

MOST

Media Oriented Systems Transport

Multimedia and Control
Networking Technology

MOST FBlock Template GeneralFBlock

Rev 3.1.1

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Bibliography

All documents, which this MOST document has references to, are listed here with the actual revision this document is referring to.

Number	Document	Revision
[1]	MOST Specification	3.1

Document History

Changes GeneralFBlock FBlock Template 3.1.0 to GeneralFBlock FBlock Template 3.1.1

Change Ref.	FktID	Changes
3.1.1-001	0x0C3	Removed function HDCP_Status. (WGDA D158_6)

Changes GeneralFBlock FBlock Template 3.0.6 to GeneralFBlock FBlock Template 3.1.0

Change Ref.	FktID	Changes
3.1.0-001	All	Made all functions mandatory. (WGDA D137_6)
3.1.0-002	0x001	Notification: Replaced DeviceID with TargetAddress; replaced DeviceIDList with TargetAddressList. (WGDA D146_7)
3.1.0-003	0x002	NotificationCheck: Replaced DeviceID with TargetAddress; replaced DeviceIDList with TargetAddressList. (WGDA D146_7)
3.1.0-004	0x080	DynArrayIns: – Restricted range of FktID parameter; – Improved function description;
3.1.0-005	0x081	DynArrayDel: Improved function description;
3.1.0-006	0x081	DynArrayDel: Restricted range of FktID parameter;
3.1.0-007	0x090	CreateArrayWindow: Restricted range of FktIDArrayWindow parameter
3.1.0-008	0x091	DestroyArrayWindow: Restricted range of FktIDArrayWindow parameter;
3.1.0-009	0x092	MoveArrayWindow: Restricted range of FktIDArrayWindow parameter;
3.1.0-010	0x093	SearchArrayWindow: Restricted range of FktIDArrayWindow parameter;
3.1.0-011	0x094	LongArrayInfo: – Restricted range of FktIDArrayWindow parameter; – Renamed FktIDAW to FktIDArrayWindow and FktIDMA to FktIDMotherArray for uniformity; – Replace DeviceIDController with ControllerTargetAddress; replace DeviceID with target address; (WGDA D146_7)
3.1.0-012	0x09A	ArrayWindowDel: Restricted range of FktIDArrayWindow parameter;
3.1.0-013	0x09B	ArrayWindowIns: Restricted range of FktIDArrayWindow parameter;
3.1.0-014	0x0A0	Removed function PowerDownDelay. (WGDA D135_12)
3.1.0-015	0x111	Connect: Improved function description;
3.1.0-016	0x112	Disconnect: Improved function description;
3.1.0-017	0x113	Mute: Changed parameter Status from Boolean (legacy) to Boolean.
3.1.0-018	0x115	Removed function ConnectTo. (WGDA D135_12)
3.1.0-019	0x117	Removed function SinkRouting. (WGDA D135_12)
3.1.0-020	0x121	DTCP_Control: Changed OP3_exchange_key from Boolean (legacy) to bit-oriented Unsigned Byte.
3.1.0-021	0x122	DTCP_Status: Changed OP3_exchange_key from Boolean (legacy) to bit-oriented Unsigned Byte.
3.1.0-022	0x123	DTCP_CipherStatus: Changed AvailableExchangeKeys from Boolean (legacy) to bit-oriented Unsigned Byte.
3.1.0-023	0x450	Removed function Random. (WGDA D135_12)
3.1.0-024	0x451	Removed function Scan. (WGDA D135_12)
3.1.0-025	0x452	Repeat: Marked 0x08...0x09 as reserved range.

Changes GeneralFBlock FBlock Template 3.0.5 to GeneralFBlock FBlock Template 3.0.6

Change Ref.	FktID	Changes
3.0.6-001	0x002	NotificationCheck: – Function specific error 0x08 "DeviceIDNotRegistered" and 0x20 "FBlockNotRegistered" deleted – Remodeled function specific Error.

Change Ref.	FktID	Changes
3.0.6-002	0x100	SourceInfo: Marked DTCPIP as "deprecated".
3.0.6-003	0x101	Allocate: Remodeled function specific Error.
3.0.6-004	0x108	AllocateExt: Remodeled function specific Error.
3.0.6-005	0x110	SinkInfo: Marked DTCPIP as "deprecated".
3.0.6-006	0x121	DTCP_Control: Completely revised.
3.0.6-007	0x122	DTCP_Status: Completely revised.
3.0.6-008	0x123	DTCP_Cipher_Status: Changed parameter AvailableExchangeKeys from BitField to BoolField; added statement regarding SourceSinkNr.
3.0.6-009	0x124	DTCP_Info: Marked DTCPIP as "deprecated".
3.0.6-010	0x125	DTCP_ContentKeyProcess: Marked DTCPIP as "deprecated".
3.0.6-011	0x126	DTCP_InfoExt: Marked DTCPIP as "deprecated".
3.0.6-012	0x200	DeckStatus: Turned into an Unclassified Property to allow remodelling of function specific Error.
3.0.6-013	0x207	DeckStatusExt: Remodeled function specific Error.
3.0.6-014	0x251	VideoInteraction: Remodeled function specific Error.

Changes GeneralFBlock FBlock Template 3.0.4 to GeneralFBlock FBlock Template 3.0.5

Change Ref.	FktID	Changes
3.0.5-001	–	Added GenericPCM_with_FrameRateMultiplier (0x12) to ContentType and TransmissionClass table.
3.0.5-002	0x011	FBlockInfo: Function has become conditional. It is not required for System FBlocks.
3.0.5-003	0x0C0	HDCP_ReceiverConnectedIndication: New function.
3.0.5-004	0x0C1	HDCP_ReceiverDisconnectedIndication: New function.
3.0.5-005	0x0C2	HDCP_Control: New function.
3.0.5-006	0x0C3	HDCP_Status: New function.
3.0.5-007	0x0C4	HDCP_DecipherStatus: New function.
3.0.5-008	0x0C5	HDCP_Assign: New function.
3.0.5-009	0x100	SourceInfo: Added GenericPCM_with_FrameRateMultiplier.
3.0.5-010	0x110	SinkInfo: Added GenericPCM_with_FrameRateMultiplier.
3.0.5-011	0x121	DTCP_Control: Modified description of parameter Subfunction.
3.0.5-012	0x126	DTCP_InfoExt: New function.

Changes GeneralFBlock FBlock Template 3.0.3 to GeneralFBlock FBlock Template 3.0.4

Change Ref.	FktID	Changes
3.0.4-001	0x100	SourceInfo: – Added MOST DTCP and HDCP to ContentProtection parameter. (WGDA 103_12_1) – Corrected symbolic name of Enum value for "Front Right of Center" in parameter AudioChannelName.
3.0.4-002	0x110	SinkInfo: – Added MOST DTCP and HDCP to ContentProtection parameter. (WGDA 103_12_1) – Corrected symbolic name of Enum value for "Front Right of Center" in parameter AudioChannelName.
3.0.4-003	0x120	DTCP_StartProcess: Removed OPTypes without SenderHandle. (WG Streaming)
3.0.4-004	0x121	DTCP_Control: Completely revised. (WGDA 103_17)
3.0.4-005	0x122	DTCP_Status: Completely revised. (WGDA 103_17)
3.0.4-006	0x125	DTCP_ContentKeyProcess: – Removed OPTypes without SenderHandle. (WG Streaming) – Corrected clerical error. MediaType parameter was missing for StartResultAck.
3.0.4-007	0x130	ScreenFormat: Adopted function from GeneralPlayer 2.5.1 and added symbolic names. (WGDA 109_6)
3.0.4-008	0x131	VideoFrequency: Adopted function from GeneralPlayer 2.5.1 and added symbolic names. (WGDA 109_6)

Change Ref.	FktID	Changes
3.0.4-009	0x132	VideoNorm: Adopted function from GeneralPlayer 2.5.1 and added symbolic names. (WGDA 109_6)
3.0.4-010	0x133	VideoSignalFormat: Adopted function from GeneralPlayer 2.5.1 and added symbolic names. (WGDA 109_6)
3.0.4-011	0x135	VideoFormat: Adopted function from GeneralPlayer 2.5.1, extended with additional Enum values, and added symbolic names. (WGDA 109_6)
3.0.4-012	0x200	DeckStatus: Adopted function from GeneralPlayer 2.5.1, extended DeckStatus Enum, and added symbolic names. (WGDA 109_6)
3.0.4-013	0x201	TimePosition: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-014	0x202	TrackPosition: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-015	0x203	FramePosition: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-016	0x205	TitlePosition: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-017	0x206	ChapterPosition: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-018	0x207	DeckStatusExt (0x207): New function for extended DeckStatus. (WGDA 111)
3.0.4-019	0x251	<ul style="list-style-type: none"> VideoInteraction: Adopted function from GeneralPlayer 2.5.1 and added OPTypes with SenderHandle. (WGDA 109_6) Added Touch events.
3.0.4-020	0x270	PlayerRegion: Adopted function from GeneralPlayer 2.5.1 as Unclassified Property and changed parameter to Enum. (WGDA 109_6)
3.0.4-021	0x430	DeckEvent: Adopted function from GeneralPlayer 2.5.1, extended with additional Enum values, and added symbolic names. (WGDA 109_6)
3.0.4-022	0x431	MediaEvent: Adopted function from GeneralPlayer 2.5.1, extended with additional Enum values, and added symbolic names. (WGDA 109_6)
3.0.4-023	0x450	Random: Adopted function from GeneralPlayer 2.5.1 and added symbolic names. (WGDA 109_6)
3.0.4-024	0x451	Scan: Adopted function from GeneralPlayer 2.5.1 and added symbolic names. (WGDA 109_6)
3.0.4-025	0x452	Repeat: Adopted function from GeneralPlayer 2.5.1, extended with additional Enum values, and added symbolic names. (WGDA 109_6)
3.0.4-026	0x453	NextTrackToPlay: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-027	0x454	Deemphasis: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-028	0x455	SlowFwSpeed: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-029	0x456	SlowBwSpeed: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-030	0x457	FastFwSpeed: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)
3.0.4-030	0x458	FastBwSpeed: Adopted function from GeneralPlayer 2.5.1. (WGDA 109_6)

Changes GeneralFBlock FBlock Template 3.0.2 to GeneralFBlock FBlock Template 3.0.3

Change Ref.	FktID	Changes
3.0.3-001	General	<ul style="list-style-type: none"> Corrected invalid exponent and step values. Corrected invalid max. size and range values. Combined duplicate parameters within single functions. Corrected invalid parameter position values. Fixed incorrect TEnumMax values. Filled the SymbolicName attribute for all Enums.
3.0.3-002	0x001	Notification: Removed blank after ClearAll Enum value of parameter Control.

Changes GeneralFBlock FBlock Template 3.0.1 to GeneralFBlock FBlock Template 3.0.2

Change Ref.	FktID	Changes
3.0.2-001	General	<ul style="list-style-type: none"> Added ContentType/TransmissionClass table to FBlock description.

Change Ref.	FktID	Changes
3.0.2-002	0x100	<ul style="list-style-type: none"> SourceInfo: Distinguished between MOST50 and MOST150 ranges for BlockWidth, ClkSrcLabel, and ConnectionLabel. Added ContentType SAD (0x08). Added ContentType Ethernet (0x91). Marked ContentType IP Stream (0x90) as deprecated.
3.0.2-003	0x101	<ul style="list-style-type: none"> Allocate: Distinguished between MOST50 and MOST150 ranges for BlockWidth and ConnectionLabel..
3.0.2-004	0x108	<ul style="list-style-type: none"> AllocateExt: Distinguished between MOST50 and MOST150 ranges for BlockWidth, ClkSrcLabel, and ConnectionLabel.
3.0.2-005	0x110	<ul style="list-style-type: none"> SinkInfo: Distinguished between MOST50 and MOST150 ranges for BlockWidth and ConnectionLabel. Added ContentType SAD (0x08). Added ContentType Ethernet (0x91). Marked ContentType IP Stream (0x90) as deprecated.
3.0.2-006	0x111	<ul style="list-style-type: none"> Connect: Distinguished between MOST50 and MOST150 ranges for BlockWidth and ConnectionLabel.
3.0.2-007	0x118	<ul style="list-style-type: none"> Connect:Ext Distinguished between MOST50 and MOST150 ranges for BlockWidth, ClkSrcLabel, and ConnectionLabel.
3.0.2-008	0x124	<ul style="list-style-type: none"> DTCP_Info: Added A/V Packetized DTCP-IP to PacketFormat Enum.
3.0.2-009	0x125	<ul style="list-style-type: none"> DTCP_ContentKeyProcess: Added A/V Packetized DTCP-IP to PacketFormat Enum

Changes GeneralFBlock FBlock 3.0.0 to GeneralFBlock FBlock 3.0.1

Change Ref.	FktID	Changes
3.0.1-001	General	<ul style="list-style-type: none"> Minor corrections Removed "full range" from RangeMin attribute for unrestricted number parameters.
3.0.1-002	0x090	CreateArrayWindow: <ul style="list-style-type: none"> Added OPType ProcessingAck.
3.0.1-003	0x091	DestroyArrayWindow: <ul style="list-style-type: none"> Added OPType ProcessingAck.
3.0.1-004	0x09A	ArrayWindowIns: <ul style="list-style-type: none"> Modified description of the Entry parameter. Added parameter Taglist.
3.0.1-005	0x100	SourceInfo: <ul style="list-style-type: none"> Added Phase Information (0x0F) to ContentType Enum. Removed codes that are not used (0x80, 0x81, and 0x91) from ContentDescription parameter. Added SpeedFactor to ContentDescription for ContentType 0x02. Changed ContentType 0x90 to "IP Stream".
3.0.1-006	0x101	Allocate: <ul style="list-style-type: none"> Fixed clerical error; 0 is not a legal value for the ConnectionLabel.
3.0.1-007	0x107	<ul style="list-style-type: none"> Removed function SourceRouting.
3.0.1-008	0x108	<ul style="list-style-type: none"> Added function AllocateExt.
3.0.1-009	0x110	SinkInfo: <ul style="list-style-type: none"> Added Phase Information (0x0F) to ContentType Enum. Removed codes that are not used (0x80, 0x81, and 0x91) from ContentDescription parameter. Added SpeedFactor to ContentDescription for ContentType 0x02. Changed ContentType 0x90 to "IP Stream".
3.0.1-010	0x111	Connect: <ul style="list-style-type: none"> Fixed clerical error; 0 is not a legal value for the ConnectionLabel.
3.0.1-011	0x116	StreamDataInfo: <ul style="list-style-type: none"> Revised function and changed Occurrence attribute from optional to conditional.
3.0.1-012	0x118	<ul style="list-style-type: none"> Added function ConnectExt.
3.0.1-013	0x124	DTCP_Info <ul style="list-style-type: none"> Changed description of codes 0x02 and 0x03 of parameter PacketFormat.

