

# MOST

Media Oriented Systems Transport

Multimedia and Control  
Networking Technology

**MOST Function Block NetworkMaster**

**Rev 2.5.0**

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## References

Number	Document
[1]	MOST Specification 2V5

## Bibliography MOST Function Catalog

This is a list of released function blocks (FBlocks) at the release time of this specification. FBlocks which are released later are not reflected in this list.

FBlockID	FunctionBlock
-	GeneralFBlock
-	GeneralPlayer
0x01	NetBlock
0x02	NetworkMaster
0x03	ConnectionMaster
0x06	Diagnosis
0x0F	Enhanced Testability
0x22	AudioAmplifier
0x24	AuxIn
0x26	MicrophoneInput
0x30	AudioTapePlayer
0x31	AudioDiskPlayer
0x34	DVDVideoPlayer
0x40	AmFmTuner
0x41	TMCTuner
0x42	TVTuner
0x43	DABTuner
0x44	SDARS
0x50	Telephone
0x51	GeneralPhoneBook
0x60	GraphicDisplay
-	Unique Functions

## NetworkMaster FBlock (0x02) Change History

### Changes NetWorkMaster FBlock 2.3.3 to NetworkMaster FBlock 2.5

Change Ref.	FktID	Changes
2.5-001	General	<ul style="list-style-type: none"> <li>- Many minor corrections in spelling and use of MOST terminology.</li> <li>- Replaced terms synchronous/asynchronous with streaming/packet data in descriptions.</li> <li>- Unified use of RxTxLog to match the MOST specification.</li> <li>- Amended XML storage format with new Function Classes, data types and units.</li> </ul>
2.5-002	0x010	- Added function Version.
2.5-003	0xA00	- Removed OPType Get from function Configuration.
2.5-004	0xA01	- Changed description for CentralRegistry/FBlockInfoList/RxTxLog. Range for user now is [0x0010...0x02FF] and [0x0500...0x0FEF].

### Changes NetWorkMaster FBlock 2.3.2 to NetworkMaster FBlock 2.3.3

Change Ref.	FktID	Changes
2.3.3-001	0xA00	- Changed description
2.3.3-002	0xA00	- Changed all parameters to optional in DeltaFBlockList.
2.3.3-003	0xA00, 0xA01	- Changed comment for InstID.
2.3.3-004	0xA03	- Added comment.

### Changes NetWorkMaster FBlock 2.3.1 to NetworkMaster FBlock 2.3.2

Change Ref.	FktID	Changes
2.3.2-001	0xA01	- Changed description and valid range for RxTxLog

### Changes NetworkMaster FBlock 2.3 to NetworkMaster FBlock 2.3.1

Change Ref.	FktID	Changes
2.3.1-001	0xA01	- Changed valid range for parameter RxTxLog

# 1 Introduction

A MOST Function Catalog is a collection of MOST function blocks (FBlocks).

This document contains the specification of an FBlock. MOST FBlocks are standardized and maintained by MOST workgroup Device Architecture (WG\_DA). In order to speed up the process of making new Function Blocks available, every FBlock will be updated individually as required.

## 2 FBlock Definition

### 2.1 NetworkMaster (FBlockID=0x02)

In a MOST network there exists exactly one NetworkMaster. The NetworkMaster administrates the Central Registry that represents an image of the physical and logical system configuration.

Function Overview		
FktID	Name	Section Type
0x000	<a href="#">FktIDs</a>	Coordination
0x010	<a href="#">Version</a>	Coordination
0xA00	<a href="#">Configuration</a>	Unique
0xA01	<a href="#">CentralRegistry</a>	Unique
0xA02	<a href="#">SaveConfiguration</a>	Unique
0xA03	<a href="#">Boundary</a>	Unique

#### 2.1.1 FktIDs (0x000)

Section type: Coordination

With the property FktIDs, the functions of an FBlock may be queried.

##### 2.1.1.1 Format of Function

Function classes: Unclassified Property

FBlock	Function	OPType	Parameter
NetworkMaster (0x02)	FktIDs (0x000)	Get	-
		Status	BitField
		Error	ErrorCode, ErrorInfo

##### 2.1.1.2 Parameter

###### BitField

RLE-coded bitfield of available functions.

