

MOST

Media Oriented Systems Transport

Multimedia and Control
Networking Technology

**MOST FunctionBlock NetworkMaster –
Speed Grade MOST50
Rev 2.5.1
10/2007**



Legal Notice

COPYRIGHT

© Copyright 1999 - 2007 MOST Cooperation. All rights reserved.

LICENSE DISCLAIMER

Nothing on any MOST Cooperation Web Site, or in any MOST Cooperation document, shall be construed as conferring any license under any of the MOST Cooperation or its members or any third party's intellectual property rights, whether by estoppel, implication, or otherwise.

CONTENT AND LIABILITY DISCLAIMER

MOST Cooperation or its members shall not be responsible for any errors or omissions contained at any MOST Cooperation Web Site, or in any MOST Cooperation document, and reserves the right to make changes without notice. Accordingly, all MOST Cooperation and third party information is provided "AS IS". In addition, MOST Cooperation or its members are not responsible for the content of any other Web Site linked to any MOST Cooperation Web Site. Links are provided as Internet navigation tools only.

MOST COOPERATION AND ITS MEMBERS DISCLAIM ALL WARRANTIES WITH REGARD TO THE INFORMATION (INCLUDING ANY SOFTWARE) PROVIDED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

In no event shall MOST Cooperation or its members be liable for any damages whatsoever, and in particular MOST Cooperation or its members shall not be liable for special, indirect, consequential, or incidental damages, or damages for lost profits, loss of revenue, or loss of use, arising out of or related to any MOST Cooperation Web Site, any MOST Cooperation document, or the information contained in it, whether such damages arise in contract, negligence, tort, under statute, in equity, at law or otherwise.

FEEDBACK INFORMATION

Any information provided to MOST Cooperation in connection with any MOST Cooperation Web Site, or any MOST Cooperation document, shall be provided by the submitter and received by MOST Cooperation on a non-confidential basis. MOST Cooperation shall be free to use such information on an unrestricted basis.

TRADEMARKS

MOST Cooperation and its members prohibit the unauthorized use of any of their trademarks. MOST Cooperation specifically prohibits the use of the MOST Cooperation LOGO unless the use is approved by the Steering Committee of MOST Cooperation.

SUPPORT AND FURTHER INFORMATION

For more information on the MOST technology, please contact:

MOST Cooperation

Administration
Bannwaldallee 48
D-76185 Karlsruhe
Germany

Tel: (+49) (0) 721 966 50 00

Fax: (+49) (0) 721 966 50 01

E-mail: contact@mostcooperation.com

Web: www.mostcooperation.com



© Copyright 1999 - 2007 MOST Cooperation
All rights reserved

MOST is a registered trademark

1	INTRODUCTION	7
2	FBLOCK DEFINITION	7
2.1	NetworkMaster (FBlockID=0x02).....	7
2.1.1	Configuration (0xA00)	9
2.1.2	CentralRegistry (0xA01)	10
2.1.3	SaveConfiguration (0xA02)	11
2.1.4	Boundary (0xA03).....	11

References

Number	Document
[1]	MOST Specification 2V5
[2]	MOST FBlock template GeneralFBlock Rev 2.5.1 – Speed Grade MOST50

Bibliography MOST Library

This is a list of released FBlocks and FBlock templates 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
0x0E	Tool
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) Speed Grade MOST50 Change History

Changes NetWorkMaster FBlock 2.5.1 - Speed Grade MOST25 to NetworkMaster FBlock 2.5.1 – Speed Grade MOST50

Change Ref.	FktID	Changes
2.5.1-001	-	- Created NetworkMaster for speed grade MOST50, based on NetworkMaster 2.5.1 (speed grade MOST25).
2.5.1-002	0xA03	- Function Boundary: Modified range of Boundary Descriptor - previously 6-15, now 0-29.

1 Introduction

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.

In addition to the functions contained in this document, the following functions are also part of the NetworkMaster FBlock. They exist in the GeneralFBlock template Rev. 2.5.1 and are included here by reference:

FktID	Function name
0x000	FktIDs
0x010	Version

Function Overview		
FktID	Name	Section Type
0xA00	Configuration	Unique
0xA01	CentralRegistry	Unique
0xA02	SaveConfiguration	Unique
0xA03	Boundary	Unique

2.1.1 Configuration (0xA00)

Section type: Unique

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

2.1.1.1 Format of Function

Function classes: Unclassified Property

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

2.1.1.2 Parameter

ConfigurationControl

Validity of the Central Registry.

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

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	Condition	Description
Stream		-	Content: FBlockID, InstID {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

2.1.2 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.

2.1.2.1 Format of Function

Function classes: Unclassified Property

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

2.1.2.2 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	Condition	Description
Stream		-	Content: RxTxLog, FBlockID, InstID 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

2.1.3 SaveConfiguration (0xA02)

Section type: Unique

Function for saving the Central Registry as default configuration

2.1.3.1 Format of Function

Function classes: Trigger

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

2.1.3.2 Parameter

2.1.4 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.

2.1.4.1 Format of Function

Function classes: Number

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

2.1.4.2 Parameter

BoundaryDescriptor

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

Basis datatype	Exp.	Range of values	Step	Unit
Unsigned Byte	0	0..29	1	none