Change Ref.	FktID	Changes
3.0.1-014	0x125	DTCP_ContentKeyProcess – Changed description of codes 0x02 and 0x03 of parameter PacketFormat.

Changes GeneralFBlock FBlock 2.5.1 - Speed Grade MOST50 to GeneralFBlock FBlock 3.0.0

Change Ref.	FktID	Changes
3.0.0-001	General	<ul style="list-style-type: none"> – Corrected ParamPos from 1 to 0 for parameterless OPTypes for reasons of consistency. – Unified descriptions of identical parameters and corrected clerical errors. – Added Occurrence attribute to all functions. – Replaced ChannelList with BlockWidth, ConnectionLabel. – Removed SrcDelay parameter. – Removed SinkDelay parameter.
3.0.0-002	0x000	– Changed function class of FktIDs from Unclassified Method to Sequence Method.
3.0.0-003	0x001	– Removed remark that Notification messages must not be segmented. This is already described in more detail in the MOST Specification.
3.0.0-004	0x002	– Added function specific errors to NotificationCheck.
3.0.0-005	0x003	– Removed function AsyncControlSwitch.
3.0.0-006	0x011	– Added function FBlockInfo.
3.0.0-007	0x080	<ul style="list-style-type: none"> – Changed function class of DynArrayIns from Unclassified Method to Sequence Method. – Removed OPTYPE AbortAck from DynArrayIns.
3.0.0-008	0x081	<ul style="list-style-type: none"> – Changed function class of DynArrayDel from Unclassified Method to Sequence Method. – Removed OPTYPE AbortAck from DynArrayDel.
3.0.0-009	0x082	– Changed function class of MapIns from Unclassified Method to Sequence Method.
3.0.0-010	0x083	– Changed function class of MapDel from Unclassified Method to Sequence Method.
3.0.0-011	0x090	<ul style="list-style-type: none"> – Changed function class of CreateArrayWindow from Unclassified Method to Sequence Method. – Removed OPTYPE AbortAck from CreateArrayWindow.
3.0.0-012	0x091	<ul style="list-style-type: none"> – Changed function class of DestroyArrayWindow from Unclassified Method to Sequence Method. – Removed OPTYPE AbortAck from DestroyArrayWindow.
3.0.0-013	0x092	<ul style="list-style-type: none"> – Changed function class of MoveArrayWindow from Unclassified Method to Sequence Method. – Removed OPTYPE AbortAck from MoveArrayWindow.
3.0.0-014	0x093	<ul style="list-style-type: none"> – Changed function class of SearchArrayWindow from Unclassified Method to Sequence Method. – Removed OPTYPE AbortAck from SearchArrayWindow.
3.0.0-015	0x09A	– Changed function class of ArrayWindowIns from Unclassified Method to Sequence Method.
3.0.0-016	0x09B	<ul style="list-style-type: none"> – Corrected description of parameter FktIDArrayWindow in ArrayWindowDel. – Changed SenderHandle type from Void to Unsigned Word in ArrayWindowDel.
3.0.0-017	0x100	– Completely revised SourceInfo.
3.0.0-018	0x101	<ul style="list-style-type: none"> – Changed function class of Allocate from Unclassified Method to Sequence Method. – Added SourceNr and BlockWidth as ErrorInfo in Allocate. – Added OPTypes StartResultAck, ErrorAck, ProcessingAck, and ResultAck to function Allocate.
3.0.0-019	0x102	<ul style="list-style-type: none"> – Changed function class of DeAllocate from Unclassified Method to Sequence Method. – Added OPTypes StartResultAck, ErrorAck, ProcessingAck, and ResultAck to function DeAllocate.
3.0.0-020	0x103	<ul style="list-style-type: none"> – Changed function class of SourceActivity from Unclassified Method to Sequence Method. – Added OPTypes StartResultAck, ErrorAck, ProcessingAck, and ResultAck to function SourceActivity.
3.0.0-021	0x104	– Removed limitation to 11 characters for SourceName parameter of the SourceName function.
3.0.0-022	0x110	– Completely revised SinkInfo.
3.0.0-023	0x111	<ul style="list-style-type: none"> – Changed function class of Connect from Unclassified Method to Sequence Method. – Added OPTypes StartResultAck, ErrorAck, ProcessingAck, and ResultAck to function Connect.

Change Ref.	FktID	Changes
3.0.0-024	0x112	<ul style="list-style-type: none"> – Changed function class of Disconnect from Unclassified Method to Sequence Method. – Added OPTypes StartResultAck, ErrorAck, ProcessingAck, and ResultAck to function Disconnect.
3.0.0-025	0x114	<ul style="list-style-type: none"> – Removed limitation to 11 characters for SinkName parameter of the SinkName function.
3.0.0-026	0x115	<ul style="list-style-type: none"> – Changed function class of ConnectTo from Unclassified Method to Sequence Method. – Added OPTypes StartResultAck, ErrorAck, ProcessingAck, and ResultAck to function ConnectTo.
3.0.0-027	0x116	<ul style="list-style-type: none"> – Renamed SyncDataInfo to StreamDataInfo. – Replaced SinkCount and SourceCount with SinkNrList and SourceNrList in StreamDataInfo.
3.0.0-028	0x120	<ul style="list-style-type: none"> – Changed function class of DTCP_StartProcess from Unclassified Method to Sequence Method.
3.0.0-029	0x121	<ul style="list-style-type: none"> – Changed function class of DTCP_Control from Unclassified Method to Sequence Method.
3.0.0-030	0x122	<ul style="list-style-type: none"> – Changed function class of DTCP_Status from Unclassified Method to Sequence Method.
3.0.0-031	0x125	<ul style="list-style-type: none"> – Changed function class of DTCP_ContentKeyProcess from Unclassified Method to Sequence Method.

Changes GeneralFBlock FBlock 2.5.1 - Speed Grade MOST25 to GeneralFBlock FBlock 2.5.1 – Speed Grade MOST50

Change Ref.	FktID	Changes
2.5.1-001	General	- Created new template for speed grade MOST50, based on GeneralFBlock 2.5.1 (speed grade MOST25).
2.5.1-002	General	- Added range information for parameters SrcDelay and SinkDelay (0-63).
2.5.1-003	General	- Modified parameter ChannelList so that it now consists of Blockwidth and ConnectionLabel.
2.5.1-004	General	- Modified parameter Blockwidth to either contain MOST50-specific information or 0x00.
2.5.1-005	General	- Added range information for parameters SourceNr and Resolution (1-255).
2.5.1-006	0x105	- Removed function SourceConnect (0x105), which is not used in MOST50.
2.5.1-007	0x106	- Removed function SourceDisconnect (0x106), which is not used in MOST50.

1 Introduction

This document contains the specification of an FBlock template. 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 Function Block will be updated individually as required.

This template contains a diverse collection of functions that may be referenced by different FBlocks.

The following table illustrates the relation between ContentType and TransmissionClass. Asynchronous connections are not covered by the connection management; therefore, the ContentTypes of TransmissionClass "Asynchronous" are not provided by SourceInfo or SinkInfo.

ContentType	Description	Synchronous	DiscreteFrame Isochronous	Packetized Isochronous	QoS IP	Asynchronous
0x00	Audio	X	X			
0x02	SPDIF	X	X			
0x08	SAD	X				
0x0F	Phase Information		X			
0x10	GenericPCM	X	X			
0x12	GenericPCM_with_Frame RateMultiplier	X	X			
0x20	MPEG1_SystemStream	X		X		
0x21	MPEG1_ProgramStream	X		X		
0x22	MPEG1_TransportStream	X		X		
0x90	IP Stream				X	X
0x91	Ethernet				X	X
0xC0...0xEF	System Integrator specific	X dependent on the content	X dependent on the content	X dependent on the content	X dependent on the content	X dependent on the content
0xF0...0xFE	Supplier specific	X dependent on the content	X dependent on the content	X dependent on the content	X dependent on the content	X dependent on the content

2 Function Catalog

Function Overview		
FktID	Name	Occurrence
0x000	FktIDs	Mandatory
0x001	Notification	Mandatory
0x002	NotificationCheck	Mandatory
0x010	Version	Mandatory
0x011	FBlockInfo	Mandatory
0x080	DynArrayIns	Mandatory
0x081	DynArrayDel	Mandatory
0x082	MapIns	Mandatory
0x083	MapDel	Mandatory
0x090	CreateArrayWindow	Mandatory
0x091	DestroyArrayWindow	Mandatory
0x092	MoveArrayWindow	Mandatory
0x093	SearchArrayWindow	Mandatory
0x094	LongArrayInfo	Mandatory
0x09A	ArrayWindowIns	Mandatory
0x09B	ArrayWindowDel	Mandatory
0x0C0	HDCP_ReceiverConnectedIndication	Mandatory
0x0C1	HDCP_ReceiverDisconnectedIndication	Mandatory
0x0C2	HDCP_Control	Mandatory
0x0C4	HDCP_DecipherStatus	Mandatory
0x0C5	HDCP_Assign	Mandatory
0x100	SourceInfo	Mandatory
0x101	Allocate	Mandatory
0x102	DeAllocate	Mandatory
0x103	SourceActivity	Mandatory
0x104	SourceName	Mandatory
0x108	AllocateExt	Mandatory
0x110	SinkInfo	Mandatory
0x111	Connect	Mandatory
0x112	Disconnect	Mandatory
0x113	Mute	Mandatory
0x114	SinkName	Mandatory
0x116	StreamDataInfo	Mandatory
0x117	SinkRouting	Mandatory
0x118	ConnectExt	Mandatory
0x120	DTCP_StartProcess	Mandatory
0x121	DTCP_Control	Mandatory
0x122	DTCP_Status	Mandatory
0x123	DTCP_CipherStatus	Mandatory
0x124	DTCP_Info	Mandatory
0x125	DTCP_ContentKeyProcess	Mandatory
0x126	DTCP_InfoExt	Mandatory
0x130	ScreenFormat	Mandatory
0x131	VideoFrequency	Mandatory
0x132	VideoNorm	Mandatory
0x133	VideoSignalFormat	Mandatory
0x135	VideoFormat	Mandatory
0x200	DeckStatus	Mandatory
0x201	TimePosition	Mandatory
0x202	TrackPosition	Mandatory

Function Overview		
0x203	FramePosition	Mandatory
0x205	TitlePosition	Mandatory
0x206	ChapterPosition	Mandatory
0x207	DeckStatusExt	Mandatory
0x251	VideoInteraction	Mandatory
0x270	PlayerRegion	Mandatory
0x430	DeckEvent	Mandatory
0x431	MediaEvent	Mandatory
0x452	Repeat	Mandatory
0x453	NextTrackToPlay	Mandatory
0x454	Deemphasis	Mandatory
0x455	SlowFwSpeed	Mandatory
0x456	SlowBwSpeed	Mandatory
0x457	FastFwSpeed	Mandatory
0x458	FastBwSpeed	Mandatory

2.1.1 FktIDs (0x000)

Occurrence: Mandatory

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

2.1.1.1 Format of Function

Function class: Container

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

2.1.1.2 Parameter

BitField

RLE-coded bitfield of available functions.
Remark: FktIDs are 12-bit encoded!

Basis data type	Length	Description
Stream		

2.1.2 Notification (0x001)

Occurrence: Mandatory

For FBlocks that support the notification mechanism, this property administrates the Notification Matrix.

2.1.2.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	Notification (0x001)	Set	Control , TargetAddress , FktIDList
		Get	FktID
		Status	FktID , TargetAddressList
		Error	ErrorCode, ErrorInfo

2.1.2.2 Parameter

Control

The parameter Control determines where the entry has to be done or the deletion respectively.

- SetAll = Entry of target address in all properties that support notification.
- SetFunction = Entry of target address for the specified functions in the Notification Matrix.
- ClearAll = Deletion of target address at all functions of the Notification Matrix.
- ClearFunction = Deletion of target address for the specified functions in the Notification Matrix.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	SetAll	SetAll
	0x1	SetFunction	SetFunction
	0x2	ClearAll	ClearAll
	0x3	ClearFunction	ClearFunction

TargetAddress

Either the logical node address of a node or a group address.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDList

List of functions.

Basis data type	Length	Description
Stream		Content: FktID [repeated]

FktIDList.FktID

Function ID.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktID

Function ID.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TargetAddressList

List of target addresses.