**Note:** FktIDs are 12-bit encoded!

Basis datatype	Length	Description
Stream		FktID1, FktID2, ...

## 2.1.2 Version (0x010)

Section type: Coordination

This function has to be implemented in every node. It describes the version of the FBlock, divided into the major version, the minor version and the build number. (E.g., Version 2.3.5)

### 2.1.2.1 Format of Function

**Function classes:** Unclassified Property

FBlock	Function	OPType	Parameter
NetworkMaster (0x02)	Version (0x010)	Get	-
		Status	Major, Minor, Build
		Error	ErrorCode, ErrorInfo

### 2.1.2.2 Parameter

#### Major

Major version value of the FBlock.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	full range	1	none

#### Minor

Minor version value of the FBlock.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	full range	1	none

#### Build

Build number of the FBlock.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	full range	1	none



## 2.1.3 Configuration (0xA00)

Section type: Unique

Informs each device about the state of the network configuration. The Status is reported by a broadcast message.

### 2.1.3.1 Format of Function

**Function classes:** Unclassified Property

FBlock	Function	OPType	Parameter
NetworkMaster (0x02)	Configuration (0xA00)	Status	ConfigurationControl, DeltaFBlockList
		Error	ErrorCode, ErrorInfo

### 2.1.3.2 Parameter

#### DeltaFBlockList

List of changed FBlocks. Sending segmented messages should be avoided, therefore the change of more than 5 FBlocks should be announced in multiple messages.

Basis datatype	Length	Description
Stream	10	[FBlockID1, InstID1, FBlockID2, InstID2 ...]

#### FBlockID

Functional address of an FBlock.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	1..255	1	none

#### InstID

Distinction of identical FBlocks in a system.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	1..255	1	none

#### ConfigurationControl

Validity of the Central Registry.

Basis datatype	Range of values	Code	Description
Enum	0x00..0x03	0x00	NotOk
		0x01	Ok
		0x02	Invalid
		0x03	New

## 2.1.4 CentralRegistry (0xA01)

Section type: Unique

Query of information about an FBlock from the Central Registry. The parameter InstID is optional. After a Get command without any parameter, the NetworkMaster responds with all registry entries.

### 2.1.4.1 Format of Function

**Function classes:** Unclassified Property

FBlock	Function	OPType	Parameter
NetworkMaster (0x02)	CentralRegistry (0xA01)	Get	FBlockID, InstID
		Status	FBlockInfoList
		Error	ErrorCode, ErrorInfo

### 2.1.4.2 Parameter

#### FBlockID

Functional address of an FBlock.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	1..255	1	none

#### InstID

Distinction of identical FBlocks in a system.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	1..255	1	none

#### FBlockInfoList

List of information about the FBlocks.

Basis datatype	Length	Description
Stream		RxTxLog, FBlockID, InstID {, RxTxLog, FBlockID, InstID}

#### RxTxLog

Calculated by each device when the network is initialized:  
 $RxTxLog = 0x0100 + RxTxPos.$

May also be defined later by the user with range:  
 [0x0010...0x02FF] and [0x0500...0x0FEF]

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Word	0		1	none

## 2.1.5 SaveConfiguration (0xA02)

Section type: Unique

Function for saving the Central Registry as default configuration

### 2.1.5.1 Format of Function

Function classes: Trigger

FBlock	Function	OPType	Parameter
NetworkMaster (0x02)	SaveConfiguration (0xA02)	Result	-
		StartResult	-
		Error	ErrorCode, ErrorInfo

### 2.1.5.2 Parameter

## 2.1.6 Boundary (0xA03)

Section type: Unique

Property for administration of the boundary value for streaming data and packet data in the NetworkMaster.

This function shall not be used because it is now part of the NetBlock. It remains in the NetworkMaster for backward compatibility.

### 2.1.6.1 Format of Function

Function classes: Number

FBlock	Function	OPType	Parameter
NetworkMaster (0x02)	Boundary (0xA03)	Get	-
		SetGet	BoundaryDescriptor
		Status	BoundaryDescriptor
		Error	ErrorCode, ErrorInfo

### 2.1.6.2 Parameter

#### BoundaryDescriptor

Boundary value (in quadlets) for streaming data and packet data.

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	6..15	1	none