xC1

Field3: 001 ---> IRD\_Operation ---> IRD\_data\_length Field4: 12

```
---> IRD_data ( network_id = 0x0B02
               transport_id = 0x001A
               service_id = 0x00F3)
```



## 4.1 Mail (P3 STB)

CommandHeader = 00900000201000100020000320050324

```
Field1: 009000002 ---> TransactionNumber
Field2: 01 ---> CommandType = EMM
Field3: 0001 ---> Source_ID
Field4: 0002 ---> Dest_ID
Field5: 00003 ---> MOP PPID
```

Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

```
Field1: N ---> Normal (Standard broadcasting mode)
Field2: 20050323 ---> Boardcast Start Date
Field3: 20050325 ---> Boardcast End Date
Field4: U ---> Unique (EMM addressing mode for EMM command)
Field5: 0700000001 ---> The Unique Address of Card
```

#### CommandBody =

006919200144484856494848535254535551555254535452504852505557504852515449545054675453535154705454555200000000

```
Field1: 0069 ---> SMS Command ID
Field2: 192 ---> IRD_command_id = 0xC0
Field3: 001 ---> IRD_Operation
Field4: 44 ---> IRD_data_length
Field5: 484856494848535254535551555254535452504852505557504852515
449545054675453535154705454555200000000

---> IRD_data ( mail_id = 2 (b2:000000010), total_segment = 1 (b2:000001), priority = 0 (b2:00),
```

b2:00000000 10000001 00000000 £ 0x008100

message = 'Tested By CableSoft'  $\pm$  0x 54 65 73 74 65 64 20 42 79 20 43 61 62 6C 65 53 6F 66 74 )

segment nb = 0 (b2:000000),





## 5.1 Master/Slave Continuous Mode Initialization (P3 STB)

CommandHeader = 00900000401000100020000320050324

Field1: 009000004 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000003

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000003 ---> The Unique Address of Card

### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 199  $\longrightarrow$  IRD\_command\_id = 0xC7

Field3: 001 ---> IRD\_Operation Field4: 14 ---> IRD\_data\_length

---> IRD\_data ( masterSmartcard = 0x29B92764 (i.e

0700000100),

validationPeriod = 0x07 (i.e. 7 days), randomPeriod = 0x02 (i.e. 2 days), timeout = 0x18 (i.e. 24 hours)



## 5.2 Master/Slave Cancellation (P3 STB)

CommandHeader = 00900000601000100020000320050324

Field1: 009000006 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000001

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000001 ---> The Unique Address of Card

#### CommandBody =

Field1: 0069 ---> SMS Command ID

Field2: 199  $\longrightarrow$  IRD\_command\_id = 0xC7

Field3: 002 ---> IRD\_Operation Field4: 00 ---> IRD\_data\_length

---> IRD\_data ( no value )



# 5.3 Master/Slave Single Shot (P3 STB)

CommandHeader = 00900000701000100020000320050324

Field1: 009000007 ---> TransactionNumber Field2: 01 ---> CommandType = EMM

Field3: 0001 ---> Source\_ID
Field4: 0002 ---> Dest\_ID
Field5: 00003 ---> MOP\_PPID
Field6: 20050324 ---> Creation\_date

CommandSection = N2005032320050325U0700000003

Field1: N ---> Normal (Standard broadcasting mode)

Field2: 20050323 ---> Boardcast Start Date Field3: 20050325 ---> Boardcast End Date

Field4: U ---> Unique ( EMM addressing mode for EMM

command )

Field5: 0700000003 ---> The Unique Address of Card

#### CommandBody =

0700000100),

Field1: 0069 ---> SMS Command ID

Field2: 199  $\longrightarrow$  IRD\_command\_id = 0xC7

Field3: 003 ---> IRD\_Operation Field4: 10 ---> IRD\_data\_length

---> IRD\_data ( masterSmartcard = 0x29B92764 (i.e

timeout = 0x04 (i.e. 4 hours)

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