Basis data type	Length	Description
Stream		Content: { TargetAddress }[repeated]

TargetAddressList.TargetAddress

Either the logical node address of a node or a group address.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.3 NotificationCheck (0x002)

Occurrence: Mandatory

Under certain system conditions, it can be helpful if a device can check whether its entries are still existent in the Notification Matrix. In case of an error, a device is able to renew its entries.

2.1.3.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	NotificationCheck (0x002)	Get	TargetAddress
		Status	TargetAddress , FktIDList
		Error	ErrorCode , ErrorInfo

2.1.3.2 Parameter

TargetAddress

Either the logical node address of a node or a group address.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDList

List of functions.

Basis data type	Length	Description
Stream		Content: FktID [repeated]

FktIDList.FktID

Function ID.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_Detail

ErrorInfo.ErrorInfo_Detail

Error info details.

Basis data type	Code	Name	Description
Enum (1 byte)	0x1	BufferOverflow	Buffer Overflow List of functions (parameter FktIDList of Status Message) is too long to be transmitted correctly by the message service, caused by a configuration fault.

2.1.4 Version (0x010)

Occurrence: Mandatory

Version describes the version of the FBlock, divided into the major version, the minor version and the build number. (E.g., Version 2.3.5)

2.1.4.1 Format of Function

Function class: Unclassified Property

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

2.1.4.2 Parameter

Major

Major version value of the FBlock. A difference in the major version indicates that some changes are not backward compatible.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Minor

Minor version value of the FBlock. A difference in the minor version indicates enhanced functionality.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Build

Build number of the FBlock. A difference in the build number indicates typographical changes as well as bugfixes.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

2.1.5 FBlockInfo (0x011)

Occurrence: Mandatory

The property FBlockInfo exists to distinguish between the functionality of similar FBlocks with the same FBlockID.

The function FBlockInfo provides information about the FBlock name, the name of the instance, the corresponding MOST Specification version, and the version of the FBlock itself. All this information is provided in text form.

The name of the instance is a string, which is assigned by the system integrator to allow a further differentiation of the application, e.g., "DISP_L" for a left display or "DISP_R" for a right display).

2.1.5.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	FBlockInfo (0x011)	Get	ID
		Status	ID , Description
		Error	ErrorCode, ErrorInfo

2.1.5.2 Parameter

ID

The ID parameter corresponds to one entry of the Description parameter.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Description

Description provides either information about an entire FBlock or a particular function. Which is requested, depends on the parameter ID:

IDs equal to or larger than 0xF000 indicate that information about the FBlock is requested, for example, version of the FBlock.

If ID is in the range 0x0000...0x0FFF, ID corresponds to a function ID. In this case, information on the maturity of that particular function is requested (partly implemented, fully implemented...).

Basis data type	Length	Condition	Description
Stream		ID = 0x0...0xFFFF	Content: FunctionMaturity
		ID = 0xF000	Content: FBlockName , SupplierVersion , FBlockVersion , MOSTVersion , SystemIntegrator , FBlockType
		ID = 0xF001	Content: FBlockName
		ID = 0xF002	Content: SupplierVersion
		ID = 0xF003	Content: FBlockVersion
		ID = 0xF004	Content: MOSTVersion
		ID = 0xF005	Content: SystemIntegrator
		ID = 0xF006	Content: FBlockType

Description.FunctionMaturity

FunctionMaturity defines the implementation progress of one specific function that is identified by parameter ID.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Unknown	Unknown
	0x1	InterfaceOnly	Interface only
	0x2	PartlyImplemented	Partly implemented
	0x3	FullyImplemented	Fully implemented
	0x11	PartlyImplementedVerified	Partly implemented and verified
	0x12	FullyImplementedVerified	Fully implemented and verified

Description.FBlockName

Name of the FBlock corresponding to the FBlockID as specified in the FBlock library, e.g. "AmFmTuner".

Basis data type	MaxSize
String	

Description.SupplierVersion

String, of format "x.y.z", where x,y,z are one or two digit numbers, which describe the version of the FBlock from the system integrator function catalog.

Basis data type	MaxSize
String	

Description.FBlockVersion

This string has the format "x.y.z", where x,y, and z are one or two digit numbers. The combination x.y.z describes the FBlock version that the FBlock is based upon. In proprietary FBlocks this field contains "0.0.0".

Basis data type	MaxSize
String	

Description.MOSTVersion

This string has the format "x.y.z", where x,y, and z are one or two digit numbers. The combination x.y.z describes the MOST Specification version that the FBlock is based upon. (This indicates, which version of the GeneralFBlock matches the implemented FBlock.)

Basis data type	MaxSize
String	

Description.SystemIntegrator

String, which identifies the system integrator responsible for the system (e.g., "Audi", "BMW", "Daimler", or "Volvo"). A value "MOSTCo" specifies a generic FBlock implemented according to the MOST FBlock library.

Basis data type	MaxSize
String	

Description.FBlockType

This string, which is assigned by the system integrator, allows a further differentiation of FBlock instances, e.g., "DISP_L" for a left display or "DISP_R" for a right display.

Basis data type	MaxSize
String	

2.1.6 DynArrayIns (0x080)

Occurrence: Mandatory

Inserts the number of rows determined by the Quantity parameter into a DynamicArray. Rows are inserted after the line identified by the parameter Tag.

2.1.6.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	DynArrayIns (0x080)	StartResultAck	SenderHandle , FktID , Tag , Quantity , InsertData
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle

2.1.6.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktID

Function ID of the DynamicArray.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Word	none	0	1	512 . . . 4095	0x200...0xFFFF

Tag

Unique handle of a row of an array (0xFFFF = no valid value).

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Quantity

Number of rows.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

InsertData

Data to be inserted.

Basis data type	Length	Description
Stream		Content: {Entry}[repeated]

InsertData.Entry

The contents of an entry, including its Tag as the first parameter.

Basis data type	Length	Description
Stream		

2.1.7 DynArrayDel (0x081)

Occurrence: Mandatory

Delete the number of rows determined by the Quantity parameter from a DynamicArray. Rows are deleted in ascending Tag order. The first row to be deleted is identified by the parameter Tag.

2.1.7.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	DynArrayDel (0x081)	StartResultAck	SenderHandle , FktID , Tag , Quantity
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle

2.1.7.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktID

Function ID of the DynamicArray.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Word	none	0	1	512...4095	0x200...0xFFFF

Tag

Unique handle of a row of an array (0xFFFF = no valid value).

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Quantity

Number of rows.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.8 MapIns (0x082)

Occurrence: Mandatory

Using the method MapIns, a number of array elements (entire lines) will be inserted in the Map with the given FktID. Because the elements of a Map are not ordered, no given position for the insertion can be specified. The number of array elements to insert is given in the parameter Quantity. The data contents of the lines to be inserted will be transferred in the parameter Data of type Stream. Because the Slave is responsible for assigning Tags, the Tag values in Data must be ignored (to avoid misunderstandings, these values should be set to 0xFFFF).

In case of using StartResult and if the insertion of the elements has been successful, the assigned Tags will be returned in the parameter TagList of the Result message. The items in TagList must have the same order as the items in the parameter Data of the corresponding StartResult request.

2.1.8.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	MapIns (0x082)	StartResultAck	SenderHandle , FktID , Quantity , InsertData
		AbortAck	SenderHandle
		StartAck	SenderHandle , FktID , Quantity , InsertData
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , Quantity , TagList

2.1.8.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktID

The function ID of the Map property, for which the insert operation is to be applied.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Quantity

The number of elements that are to be inserted into the Map property.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

InsertData

A list with the contents of the entries to insert into the specified datatype. The length of this parameter has to match the specified quantity and the format of the Map property. The values of the tags shall be set to 0xFFFF as they are assigned by the slave providing the Map property.

Basis data type	Length	Description
Stream		Content: { Entry }[repeated]

InsertData.Entry

The contents of an entry of the Map, including its Tag as the first parameter.

Basis data type	Length	Description
Stream		

TagList

A list with the tags that have been created for the inserted entries. The entries shall be in the same order as the entries specified in the parameter InsertData.

Basis data type	Length	Description
Stream		Content: { Tag }[repeated]

TagList.Tag

A tag that identifies an entry of the Map.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.9 MapDel (0x083)

Occurrence: Mandatory

The method MapDel deletes a number of array elements (entire lines) from the Map with the given FktID. The number of elements to delete is described through the parameter Quantity of data type Unsigned Word. The Tags of lines to be deleted are contained in the parameter TagList of type Stream. Because the elements in a Map are not ordered, no deletion of ranges is possible. However, using a Quantity of 0xFFFF and an empty TagList will delete the whole Map.

If the method MapDel is called with the OPType StartResultAck and if the deletion of the lines is successful, the given FktID is returned together with the number and the tags of the deleted lines in the parameters Quantity and TagList.

2.1.9.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	MapDel (0x083)	StartResultAck	SenderHandle , FktID , Quantity , TagList
		AbortAck	SenderHandle
		StartAck	SenderHandle , FktID , Quantity , TagList
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , FktID , Quantity , TagList

2.1.9.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktID

The function ID of the Map property, for which the delete operation is to be applied.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Quantity

Describes the number of elements that are to be deleted from the Map property. If this parameter has the value 0xFFFF, all entries of the Map property are to be deleted.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TagList

A list with the tags that have to be deleted from the Map property (if parameter Quantity is not 0xFFFF).

Basis data type	Length	Description
Stream		Content: { Tag }[repeated]

TagList.Tag

A tag that identifies an entry of the Map.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.10 CreateArrayWindow (0x090)

Occurrence: Mandatory

Create a new instance of an ArrayWindow on a MotherArray.

2.1.10.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	CreateArrayWindow (0x090)	StartResultAck	SenderHandle , FktIDMotherArray , Tag , WindowSize
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , FktIDArrayWindow

2.1.10.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDMotherArray

FktID of the MotherArray.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Tag

Unique handle of a row of an array (0xFFFF = no valid value).

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

WindowSize

Size of the ArrayWindow.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

FktIDArrayWindow

Function ID of the created ArrayWindow.

Note: The valid range of *FktIDArrayWindow* depends on the *FktID* range reserved in the description of the respective *LongArray*.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512 . . . 2559	ApplicationRange	0x200...0x9FF
				3072 . . . 4095	ProprietaryRange	0xC00...0xFFF

2.1.11 DestroyArrayWindow (0x091)

Occurrence: Mandatory

This function destroys an ArrayWindow that exists on a MotherArray.

2.1.11.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	DestroyArrayWindow (0x091)	StartResultAck	SenderHandle , FktIDArrayWindow
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle

2.1.11.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDArrayWindow

Function ID of the created ArrayWindow.

Note: The valid range of FktIDArrayWindow depends on the FktID range reserved in the description of the respective LongArray.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512 . . . 2559	ApplicationRange	0x200...0x9FF
				3072 . . . 4095	ProprietaryRange	0xC00...0xFFF

2.1.12 MoveArrayWindow (0x092)

Occurrence: Mandatory

This function is used to position an ArrayWindow on a MotherArray.

2.1.12.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	MoveArrayWindow (0x092)	StartAck	SenderHandle , FktIDArrayWindow , MovingMode , Number , Tag
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo

2.1.12.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDArrayWindow

Function ID of the ArrayWindow.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512 . . . 2559	ApplicationRange	0x200...09FF
				3072 . . . 4095	ProprietaryRange	0xC00...0xFFFF

MovingMode

Determines the desired positioning mode for the ArrayWindow.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Top	Top
	0x1	Bottom	Bottom
	0x2	Up	Up
	0x3	Down	Down
	0x4	Absolute	Absolute

Number

Number of lines to move the ArrayWindow.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Tag

Unique handle of a row of an array (0xFFFF = no valid value).

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.13 SearchArrayWindow (0x093)

Occurrence: Mandatory

The property is for searching the MotherArray for a text (SearchString) in the column indicated by PosY. If the text could not be found, the device answers with the ErrorCode 0x07 (parameter not available). A detailed description of this method can be found in the MOST specification.

2.1.13.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	SearchArrayWindow (0x093)	StartResultAck	SenderHandle , FktIDArrayWindow , PosY , SearchString
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle

2.1.13.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDArrayWindow

Function ID of the ArrayWindow.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512...2559	ApplicationRange	0x200...09FF
				3072...4095	ProprietaryRange	0xC00...0xFFF

PosY

PosY indicates which column is the target of the search.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

SearchString

The text to search for.

Basis data type	MaxSize
String	100

2.1.14 LongArrayInfo (0x094)

Occurrence: Mandatory

Each Slave with one or several LongArrays offers the property LongArrayInfo (one instance for all LongArrays). It enables Controllers to re-synchronize after a system error or interrupt. Controllers can check whether ArrayWindows, previously created in the Slave, still exist.

2.1.14.1 Format of Function

Function class: Array of { Record of { Unsigned Word Unsigned Word Unsigned Word } }

FBlock	Function	OPType	Parameter
	LongArrayInfo (0x094)	Get	Pos
		Status	Pos , Data
		Error	ErrorCode, ErrorInfo

2.1.14.2 Parameter

Pos

The parameter Pos={x,y} consists of two bytes, x and y, and shows which parameter shall be set or read.

Valid range: x=0..NMax, y=0..3

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Data

This Array contains individual records with information about present LongArrays, existing ArrayWindows, and the Controllers that requested their creation.

Basis data type	Description	
Array	Pos	Data
	{ x=0, y=0 }	FktIDMotherArray [1], FktIDArrayWindow [1], ControllerTargetAddress [1],..., FktIDMotherArray [NMax], FktIDArrayWindow [NMax], ControllerTargetAddress [NMax]
	{ x>0, y=0 }	FktIDMotherArray [x], FktIDArrayWindow [x], ControllerTargetAddress [x]
	{ x>0, y=1 }	FktIDMotherArray [x]
	{ x>0, y=2 }	FktIDArrayWindow [x]
	{ x>0, y=3 }	ControllerTargetAddress [x]

FktIDMotherArray

Function ID of a MotherArray.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDArrayWindow

Function ID of an ArrayWindow.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512 . . . 2559	ApplicationRange	0x200...0x9FF
				3072 . . . 4095	ProprietaryRange	0xC00...0xFFFF

ControllerTargetAddress

Target address of the controller that created the ArrayWindow.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.15 ArrayWindowIns (0x09A)

Occurrence: Mandatory

Inserts a number of lines into a MotherArray.

2.1.15.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	ArrayWindowIns (0x09A)	StartResultAck	SenderHandle , FktIDArrayWindow , Tag , Quantity , InsertData
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , TagList

2.1.15.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDArrayWindow

Function ID of the ArrayWindow.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512...2559	ApplicationRange	0x200...09FF
				3072...4095	ProprietaryRange	0xC00...0xFFF

Tag

Unique handle of a row (0xFFFF no valid value) after which the new lines are inserted.
0x0000 indicates an insertion before the first line of the ArrayWindow.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Quantity

Number of rows.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

InsertData

Data to be inserted.

Basis data type	Length	Description
Stream		Content: { Entry }[repeated]

InsertData.Entry

The contents of an entry. Tag is not included but is determined by the slave.

Basis data type	Length	Description
Stream		

TagList

The list of tags that were generated by the ArrayWindowIns function. The order of the tags corresponds to the order in which the entries were received.

Basis data type	Length	Description
Stream		Content: { Tag }[repeated]

TagList.Tag

A tag that identifies an entry of the Map.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.16 ArrayWindowDel (0x09B)

Occurrence: Mandatory

Deletes a number of lines from a MotherArray.

2.1.16.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	ArrayWindowDel (0x09B)	StartResultAck	SenderHandle , FktIDArrayWindow , Tag , Quantity
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle

2.1.16.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FktIDArrayWindow

Function ID of the ArrayWindow.

Basis data type	Unit	Exp.	Step	Range of values	Name	Range description
Unsigned Word	none	0	1	512...2559	ApplicationRange	0x200...09FF
				3072...4095	ProprietaryRange	0xC00...0xFFF

Tag

Unique handle of a row (0xFFFF no valid value) after which the given number of lines is deleted.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Quantity

Number of rows.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.17 HDCP_ReceiverConnectedIndication (0x0C0)

Occurrence: Mandatory

An indication to the HDCP Transmitter that a receiver has been connected to it.

2.1.17.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	HDCP_Receiver Connected Indication (0x0C0)	StartResultAck	SenderHandle , FBlockID , InstID
		AbortAck	SenderHandle
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , FBlockID , InstID
		Error	ErrorCode , ErrorInfo

2.1.17.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FBlockID

ID of the FBlock that owns the receiver.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

InstID

Instance ID of the FBlock instance that owns the receiver.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_RecConnectedInd

ErrorInfo.ErrorInfo_RecConnectedInd

Error info details.

Basis data type	Code	Name	Description
Enum (1 byte)	0x1	TooManyDevices	Too many devices
	0x2	TooManyLevels	Too many levels
	0x3	AuthenticationFailure	Authentication failure

2.1.18 HDCP_ReceiverDisconnectedIndication (0x0C1)

Occurrence: Mandatory

An indication to the HDCP Transmitter that the receiver has disconnected from it.

2.1.18.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	HDCP_Receiver Disconnected Indication (0x0C1)	StartResultAck	SenderHandle , FBlockID , InstID
		AbortAck	SenderHandle
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , FBlockID , InstID
		Error	ErrorCode , ErrorInfo

2.1.18.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FBlockID

ID of the FBlock that owns the receiver.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

InstID

Instance ID of the FBlock instance that owns the receiver.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_RecDisconInd

ErrorInfo.ErrorInfo_RecDisconInd

Error info details.

Basis data type	Code	Name	Description
Enum (1 byte)	0x1	DisconnectionFailure	Disconnection failure

2.1.19 HDCP_Control (0x0C2)

Occurrence: Mandatory

This function is used to transmit a HDCP control message.

2.1.19.1 Format of Function

Function class: Unclassified Method

FBlock	Function	OPType	Parameter
	HDCP_Control (0x0C2)	StartResultAck	SenderHandle , RequesterFBlockID , RequesterInstID , msg_id , Control_HDCP
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle
		Error	ErrorCode, ErrorInfo

2.1.19.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

RequesterFBlockID

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

RequesterInstID

Instance ID of the FBlock instance that owns the source.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

msg_id

HDCP message ID field.

Basis data type	Code	Name	Description
Enum (1 byte)	0x1	NullMessage	Null message
	0x2	AKE_Init	AKE_Init (Transmitter to Receiver)
	0x3	AKE_Send_Cert	AKE_Send_Cert (Receiver to Transmitter)
	0x4	AKE_No_Stored_km	AKE_No_Stored_km (Transmitter to Receiver)
	0x5	AKE_Stored_km	AKE_Stored_km (Transmitter to Receiver)
	0x6	AKE_Send_rrx	AKE_Send_rrx (Receiver to Transmitter)
	0x7	AKE_Send_H_prime	AKE_Send_H_prime (Receiver to Transmitter)
	0x8	AKE_Send_Pairing_Info	AKE_Send_Pairing_Info (Receiver to Transmitter)
	0x9	LC_Init	LC_Init (Transmitter to Receiver)
	0xA	LC_Send_L_prime	LC_Send_L_prime (Receiver to Transmitter)
	0xB	SKE_Send_Eks	SKE_Send_Eks (Transmitter to Receiver)
	0xC	RepeaterAuth_Send_RecID_List	RepeaterAuth_Send_ReceiverID_List (Receiver to Transmitter)
	0xD	RTT_Ready	RTT_Ready (Receiver to Transmitter)
	0xE	RTT_Challenge	RTT_Challenge (Transmitter to Receiver)
	0xF	RepeaterAuth_Send_Ack	RepeaterAuth_Send_Ack (Transmitter to Receiver)
	0x10	RepeaterAuth_Stream_Manage	RepeaterAuth_Stream_Manage (Transmitter to Receiver)
	0x11	RepeaterAuth_Stream_Ready	RepeaterAuth_Stream_Ready (Receiver to Transmitter)
	0x12	Receiver_AuthStatus	Receiver_AuthStatus (Receiver to Transmitter)
	0x13	AKE_Transmitter_Info	AKE_Transmitter_Info (Transmitter to Receiver)
	0x14	AKE_Receiver_Info	AKE_Receiver_Info (Receiver to Transmitter)
	0x15...0x1F		Reserved range.

Control_HDCP

HDCP control message envelope.

Basis data type	Length	Description
Stream		

2.1.20 HDCP_DecipherStatus (0x0C4)

Occurrence: Mandatory

This function provides information about the decipher status.

2.1.20.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	HDCP_Decipher Status (0x0C4)	Get	SinkNr
		Status	SinkNr , DecipherStatus
		Error	ErrorCode, ErrorInfo

2.1.20.2 Parameter

SinkNr

Number of a data sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

DecipherStatus

CipherError provides the current state of the deciphering machine.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NoError	No error
	0x1	DecodingError	Decoding error

2.1.21 HDCP_Assign (0x0C5)

Occurrence: Mandatory

This function makes the assignment of the HDCP transmitter to the sink

Note: Function Connect does not provide this information as it is based on the connection label only.

2.1.21.1 Format of Function

Function class: Unclassified Method

FBlock	Function	OPType	Parameter
	HDCP_Assign (0x0C5)	StartResultAck	SenderHandle , SinkNr , HDCP_Transmitter_FBlockID , HDCP_Transmitter_InstID
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle
		Error	ErrorCode, ErrorInfo

2.1.21.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

SinkNr

Number of a data sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

HDCP_Transmitter_FBlockID

ID of the transmitter FBlock.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

HDCP_Transmitter_InstID

ID of the transmitter FBlock instance.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

2.1.22 SourceInfo (0x100)

Occurrence: Mandatory

This property provides information about the type of streaming data a source can handle. If notification is used for an FBlock with multiple sources, multiple notifications will be sent when the status changes for more than one source.

For further information please refer to the MOST Stream Transmission Specification.

2.1.22.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	SourceInfo (0x100)	Get	SourceNr
		Status	SourceNr , BlockWidth , ConnectionLabel , TransmissionClass , ContentProtection , ContentType , ContentDescription , TransmissionParameter
		Error	ErrorCode, ErrorInfo

2.1.22.2 Parameter

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

BlockWidth

Number of transferred bytes per MOST frame.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

ConnectionLabel

Connection identifier. If no bandwidth was allocated yet, 0x0000 must be used.

Speed grade	Parameter value range
MOST50	0; 11...127
MOST150	0; 12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TransmissionClass

Describe the used MOST transmission type.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Synchronous	Synchronous
	0x1	DiscreteFrameIsochronous	DiscreteFrame Isochronous
	0x2	PacketizedIsochronous	Packetized Isochronous
	0x3	QoSIP	QoS IP
	0x4	Asynchronous	Asynchronous

ContentProtection

Type of used Content Protection.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	None	None
	0x1	SerialCopyManagement	Serial Copy Management
	0x2	MOSTDTCP	MOST DTCP (Supplement B)
	0x3	DTCPiP	DTCP-IP (Supplement E); deprecated!
	0x4	MOSTDTCP_SuppH	MOST DTCP (Supplement H)
	0x5	HDCP	HDCP

ContentType

Type of transported content.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Audio	Audio
	0x1	ReservedDeprecatedCDROM	Reserved, usage deprecated (CDROM)
	0x2	SPDIF	SPDIF
	0x8	SAD	SAD
	0xF	PhaseInformation	Phase Information
	0x10	GenericPCM	GenericPCM
	0x11	ReservedDeprecatedPCMDTCP	Reserved, usage deprecated (GenericPCM/DTCP)
	0x12	GenericPCM_w_FRM	GenericPCM with FrameRateMultiplier
	0x20	MPEG1SystemStream	MPEG1 SystemStream
	0x21	MPEG2ProgramStream	MPEG2 ProgramStream
	0x22	MPEG2TransportStream	MPEG2 TransportStream
	0x30 . . . 0x3F	Reserved for MPEG Elementary Streams	Reserved range.
	0x40	ReservedDeprecatedMPEG1	Reserved, usage deprecated (MPEG1 DTCP System Stream)
	0x41	ReservedDeprecatedMPEG2Pr	Reserved, usage deprecated (MPEG2 DTCP Program Stream)
	0x42	ReservedDeprecatedMPEG2Tr	Reserved, usage deprecated (MPEG2 DTCP Transport Stream)
	0x50 . . . 0x5F	Reserved for Compressed Audio	Reserved range.
	0x90	IPStream	IP Stream (deprecated)
	0x91	Ethernet	Ethernet
	0xC0 . . . 0xEF	System Integrator specific	Reserved range.
	0xF0 . . . 0xFE	Supplier specific	Reserved range.

ContentDescription

The parameter depends on the used content type.

Basis data type	Max. Length	Condition	Description
Short Stream		ContentType = 0x0	Content: AudioChannels , Resolution
		ContentType = 0x2	Content: SpeedFactor
		ContentType = 0x8	Content: DataConnectionLabel
		ContentType = 0xF	
		ContentType = 0x10	Content: AudioChannels , AudioChannelList
		ContentType = 0x12	Content: AudioChannels , AudioChannelList_FRM
		ContentType = 0x20	
		ContentType = 0x21	
		ContentType = 0x22	
		ContentType = 0x90	Content: IP_Address , Port
		ContentType = 0x91	

ContentDescription.AudioChannels

Number of audio channels.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ContentDescription.Resolution

Resolution of the audio samples in bytes.

Basis data type	Unit	Exp.	Step
Unsigned Byte	Byte	0	1

ContentDescription.SpeedFactor

SpeedFactor defines the speed factor of the content with respect to the transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ContentDescription.DataConnectionLabel

Connection identifier of the SAD associated stream. If no bandwidth was allocated yet, 0x0000 must be used.

Speed grade	Parameter value range
MOST50	0; 11...127
MOST150	0; 12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ContentDescription.AudioChannelList

The parameter depends on the used transmission class.

Basis data type	Length	Description
Stream		Content: { AudioChannelName , BitsPerSample }[repeated]

AudioChannelList.AudioChannelName

Describe the channel name and determine the room position of the channel.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	CurrentlyNotInUse	Currently not in use
	0x1	FrontLeft	Front Left (FL)
	0x2	FrontRight	Front Right (FR)
	0x3	FrontCenter	Front Center (FC)
	0x4	LowFrequency	Low Frequency (LF)
	0x5	BackLeft	Back Left (BL)
	0x6	BackRight	Back Right (BR)
	0x7	FrontLeftCenter	Front Left of Center (FLC)
	0x8	FrontRightCenter	Front Right of Center (FRC)
	0x9	BackCenter	Back Center (BC)
	0xA	SideLeft	Side Left (SL)
	0xB	SideRight	Side Right (SR)
	0xC	TopCenter	Top Center (TC)
	0xD	TopFrontLeft	Top Front Left (TFL)
	0xE	TopFrontCenter	Top Front Center (TFC)
	0xF	TopFrontRight	Top Front Right (TFR)
	0x10	TopBackLeft	Top Back Left (TBL)
	0x11	TopBackCenter	Top Back Center (TBC)
	0x12	TopBackRight	Top Back Right (TBR)
	0x13	BackLeftCenter	Back Left of Center (BCL)
	0x14	BackRightCenter	Back Right of Center (BCR)

AudioChannelList.BitsPerSample

Resolution of the audio samples in bits.

Basis data type	Unit	Exp.	Step
Unsigned Byte	bit	0	1

ContentDescription.AudioChannelList_FRM

The parameter depends on the used transmission class.

Basis data type	Length	Description
Stream		Content: { AudioChannelName , BitsPerSample , FrameRateMultiplier }[repeated]

AudioChannelList_FRM.AudioChannelName

Describe the channel name and determine the room position of the channel.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	CurrentlyNotInUse	Currently not in use
	0x1	FrontLeft	Front Left (FL)

Basis data type	Code	Name	Description
	0x2	FrontRight	Front Right (FR)
	0x3	FrontCenter	Front Center (FC)
	0x4	LowFrequency	Low Frequency (LF)
	0x5	BackLeft	Back Left (BL)
	0x6	BackRight	Back Right (BR)
	0x7	FrontLeftCenter	Front Left of Center (FLC)
	0x8	FrontRightCenter	Front Right of Center (FRC)
	0x9	BackCenter	Back Center (BC)
	0xA	SideLeft	Side Left (SL)
	0xB	SideRight	Side Right (SR)
	0xC	TopCenter	Top Center (TC)
	0xD	TopFrontLeft	Top Front Left (TFL)
	0xE	TopFrontCenter	Top Front Center (TFC)
	0xF	TopFrontRight	Top Front Right (TFR)
	0x10	TopBackLeft	Top Back Left (TBL)
	0x11	TopBackCenter	Top Back Center (TBC)
	0x12	TopBackRight	Top Back Right (TBR)
	0x13	BackLeftCenter	Back Left of Center (BCL)
	0x14	BackRightCenter	Back Right of Center (BCR)

AudioChannelList_FRM.BitsPerSample

Resolution of the audio samples in bits.

Basis data type	Unit	Exp.	Step
Unsigned Byte	bit	0	1

AudioChannelList_FRM.FrameRateMultiplier

Specifies the multiplier of the audio frame rate compared to MOST frame rate (1,2 or 4).

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 4	

ContentDescription.IP_Address

ContentType "IP Stream" (0x90) is deprecated!

Length parameter decides if IP_V4 (32bit address) or IP_V6 (128bit) address is used.

- Length=4 means IP_V4
- Length=16 means IP_V6

Basis data type	Max. Length	Description
Short Stream		

ContentDescription.Port

ContentType "IP Stream" (0x90) is deprecated!

16 bit Port.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TransmissionParameter

The parameter depends on the used transmission class.

Basis data type	Length	Condition	Description
Stream		TransmissionClass = 0x0	-
		TransmissionClass = 0x1	Content: DataFrameBlockwidth , DataSampleFrequency , ClkSrcLabel
		TransmissionClass = 0x2	Content: DataRate
		TransmissionClass = 0x3	Content: DataRate
		TransmissionClass = 0x4	-

TransmissionParameter.DataFrameBlockwidth

Number of bytes the original data frame uses.

Note: *DataFrameBlockwidth* is set to 0x00 for *ContentType* 0x0F (Phase Information).

Basis data type	Unit	Exp.	Step
Unsigned Byte	Byte	0	1

TransmissionParameter.DataSampleFrequency

Sample frequency of the original data frame in Hz.

Basis data type	Unit	Exp.	Step
Unsigned Long	Hz	0	1

TransmissionParameter.ClkSrcLabel

Connection label for Phase Information. If no bandwidth was allocated yet, 0x0000 must be used.

Speed grade	Parameter value range
MOST50	0; 11...127
MOST150	0; 12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TransmissionParameter.DataRate

The maximum data rate of the original stream in kbit/s.

Basis data type	Unit	Exp.	Step
Unsigned Long	kbps	0	1

2.1.23 Allocate (0x101)

Occurrence: Mandatory

The Allocate method causes the source to occupy bandwidth for streaming data.

2.1.23.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	Allocate (0x101)	StartResult	SourceNr
		StartResultAck	SenderHandle , SourceNr
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SourceNr , BlockWidth , ConnectionLabel
		ResultAck	SenderHandle , SourceNr , BlockWidth , ConnectionLabel
		Error	ErrorCode , ErrorInfo

2.1.23.2 Parameter

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_SourceNr , ErrorInfo_BlockWidth

ErrorInfo.ErrorInfo_SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

ErrorInfo.ErrorInfo_BlockWidth

The requested BlockWidth.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

BlockWidth

Number of transferred bytes per MOST frame.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

ConnectionLabel

Connection identifier.

Speed grade	Parameter value range
MOST50	11...127
MOST150	12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.24 DeAllocate (0x102)

Occurrence: Mandatory

The method DeAllocate causes the source to free occupied Streaming bandwidth.

2.1.24.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	DeAllocate (0x102)	StartResult	SourceNr
		StartResultAck	SenderHandle , SourceNr
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SourceNr
		ResultAck	SenderHandle , SourceNr
		Error	ErrorCode, ErrorInfo

2.1.24.2 Parameter

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.25 SourceActivity (0x103)

Occurrence: Mandatory

This method controls the activity of a source.

2.1.25.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	SourceActivity (0x103)	StartResult	SourceNr, Activity
		StartResultAck	SenderHandle, SourceNr, Activity
		ErrorAck	SenderHandle, ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SourceNr, Activity
		ResultAck	SenderHandle, SourceNr, Activity
		Error	ErrorCode, ErrorInfo

2.1.25.2 Parameter

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

Activity

Through parameter Activity, streaming data transfer can be started, stopped, or paused.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Off	Off
	0x1	Pause	Pause
	0x2	On	On

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.26 SourceName (0x104)

Occurrence: Mandatory

By property SourceName, an identifier of the streaming source data can be requested. If notification is used for an FBlock with multiple sources, multiple notifications will be sent when the status changes for more than one source.

2.1.26.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	SourceName (0x104)	Get	SourceNr
		Status	SourceNr , SourceName
		Error	ErrorCode, ErrorInfo

2.1.26.2 Parameter

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SourceName

Name of the source.

Basis data type	MaxSize
String	

2.1.27 AllocateExt (0x108)

Occurrence: Mandatory

The AllocateExt method causes the source to occupy bandwidth for streaming data.

2.1.27.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	AllocateExt (0x108)	StartResult	SourceNr , ClkSrcLabel
		StartResultAck	SenderHandle , SourceNr , ClkSrcLabel
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SourceNr , BlockWidth , ConnectionLabel , ClkSrcLabel
		ResultAck	SenderHandle , SourceNr , BlockWidth , ConnectionLabel , ClkSrcLabel
		Error	ErrorCode , ErrorInfo

2.1.27.2 Parameter

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

ClkSrcLabel

Connection label for Phase Information. The value 0xFFFF indicates that the clock channel is not used.

The value 0xFFFE instructs the source to allocate a new clock source.

Speed grade	Parameter value range
MOST50	11...127, 0xFFFE, 0xFFFF
MOST150	12...383, 0xFFFE, 0xFFFF

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_SourceNr , ErrorInfo_BlockWidth

ErrorInfo.ErrorInfo_SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

ErrorInfo.ErrorInfo_BlockWidth

The requested BlockWidth.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

BlockWidth

Number of transferred bytes per MOST frame.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

ConnectionLabel

Connection identifier.

Speed grade	Parameter value range
MOST50	11...127
MOST150	12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.28 SinkInfo (0x110)

Occurrence: Mandatory

This property gives particulars about the type of streaming sink data. If notification is used for an FBlock with multiple sinks, multiple notifications will be sent when the status changes for more than one sink.

For further information please refer to the MOST Stream Transmission Specification.

2.1.28.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	SinkInfo (0x110)	Get	SinkNr
		Status	SinkNr , BlockWidth , ConnectionLabel , TransmissionClass , ContentProtection , ContentType , ContentDescription , TransmissionParameter
		Error	ErrorCode, ErrorInfo

2.1.28.2 Parameter

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

BlockWidth

Number of transferred bytes per MOST frame.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

ConnectionLabel

Connection identifier. If no bandwidth was allocated yet, 0x0000 must be used.

Speed grade	Parameter value range
MOST50	0; 11...127
MOST150	0; 12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TransmissionClass

Describe the used MOST transmission type.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Synchronous	Synchronous
	0x1	DiscreteFrameIsochronous	DiscreteFrame Isochronous
	0x2	PacketizedIsochronous	Packetized Isochronous
	0x3	QoSIP	QoS IP
	0x4	Asynchronous	Asynchronous

ContentProtection

Type of used Content Protection.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	None	None
	0x1	SerialCopyManagement	Serial Copy Management
	0x2	MOSTDTCP	MOST DTCP (Supplement B)
	0x3	DTCPiP	DTCP-IP (Supplement E); deprecated!
	0x4	MOSTDTCP_SuppH	MOST DTCP (Supplement H)
	0x5	HDCP	HDCP

ContentType

Type of transported content.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Audio	Audio
	0x1	ReservedDeprecatedCDROM	Reserved, usage deprecated (CDROM)
	0x2	SPDIF	SPDIF
	0x8	SAD	SAD
	0xF	PhaseInformation	Phase Information
	0x10	GenericPCM	GenericPCM
	0x11	ReservedDeprecatedPCMDTCP	Reserved, usage deprecated (GenericPCM/DTCP)
	0x12	GenericPCM_w_FRM	GenericPCM with FrameRateMultiplier
	0x20	MPEG1SystemStream	MPEG1 SystemStream
	0x21	MPEG2ProgramStream	MPEG2 ProgramStream
	0x22	MPEG2TransportStream	MPEG2 TransportStream
	0x30 . . . 0x3F	Reserved for MPEG Elementary Streams	Reserved range.
	0x40	ReservedDeprecatedMPEG1	Reserved, usage deprecated (MPEG1 DTCP System Stream)
	0x41	ReservedDeprecatedMPEG2Pr	Reserved, usage deprecated (MPEG2 DTCP Program Stream)
	0x42	ReservedDeprecatedMPEG2Tr	Reserved, usage deprecated (MPEG2 DTCP Transport Stream)
	0x50 . . . 0x5F	Reserved for Compressed Audio	Reserved range.
	0x90	IPStream	IP Stream (deprecated)
	0x91	Ethernet	Ethernet
	0xC0 . . . 0xEF	System Integrator specific	Reserved range.
	0xF0 . . . 0xFE	Supplier specific	Reserved range.

ContentDescription

The parameter depends on the used content type.

Basis data type	Max. Length	Condition	Description
Short Stream		ContentType = 0x0	Content: AudioChannels , Resolution
		ContentType = 0x2	Content: SpeedFactor
		ContentType = 0x8	Content: DataConnectionLabel
		ContentType = 0xF	
		ContentType = 0x10	Content: AudioChannels , AudioChannelList
		ContentType = 0x12	Content: AudioChannels , AudioChannelList_FRM
		ContentType = 0x20	
		ContentType = 0x21	
		ContentType = 0x22	
		ContentType = 0x90	Content: IP_Address , Port
		ContentType = 0x91	

ContentDescription.AudioChannels

Number of audio channels.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ContentDescription.Resolution

Resolution of the audio samples in bytes.

Basis data type	Unit	Exp.	Step
Unsigned Byte	Byte	0	1

ContentDescription.SpeedFactor

SpeedFactor defines the speed factor of the content with respect to the transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ContentDescription.DataConnectionLabel

Connection identifier of the SAD associated stream. If no bandwidth was allocated yet, 0x0000 must be used.

Speed grade	Parameter value range
MOST50	0; 11...127
MOST150	0; 12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ContentDescription.AudioChannelList

The parameter depends on the used transmission class.

Basis data type	Length	Description
Stream		Content: { AudioChannelName , BitsPerSample }[repeated]

AudioChannelList.AudioChannelName

Describe the channel name and determine the room position of the channel.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	CurrentlyNotInUse	Currently not in use
	0x1	FrontLeft	Front Left (FL)
	0x2	FrontRight	Front Right (FR)
	0x3	FrontCenter	Front Center (FC)
	0x4	LowFrequency	Low Frequency (LF)
	0x5	BackLeft	Back Left (BL)
	0x6	BackRight	Back Right (BR)
	0x7	FrontLeftCenter	Front Left of Center (FLC)
	0x8	FrontRightCenter	Front Right of Center (FRC)
	0x9	BackCenter	Back Center (BC)
	0xA	SideLeft	Side Left (SL)
	0xB	SideRight	Side Right (SR)
	0xC	TopCenter	Top Center (TC)
	0xD	TopFrontLeft	Top Front Left (TFL)
	0xE	TopFrontCenter	Top Front Center (TFC)
	0xF	TopFrontRight	Top Front Right (TFR)
	0x10	TopBackLeft	Top Back Left (TBL)
	0x11	TopBackCenter	Top Back Center (TBC)
	0x12	TopBackRight	Top Back Right (TBR)
	0x13	BackLeftCenter	Back Left of Center (BCL)
	0x14	BackRightCenter	Back Right of Center (BCR)

AudioChannelList.BitsPerSample

Resolution of the audio samples in bits.

Basis data type	Unit	Exp.	Step
Unsigned Byte	bit	0	1

ContentDescription.AudioChannelList_FRM

The parameter depends on the used transmission class.

Basis data type	Length	Description
Stream		Content: { AudioChannelName , BitsPerSample , FrameRateMultiplier }[repeated]

AudioChannelList_FRM.AudioChannelName

Describe the channel name and determine the room position of the channel.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	CurrentlyNotInUse	Currently not in use
	0x1	FrontLeft	Front Left (FL)

Basis data type	Code	Name	Description
	0x2	FrontRight	Front Right (FR)
	0x3	FrontCenter	Front Center (FC)
	0x4	LowFrequency	Low Frequency (LF)
	0x5	BackLeft	Back Left (BL)
	0x6	BackRight	Back Right (BR)
	0x7	FrontLeftCenter	Front Left of Center (FLC)
	0x8	FrontRightCenter	Front Right of Center (FRC)
	0x9	BackCenter	Back Center (BC)
	0xA	SideLeft	Side Left (SL)
	0xB	SideRight	Side Right (SR)
	0xC	TopCenter	Top Center (TC)
	0xD	TopFrontLeft	Top Front Left (TFL)
	0xE	TopFrontCenter	Top Front Center (TFC)
	0xF	TopFrontRight	Top Front Right (TFR)
	0x10	TopBackLeft	Top Back Left (TBL)
	0x11	TopBackCenter	Top Back Center (TBC)
	0x12	TopBackRight	Top Back Right (TBR)
	0x13	BackLeftCenter	Back Left of Center (BCL)
	0x14	BackRightCenter	Back Right of Center (BCR)

AudioChannelList_FRM.BitsPerSample

Resolution of the audio samples in bits.

Basis data type	Unit	Exp.	Step
Unsigned Byte	bit	0	1

AudioChannelList_FRM.FrameRateMultiplier

Specifies the multiplier of the audio frame rate compared to MOST frame rate (1,2 or 4).

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 4	

ContentDescription.IP_Address

ContentType "IP Stream" (0x90) is deprecated!

Length parameter decides if IP_V4 (32bit address) or IP_V6 (128bit) address is used.

- Length=4 means IP_V4
- Length=16 means IP_V6

Basis data type	Max. Length	Description
Short Stream		

ContentDescription.Port

ContentType "IP Stream" (0x90) is deprecated!

16 bit Port.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TransmissionParameter

The parameter depends on the used transmission class.

Basis data type	Length	Condition	Description
Stream		TransmissionClass = 0x0	-
		TransmissionClass = 0x1	Content: DataFrameBlockwidth , DataSampleFrequency , ClkSrcLabel
		TransmissionClass = 0x2	Content: DataRate
		TransmissionClass = 0x3	Content: DataRate
		TransmissionClass = 0x4	-

TransmissionParameter.DataFrameBlockwidth

Number of bytes the original data frame uses.

Note: *DataFrameBlockwidth* is set to 0x00 for *ContentType* 0x0F (Phase Information).

Basis data type	Unit	Exp.	Step
Unsigned Byte	Byte	0	1

TransmissionParameter.DataSampleFrequency

Sample frequency of the original data frame in Hz.

Basis data type	Unit	Exp.	Step
Unsigned Long	Hz	0	1

TransmissionParameter.ClkSrcLabel

Connection label for Phase Information. If no bandwidth was allocated yet, 0x0000 must be used.

Speed grade	Parameter value range
MOST50	0; 11...127
MOST150	0; 12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

TransmissionParameter.DataRate

The maximum data rate of the original stream in kbit/s.

Basis data type	Unit	Exp.	Step
Unsigned Long	kbps	0	1

2.1.29 Connect (0x111)

Occurrence: Mandatory

Connect is used to attach sinks to streaming data that is offered by a source.

2.1.29.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	Connect (0x111)	StartResult	SinkNr , BlockWidth , ConnectionLabel
		StartResultAck	SenderHandle , SinkNr , BlockWidth , ConnectionLabel
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SinkNr
		ResultAck	SenderHandle , SinkNr
		Error	ErrorCode, ErrorInfo

2.1.29.2 Parameter

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

BlockWidth

Number of transferred bytes per MOST frame.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

ConnectionLabel

Connection identifier.

Speed grade	Parameter value range
MOST50	11...127
MOST150	12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.30 Disconnect (0x112)

Occurrence: Mandatory

Disconnect is used to detach a sink from streaming data that is offered by a source.

2.1.30.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	Disconnect (0x112)	StartResult	SinkNr
		StartResultAck	SenderHandle , SinkNr
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SinkNr
		ResultAck	SenderHandle , SinkNr
		Error	ErrorCode, ErrorInfo

2.1.30.2 Parameter

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.31 Mute (0x113)

Occurrence: Mandatory

This property is for setting and reading the mute status. If notification is used for an FBlock with multiple sinks, multiple notifications will be sent when the status changes for more than one sink.

2.1.31.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	Mute (0x113)	Get	SinkNr
		SetGet	SinkNr , Status
		Status	SinkNr , Status
		Error	ErrorCode, ErrorInfo

2.1.31.2 Parameter

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Value 0x00 is used to mute / de-mute all sinks.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Status

The Status parameter determines whether a sink is muted (Status=true) or not muted (Status=false).

Basis data type
Boolean

2.1.32 SinkName (0x114)

Occurrence: Mandatory

By using property SinkName, a name for the streaming data can be requested. If notification is used for an FBlock with multiple sinks, multiple notifications will be sent when the status changes for more than one sink.

2.1.32.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	SinkName (0x114)	Get	SinkNr
		Status	SinkNr , SinkName
		Error	ErrorCode, ErrorInfo

2.1.32.2 Parameter

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SinkName

Name of the streaming data sink.

Basis data type	MaxSize
String	

2.1.33 StreamDataInfo (0x116)

Occurrence: Mandatory

The purpose of property StreamDataInfo is obtaining the list of source numbers and sink numbers the FBlock provides. This function is required for FBlocks that contain a source or sink.

2.1.33.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	StreamDataInfo (0x116)	Get	
		Status	SourceNrList , SinkNrList
		Error	ErrorCode, ErrorInfo

2.1.33.2 Parameter

SourceNrList

List of the source numbers. The length field of the Short Stream corresponds to the amount of source numbers.

Basis data type	Max. Length	Description
Short Stream		Content: SourceNr [repeated]

SourceNrList.SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SinkNrList

List of the sink numbers. The length field of the Short Stream corresponds to the amount of sink numbers.

Basis data type	Max. Length	Description
Short Stream		Content: SinkNr [repeated]

SinkNrList.SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

2.1.34 SinkRouting (0x117)

Occurrence: Mandatory

This property describes the relation between the sink numbers of the FBlock and the physically existing streaming data sinks (e.g., the mixer inputs of an amplifier). Use this property to determine which sink numbers are mutually exclusive.

2.1.34.1 Format of Function

Function class: Array of { Unsigned Byte }

FBlock	Function	OPType	Parameter
	SinkRouting (0x117)	Get	Pos
		Status	Pos , Data
		Error	ErrorCode, ErrorInfo

2.1.34.2 Parameter

Pos

The parameter Pos={x,y} consists of two bytes, x and y, and shows which parameter shall be set or read. Since this property has only one dimension, y is unused.

Valid range: x=1...number of sources (as given in StreamDataInfo), y=0

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Data

The content depends on the parameter Pos.

Basis data type	Description	
Array	Pos	Data
	{ x=0 }	PhysicalSink [1], PhysicalSink [2],..., PhysicalSink [NMax]
	{ x>0 }	PhysicalSink [x]

PhysicalSink

Number to identify the physical sink this logical sink number is related to. The physical sink numbers are tested on equality by the ConnectionMaster.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

2.1.35 ConnectExt (0x118)

Occurrence: Mandatory

By use of the method ConnectExt, channels for data streaming will be connected.

2.1.35.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	ConnectExt (0x118)	StartResult	SinkNr , BlockWidth , ConnectionLabel , ClkSrcLabel
		StartResultAck	SenderHandle , SinkNr , BlockWidth , ConnectionLabel , ClkSrcLabel
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	SinkNr , ClkSrcLabel
		ResultAck	SenderHandle , SinkNr , ClkSrcLabel
		Error	ErrorCode , ErrorInfo

2.1.35.2 Parameter

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

BlockWidth

Number of transferred bytes per MOST frame.

Speed grade	Parameter value range
MOST50	1...117
MOST150	1...372

Basis data type	Unit	Exp.	Step
Unsigned Word	Byte	0	1

ConnectionLabel

Connection identifier.

Speed grade	Parameter value range
MOST50	11..127
MOST150	12...383

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ClkSrcLabel

Connection label for Phase Information. The value 0xFFFF indicates that the clock channel is not used.

Speed grade	Parameter value range
MOST50	11...127, 0xFFFF
MOST150	12...383, 0xFFFF

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.36 DTCP_StartProcess (0x120)

Occurrence: Mandatory

This function starts the DTCP Authentication Procedure and therefore initiates the calculation of the Exchange Keys.

Important:

Function ID 0x120 has an alias 0x12E. It is not recommended to use the alias.

However, system integrators are allowed to use Function ID 0x12E instead of 0x120 for compatibility reasons.

2.1.36.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	DTCP_Start Process (0x120)	StartResultAck	SenderHandle , FBlockID , InstID
		AbortAck	SenderHandle
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , FBlockID , InstID
		Error	ErrorCode, ErrorInfo

2.1.36.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FBlockID

ID of the FBlock that owns the source.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

InstID

Instance ID of the FBlock instance that owns the source.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

2.1.37 DTCP_Control (0x121)

Occurrence: Mandatory

This function transmits DTCP control commands and corresponding responses for Digital Transmission Content Protection.
DTCP_Control is used to exchange the messages required to implement the Authentication and Key Exchange protocols.

Important:

Function ID 0x121 has an alias 0x12F. It is not recommended to use the alias.
However, System Integrators are allowed to use Function ID 0x12F instead of 0x121 for compatibility reasons.

2.1.37.1 Format of Function

Function class: Unclassified Method

FBlock	Function	OPType	Parameter
	DTCP_Control (0x121)	StartResultAck	SenderHandle , RequesterFBlockID , RequesterInstID , ctype_response , AKE_ID , OP1_subfunction , OP2_AKE_procedure , OP3_exchange_key , OP4_subfunction_dependent , number_status , blocks_remaining , data
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , RequesterFBlockID , RequesterInstID , ctype_response , AKE_ID , OP1_subfunction , OP2_AKE_procedure , OP3_exchange_key , OP4_subfunction_dependent , number_status , blocks_remaining , data
		Error	ErrorCode , ErrorInfo

2.1.37.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

RequesterFBlockID

FBlock ID of the FBlock that sends a DTCP command.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

RequesterInstID

Instance ID of the FBlock instance that sends a DTCP command.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ctype_response

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	CONTROL	ctype
	0x1	STATUS	ctype
	0x9	ACCEPTED	response
	0xA	REJECTED	response
	0xC	STABLE	response

AKE_ID

The AKE_ID field specifies the format of the AKE_ID dependent field.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	AKE_ID_0	AKE_ID = 0

OP1_subfunction

The subfunction field specifies the operation of control commands.

The parameter "isochronous_channel_number" of the CONTENT_KEY_REQ command is used in MOST for indicating the SourceNr in the range of 1...63.

Basis data type	Code	Name	Description
Enum (1 byte)	0x1	CHALLENGE	
	0x2	RESPONSE	
	0x3	EXCHANGE_KEY	
	0x4	SRM	
	0x80	CONTENT_KEY_REQ	
	0xC0	AKE_CANCEL	

OP2_AKE_procedure

For MOST systems, only Full Authentication is used.

Basis data type	Code	Name	Description
Enum (1 byte)	0x4	full_auth	Full Authentication procedure

OP3_exchange_key

Each bit of the exchange_key field corresponds to one or multiple exchange keys.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Bit-oriented values for OP3_exchange_key

Name	Position (Bit)	Length (Bit)	Description
M6CopyNever	0	1	Exchange Key for M6 Copy-never content
M6CopyOneGeneration	1	1	Exchange Key for M6 Copy-one-generation content
M6NoMoreCopies	2	1	Exchange Key for M6 No-more-copies content
AES128	3	1	Exchange Key for AES-128

OP4_subfunction_dependent

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

number_status

The status field is used to notify the device issuing the command of the reason when the command results in a REJECTED response.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NoError	No error
	0x1	NoMoreAuthentication	No more authentication procedures currently supported
	0x2	NoIsochronousOutput	Not used for MOST systems
	0x3	NoPointToPointConnection	Not used for MOST systems
	0x4	DTCPUnavailable	
	0x5	NoAC	Not used for MOST systems
	0x7	AnyOtherError	
	0x8	IncorrectCommandOrder	Only for testing
	0x9	AuthenticationFailed	Only for testing
	0xF	NoInformation	
	0x10	DatafieldSyntaxError	Only for testing

blocks_remaining

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

data

Basis data type	Length	Description
Stream		

2.1.38 DTCP_Status (0x122)

Occurrence: Mandatory

This function transmits DTCP status commands and corresponding responses.
A device issuing a command can determine the size of data field that the target device can accept using the AKE status command.

2.1.38.1 Format of Function

Function class: Unclassified Method

FBlock	Function	OPType	Parameter
	DTCP_Status (0x122)	StartResultAck	SenderHandle , RequesterFBlockID , RequesterInstID , ctype_response , AKE_ID , OP1_subfunction , OP2_AKE_procedure , OP3_exchange_key , OP4_subfunction_dependent , status
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , RequesterFBlockID , RequesterInstID , ctype_response , AKE_ID , OP1_subfunction , OP2_AKE_procedure , OP3_exchange_key , OP4_subfunction_dependent , status
		Error	ErrorCode , ErrorInfo

2.1.38.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

RequesterFBlockID

FBlock ID of the FBlock that sends a DTCP command.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

RequesterInstID

Instance ID of the FBlock instance that sends a DTCP command.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ctype_response

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	CONTROL	ctype
	0x1	STATUS	ctype
	0x9	ACCEPTED	response
	0xA	REJECTED	response
	0xC	STABLE	response

AKE_ID

The AKE_ID field specifies the format of the AKE_ID dependent field.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	AKE_ID_0	AKE_ID = 0

OP1_subfunction

Basis data type	Code	Name	Description
Enum (1 byte)	0x1	CHALLENGE	
	0x2	RESPONSE	
	0x3	EXCHANGE_KEY	
	0x4	SRM	
	0x80	CONTENT_KEY_REQ	
	0xC0	AKE_CANCEL	

OP2_AKE_procedure

The initiator of the STATUS command sets this value initially to 0xFF to request the supported AKE procedures of the target device. For the reply, the target device overwrites this value with the supported AKE procedures.

For MOST systems, only Full Authentication is used.

Basis data type	Code	Name	Description
Enum (1 byte)	0x4	full_auth	Full Authentication procedure
	0xFF	initial_value	Initial value used by the sender

OP3_exchange_key

The initiator of the STATUS command sets this value initially to 0xFF (RequestKx) to request the supported exchange keys of the target device. For the reply, the target device overwrites this value with the supported exchange keys.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Bit-oriented values for OP3_exchange_key

Name	Position (Bit)	Length (Bit)	Description
M6CopyNever	0	1	Exchange Key for M6 Copy-never content
M6CopyOneGeneration	1	1	Exchange Key for M6 Copy-one-generation content
M6NoMoreCopies	2	1	Exchange Key for M6 No-more-copies content
AES128	3	1	Exchange Key for AES-128

OP4_subfunction_dependent

For the STATUS command, this value is not used and defined to be 0xFF.

Basis data type	Code	Name	Description
Enum (1 byte)	0xFF	fixed_value	Fixed value

status

The initiator of the STATUS command sets this value initially to 0xFF to request the current situation of the target device. For the reply, the target device overwrites this value with its current situation.

Basis data type	Code	Name	Description
Enum (1 byte)	0xF0	NoError	
	0xF1	NoMoreAuthentication	
	0xF2	NoIsochronousOutput	Not used for MOST systems
	0xF3	NoPointToPointConnection	Not used for MOST systems
	0xF4	DTCPUnavailable	
	0xF7	AnyOtherError	
	0xF9	AuthenticationFailed	Only for testing
	0xFF	NoInformation	Issued by the initiator of the command, not recommended as response

2.1.39 DTCP_CipherStatus (0x123)

Occurrence: Mandatory

This function provides information about the state of the AKE and Ciphering components for Digital Transmission Content Protection.

Because the SourceSinkNr parameter does not distinguish between source or sink, the sink and source devices in a system have to be designed so that it is possible to distinguish between different sources and sinks (e.g., using different FBlocks or device unique source and sink numbers).

Important:

Function ID 0x123 has an alias 0x12D. It is not recommended to use the alias.

However, system integrators are allowed to use Function ID 0x12D instead of 0x123 for compatibility reasons.

2.1.39.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	DTCP_Cipher Status (0x123)	Get	SourceSinkNr
		Status	SourceSinkNr , AuthenticationState , AvailableExchangeKeys , CipherError
		Error	ErrorCode, ErrorInfo

2.1.39.2 Parameter

SourceSinkNr

Number of a data source or sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

AuthenticationState

AuthenticationState gives the current state of Authentication as defined in Chapter 3 of the 5C DTCP Specification

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	A0Unauthenticated	State A0: Unauthenticated
	0x1	A1Authentication	State A1: Full Authentication
	0x2	A2RestrictedAuthentication	State A2: Restricted Authentication
	0x3	A3Authenticated	State A3: Authenticated
	0x4	A4SendContentChannelKey	State A4: Send Content Channel Key
	0x5	A5InitializeDevice	State A5: Initialize Device

AvailableExchangeKeys

AvailableExchangeKeys gives the current set of available ExchangeKeys.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Bit-oriented values for AvailableExchangeKeys

Name	Position (Bit)	Length (Bit)	Description
M6CopyNever	0	1	Exchange Key for M6 Copy-never content
M6CopyOneGeneration	1	1	Exchange Key for M6 Copy-one-generation content
M6NoMoreCopies	2	1	Exchange Key for M6 No-more-copies content
AES128	3	1	Exchange Key for AES-128

CipherError

CipherError gives the current state of the ciphering machines

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NoError	No error
	0x10	EncodingError	Encoding Error
	0x20	DecodingError	Decoding Error

2.1.40 DTCP_Info (0x124)

Occurrence: Mandatory

This function is deprecated. This function provides information about MOST DTCP parameters for Digital Transmission Content Protection.

2.1.40.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	DTCP_Info (0x124)	Get	SourceSinkNr
		Status	SourceSinkNr , PacketFormat , MediaType , Packetlength , EncryptionFrameSize
		Error	ErrorCode, ErrorInfo

2.1.40.2 Parameter

SourceSinkNr

Number of a data source or sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

PacketFormat

PacketFormat gives the packet format which is used by the source / sink (please see MOST Content Protection Scheme--DTCP Implementation).

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NotDefined	Not defined
	0x1	NotApplicable	Not applicable
	0x2	GenericMOSTDTCP	Generic MOST-DTCP Format
	0x3	AVPacketizedMOSTDTCP	A/V Packetized MOST-DTCP Format
	0x4	AVPacketizedDTCPiP	A/V Packetized DTCP-IP; deprecated!

MediaType

This parameter refers to the MediaType values, which are given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Packetlength

This parameter refers to the MOST Packet Length value, which is given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

EncryptionFrameSize

This parameter refers to the DTCP Encryption Frame Size value, which is given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.41 DTCP_ContentKeyProcess (0x125)

Occurrence: Mandatory

This method starts establishing Content Keys for Digital Transmission Content Protection.

2.1.41.1 Format of Function

Function class: Sequence Method

FBlock	Function	OPType	Parameter
	DTCP_ContentKeyProcess (0x125)	StartResultAck	SenderHandle , FBlockID , InstID , SourceNr , SinkNr , PacketFormat , MediaType , Packetlength , EncryptionFrameSize
		ErrorAck	SenderHandle , ErrorCode, ErrorInfo
		ProcessingAck	SenderHandle
		ResultAck	SenderHandle , FBlockID , InstID
		Error	ErrorCode, ErrorInfo

2.1.41.2 Parameter

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

FBlockID

ID of the FBlock that owns the source.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

InstID

Instance ID of the FBlock instance that owns the source.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

SourceNr

Number of a data source (within one FBlock there can be more than one), for example, 0x01 for the first source.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

SinkNr

Number of a data sink (within one FBlock there can be more than one), for example, 0x01 for the first sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

PacketFormat

PacketFormat gives the packet format that is used by the source (please see MOST Content Protection Scheme--DTCP-Implementation).

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NotDefined	Not defined
	0x1	NotApplicable	Not applicable
	0x2	GenericMOSTDTCP	Generic MOST-DTCP Format
	0x3	AVPacketizedMOSTDTCP	A/V Packetized MOST-DTCP Format
	0x4	AVPacketizedDTCP-IP	A/V Packetized DTCP-IP; deprecated!

MediaType

This parameter refers to the MediaType values, which are given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

Packetlength

This parameter refers to the MOST Packet Length value, which is given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

EncryptionFrameSize

This parameter refers to the DTCP Encryption Frame Size value, which is given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

2.1.42 DTCP_InfoExt (0x126)

Occurrence: Mandatory

This function provides information about MOST DTCP parameters for Digital Transmission Content Protection.

2.1.42.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	DTCP_InfoExt (0x126)	Get	SourceSinkNr
		Status	SourceSinkNr , PacketFormat , Packetlength , EncryptionFrameSize , EMI_Byte , NumInfoBytesFollowing , MediaType , RemainingInfoBytes
		Error	ErrorCode, ErrorInfo

2.1.42.2 Parameter

SourceSinkNr

Number of a data source or sink.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

PacketFormat

PacketFormat gives the packet format which is used by the source / sink (please see MOST Content Protection Scheme--DTCP Implementation).

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NotDefined	Not defined
	0x1	NotApplicable	Not applicable
	0x2	GenericMOSTDTCP	Generic MOST-DTCP Format
	0x3	AVPacketizedMOSTDTCP	A/V Packetized MOST-DTCP Format
	0x4	AVPacketizedDTCPPI	A/V Packetized DTCP-IP; deprecated!

Packetlength

This parameter refers to the MOST Packet Length value, which is given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

EncryptionFrameSize

This parameter refers to the DTCP Encryption Frame Size value, which is given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

EMI_Byte

This parameter refers to the EMI_Byte (EMI and Odd/Even bit), which is given in the DTCP header.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

NumInfoBytesFollowing

This parameter refers to the Info[0]: "Number of Info bytes following" values, which are given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

MediaType

This parameter refers to the Info[1]: "MediaType" values, which are given in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

RemainingInfoBytes

This parameter refers to Info[2] up to Info[n] (variable length) of the DTCP Info bytes, which are given in the MOST Specification for Stream Transmission.

Basis data type	Length	Description
Stream		Content: RemainingInfoByte [repeated]

RemainingInfoBytes.RemainingInfoByte

One Info byte, as provided in the MOST Specification for Stream Transmission.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

2.1.43 ScreenFormat (0x130)

Occurrence: Mandatory

Image format of the video screen.

2.1.43.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	ScreenFormat (0x130)	Get	
		Status	ScreenFormat
		Error	ErrorCode, ErrorInfo

2.1.43.2 Parameter

ScreenFormat

Enumeration of available image formats.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Unknown	Unknown
	0x1	Format_4_3	4:3
	0x2	Format_16_9	16:9

2.1.44 VideoFrequency (0x131)

Occurrence: Mandatory

The frame rate of the video signal. This function is available only if analog video output is available.

2.1.44.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	VideoFrequency (0x131)	Get	
		Status	VideoFrequency
		Error	ErrorCode, ErrorInfo

2.1.44.2 Parameter

VideoFrequency

Enumeration of available frequencies.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	unknown	unknown
	0x1	Freq50Hz	50 Hz
	0x2	Freq60Hz	60 Hz

2.1.45 VideoNorm (0x132)

Occurrence: Mandatory

The norm used for this video signal. This function is available only if analog video output is available.

2.1.45.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	VideoNorm (0x132)	Get	
		Status	VideoNorm
		Error	ErrorCode, ErrorInfo

2.1.45.2 Parameter

VideoNorm

Enumeration of the available television systems.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	unknown	unknown
	0x1	EIA	EIA
	0x2	CCIR	CCIR
	0x9	NTSC	NTSC
	0xA	NTSCEUROPE	NTSC-EUROPE
	0xB	NTSCM	NTSC-M
	0xC	NTSCJAPAN	NTSC-JAPAN
	0x13	PAL	PAL
	0x14	PALBG	PAL-BG
	0x15	PALI	PAL-I
	0x16	PALM	PAL-M
	0x17	PALN	PAL-N
	0x18	PALDK	PAL-DK
	0x19	PALAUSTRALIA	PAL-AUSTRALIA
	0x1A	PALITALIA	PAL-ITALIA
	0x1B	PALMAROCCO	PAL-MAROCCO
	0x1C	PALVRC	PAL-VRC
	0x1E	SECAMBG	SECAM-BG
	0x1F	SECAMDK	SECAM-DK
	0x20	SECAMK1	SECAM-K1
	0x21	SECAML	SECAM-L
	0x28	HDTV	HDTV
	0x29	MUSEJAPAN	MUSE(JAPAN)
	0x2A	HDTVUSA	HDTV(USA)

2.1.46 VideoSignalFormat (0x133)

Occurrence: Mandatory

Information about the format of the video signal

2.1.46.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	VideoSignal Format (0x133)	Get	
		Status	VideoSignalFormat
		Error	ErrorCode, ErrorInfo

2.1.46.2 Parameter

VideoSignalFormat

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	unknown	unknown
	0x1	BAS	BAS
	0xA	FBASCVBS	FBAS (CVBS)
	0xB	YC	Y/C
	0xC	RGB	RGB

2.1.47 VideoFormat (0x135)

Occurrence: Mandatory

The format of the video signal. This function is available only if analog video output is available.

2.1.47.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	VideoFormat (0x135)	Set	VideoFormat
		Get	
		SetGet	VideoFormat
		Status	VideoFormat
		Error	ErrorCode, ErrorInfo

2.1.47.2 Parameter

VideoFormat

Enumeration of the available video appearance settings.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	unknown	unknown
	0x1	Standard4_3	Standard 4:3
	0x2	Standard16_9	Wide 16:9
	0x3	Letterbox	Letter box
	0x4	PanSCAN	Pan SCAN
	0x5	Cinemascope	Cinemascope
	0x6	reserved1	reserved
	0x7	reserved2	reserved
	0x8	reserved3	reserved

2.1.48 DeckStatus (0x200)

Occurrence: Mandatory

This property controls and shows the state of the drive. For connectivity devices, this property shows the state of the connected device; it assumes that a device is connected and therefore does not make any statement about the connectivity status. The default value is 'Load / Connect'.

2.1.48.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	DeckStatus (0x200)	Set	DeckStatus
		Get	
		SetGet	DeckStatus
		Status	DeckStatus
		Error	ErrorCode , ErrorInfo

2.1.48.2 Parameter

DeckStatus

- 0x00...0x1F = general states
- 0x20...0x2F = video specific states
- 0x30...0x3F = tape specific states
- 0x40...0x4F = file handling
- 0x50...0x5F = recording
- 0x60...0xFF = miscellaneous

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Play	Play
	0x1	Stop	Stop
	0x2	Pause	Pause
	0x3	LoadConnect	Load / Connect
	0x4	UnloadDisconnect	Unload / Disconnect
	0x5	SearchForward	Search Forward
	0x6	SearchBackward	Search Backward
	0x7	FastForward	Fast Forward
	0x8	FastBackward	Fast Backward
	0x9	Empty	Empty / No titles available
	0xA	Retract	Retract
	0x20	SlowMotionForward	Slow Motion Forward
	0x21	SlowMotionBackward	Slow Motion Backward
	0x22	StepbyStep	Step by Step
	0x23	PreStop	PreStop
	0x30	RewindBeginTape	Rewind to Begin of Tape
	0x31	ForwardEndTape	Forward to End of Tape
	0x32	SearchStartPositionNext	Search Startposition next title
	0x33	SearchStartPositionLast	Search Startposition last Title
	0x40	Fileplay	Fileplay
	0x41	Filetransfer	Filetransfer

Basis data type	Code	Name	Description
	0x50	Record	Record
	0x51	TimeshiftPlay	Timeshift Play
	0x52	TimeshiftPause	Timeshift Pause
	0x53	TimeshiftSearchForward	Timeshift Search Forward
	0x54	TimeshiftSearchBackward	Timeshift Search Backward
	0x55	TimeshiftFastForward	Timeshift Fast Forward
	0x56	TimeshiftFastBackward	Timeshift Fast Backward
	0x57	TimeshiftSlowMotionForward	Timeshift Slow Motion Forward
	0x58	TimeshiftSlowMotionBackward	Timeshift Slow Motion Backward
	0x59	TimeshiftStepbyStep	Timeshift StepbyStep
	0x60	SkipForward	Skip Forward
	0x61	SkipBackward	Skip Backward
	0x62	SlotReady	Slot ready for medium insertion
	0xFF	ERROR	ERROR

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_Detail

ErrorInfo.ErrorInfo_Detail

Error info details.

Basis data type	Code	Name	Description
Enum (1 byte)	0x20	UOP	user operation prohibition

2.1.49 TimePosition (0x201)

Occurrence: Mandatory

Display of current or setting of a new position in milliseconds.

Datatype: Record of {DiskTime,TrackTime, TitleTime}

Note: An event is triggered only every second.

2.1.49.1 Format of Function

Function class: Record of { Signed Long Signed Long Signed Long }

FBlock	Function	OPType	Parameter
	TimePosition (0x201)	Set	Pos, Data
		Get	Pos
		SetGet	Pos, Data
		Increment	Pos, NSteps
		Decrement	Pos, NSteps
		Status	Pos, Data
		Error	ErrorCode, ErrorInfo

2.1.49.2 Parameter

Pos

The parameter Pos={x,y} consists of two bytes, x and y, and shows which parameter shall be set, queried or read. Since this is a unidimensional construction, the second Byte y is unused (y=0=const) and the simplified notation Pos={x} is valid.

Valid range: x=0..3

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Word	none	0	1	0 . . . 3	

Data

The content of Data depends on parameter Pos={x,y}.

Basis data type	Description	
Record	Pos	Data
	{ x=0 }	DiskTime, TrackTime, TitleTime

DiskTime

Time details in milliseconds related to start of disk.

Basis data type	Unit	Exp.	Step
Signed Long	ms	0	1

TrackTime

Time details in milliseconds related to start of current track.

Basis data type	Unit	Exp.	Step
Signed Long	ms	0	1

TitleTime

Time details in milliseconds related to the start of the current title.

Basis data type	Unit	Exp.	Step
Signed Long	ms	0	1

NSteps

Number of steps for adjustment.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

2.1.50 TrackPosition (0x202)

Occurrence: Mandatory

Used to query the current track or to play a different track.

Note:

- Track=0 for "no track", e.g., if there is no medium available.
- For a tape player, Track=1 corresponds to the first side of the tape and Track=2 corresponds to the second side.
- The currently valid range of values is dependent on the medium. When required, the actual range is queriable by the interface.

2.1.50.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	TrackPosition (0x202)	Set	Track
		Get	
		SetGet	Track
		Increment	NSteps
		Decrement	NSteps
		Status	Track
		Error	ErrorCode, ErrorInfo

2.1.50.2 Parameter

Track

The current track.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

NSteps

Number of steps for adjustment.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

2.1.51 FramePosition (0x203)

Occurrence: Mandatory

Query the current playback position in frame units or continue playback from a different frame.

2.1.51.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	FramePosition (0x203)	Set	Frame
		Get	
		SetGet	Frame
		Increment	NSteps
		Decrement	NSteps
		Status	Frame
		Error	ErrorCode, ErrorInfo

2.1.51.2 Parameter

Frame

The current frame.

Basis data type	Unit	Exp.	Step
Unsigned Long	none	0	1

NSteps

Number of steps for adjustment.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

2.1.52 TitlePosition (0x205)

Occurrence: Mandatory

Used to query the current sequence or continue playback from a different sequence.

2.1.52.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	TitlePosition (0x205)	Set	TitlePosition
		Get	
		SetGet	TitlePosition
		Increment	NSteps
		Decrement	NSteps
		Status	TitlePosition
		Error	ErrorCode, ErrorInfo

2.1.52.2 Parameter

TitlePosition

Title position.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

NSteps

Number of steps for adjustment.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

2.1.53 ChapterPosition (0x206)

Occurrence: Mandatory

Used to query the current chapter or continue playback from a different chapter.

2.1.53.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	ChapterPosition (0x206)	Set	ChapterPosition
		Get	
		SetGet	ChapterPosition
		Increment	NSteps
		Decrement	NSteps
		Status	ChapterPosition
		Error	ErrorCode, ErrorInfo

2.1.53.2 Parameter

ChapterPosition

Number of steps for adjustment.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

NSteps

Number of steps for adjustment.

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	1 . . . 255	

2.1.54 DeckStatusExt (0x207)

Occurrence: Mandatory

DeckStatusExt extends the DeckStatus function with an additional parameter, which may be used to identify the HMI that issued a command.

This property controls and shows the state of the drive. For connectivity devices, this property shows the state of the connected device; it assumes that a device is connected and therefore does not make any statement about the connectivity status. The default value is 'Load / Connect'.

2.1.54.1 Format of Function

Function class: Sequence Property

FBlock	Function	OPType	Parameter
	DeckStatusExt (0x207)	Set	DeckStatus , TransactionID
		Get	
		SetGet	DeckStatus , TransactionID
		Status	DeckStatus
		Error	ErrorCode , ErrorInfo

2.1.54.2 Parameter

DeckStatus

- 0x00...0x1F = general states
- 0x20...0x2F = video specific states
- 0x30...0x3F = tape specific states
- 0x40...0x4F = file handling
- 0x50...0x5F = recording
- 0x60...0xFF = miscellaneous
-

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Play	Play
	0x1	Stop	Stop
	0x2	Pause	Pause
	0x3	LoadConnect	Load / Connect
	0x4	UnloadDisconnect	Unload / Disconnect
	0x5	SearchForward	Search Forward
	0x6	SearchBackward	Search Backward
	0x7	FastForward	Fast Forward
	0x8	FastBackward	Fast Backward
	0x9	Empty	Empty / No titles available
	0xA	Retract	Retract
	0x20	SlowMotionForward	Slow Motion Forward
	0x21	SlowMotionBackward	Slow Motion Backward
	0x22	StepbyStep	Step by Step
	0x23	PreStop	PreStop
	0x30	RewindBeginTape	Rewind to Begin of Tape

Basis data type	Code	Name	Description
	0x31	ForwardEndTape	Forward to End of Tape
	0x32	SearchStartPositionNext	Search Startposition next title
	0x33	SearchStartPositionLast	Search Startposition last Title
	0x40	Fileplay	Fileplay
	0x41	Filetransfer	Filetransfer
	0x50	Record	Record
	0x51	TimeshiftPlay	Timeshift Play
	0x52	TimeshiftPause	Timeshift Pause
	0x53	TimeshiftSearchForward	Timeshift Search Forward
	0x54	TimeshiftSearchBackward	Timeshift Search Backward
	0x55	TimeshiftFastForward	Timeshift Fast Forward
	0x56	TimeshiftFastBackward	Timeshift Fast Backward
	0x57	TimeshiftSlowMotionForward	Timeshift Slow Motion Forward
	0x58	TimeshiftSlowMotionBackward	Timeshift Slow Motion Backward
	0x59	TimeshiftStepbyStep	Timeshift StepbyStep
	0x60	SkipForward	Skip Forward
	0x61	SkipBackward	Skip Backward
	0x62	SlotReady	Slot ready for medium insertion
	0xFF	ERROR	ERROR

TransactionID

The transaction ID is mainly used to identify the HMI terminal that issues a command. If the TransactionID is not used, it is set to 0x0. The transaction ID can be used, for example, as follows:

4 bit	ID of the calling instance (HMI/terminal)
8 bit	Incremental counter, used to number the commands. 8 bits are the minimum width.
4 bit	Reserved (may be used for enhancing the counter)

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Word	none	0	1	0 . . . 65535	

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_Detail

ErrorInfo.ErrorInfo_Detail

Error info details.

Basis data type	Code	Name	Description
Enum (1 byte)	0x20	UOP	user operation prohibition

2.1.55 VideoInteraction (0x251)

Occurrence: Mandatory

Operates the DVD menu.

2.1.55.1 Format of Function

Function class: Unclassified Method

FBlock	Function	OPType	Parameter
	VideoInteraction (0x251)	Start	VideoInteraction , TouchPosX , TouchPosY
		StartResult	VideoInteraction , TouchPosX , TouchPosY
		StartResultAck	SenderHandle , VideoInteraction , TouchPosY , TouchPosX
		StartAck	SenderHandle , VideoInteraction , TouchPosX , TouchPosY
		ErrorAck	SenderHandle , ErrorCode , ErrorInfo
		ProcessingAck	SenderHandle
		Processing	
		Result	
		ResultAck	SenderHandle
		Error	ErrorCode , ErrorInfo

2.1.55.2 Parameter

VideoInteraction

Enumeration of the available commands for user interaction.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Title	Title
	0x1	Root	Root
	0x2	Enter	Enter
	0x3	Up	Up
	0x4	Down	Down
	0x5	Right	Right
	0x6	Left	Left
	0x7	Back	Back
	0x8	PreviousChapter	Previous Chapter
	0x9	NextChapter	Next Chapter
	0xA	Subtitle	Subtitle
	0xB	Audio	Audio
	0xC	Angle	Angle
	0xD	PTT	PTT
	0xE	Resume	Resume
	0xF	KaraokeAudio	KaraokeAudio
	0x10	TouchEventPRESS	TouchEvent PRESS (use TouchPosX and TouchPosY parameters!)
	0x11	TouchEventRELEASE	TouchEvent RELEASE (use TouchPosX and TouchPosY parameters!)
	0x12	TouchEventHOVER	TouchEvent HOVER (use TouchPosX and TouchPosY parameters!)

TouchPosX

Touchscreen event X coordinate (only used if the VideoInteraction parameter is set to "TouchEvent DOWN", "TouchEvent UP", or "TouchEvent HOVER". Otherwise, set TouchPosX=0)

Basis data type	Unit	Exp.	Step
Unsigned Word	pixel	0	1

TouchPosY

Touchscreen event Y coordinate (only used if the VideoInteraction parameter is set to "TouchEvent DOWN", "TouchEvent UP", or "TouchEvent HOVER". Otherwise, set TouchPosY=0)

Basis data type	Unit	Exp.	Step
Unsigned Word	pixel	0	1

SenderHandle

Unique identifier of the requesting task within the device.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

ErrorCode

(Refer to the MOST Specification, section "Structure of MOST Messages: OPType")

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

ErrorInfo

Besides the error information provided in the MOST Specification, additional function specific error info values are specified here.

Basis data type	Length	Condition	Description
Stream		ErrorCode = 0x20	Content: ErrorInfo_Detail

ErrorInfo.ErrorInfo_Detail

Error info details.

Basis data type	Code	Name	Description
Enum (1 byte)	0x20	UOP	user operation prohibition

2.1.56 PlayerRegion (0x270)

Occurrence: Mandatory

This function should be used to read the current setting of the region code for the current player.

2.1.56.1 Format of Function

Function class: Unclassified Property

FBlock	Function	OPType	Parameter
	PlayerRegion (0x270)	Set	RegionCode
		SetGet	RegionCode
		Status	RegionCode , NumberOfRemainingAttempts
		Error	ErrorCode, ErrorInfo

2.1.56.2 Parameter

RegionCode

This parameter specifies the region code (Regional Playback Control) for the DVD.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	RegionCode0	"playing in all regions" or RegionCode not readable (e.g., not a Video DVD) or RC of DVD matches RC of system (for players not able to deliver real RC)
	0x1	RegionCode1	Bermuda, Canada, United States and U.S. territories
	0x2	RegionCode2	The Middle East, Western Europe, Central Europe, Egypt, French overseas territories, Greenland, Japan, Lesotho, South Africa and Swaziland
	0x3	RegionCode3	Southeast Asia, Hong Kong, Macau, south Korea and Taiwan
	0x4	RegionCode4	Australia, New Zealand, Central America, the Caribbean, Mexico, Oceania and South America (sans French Guyana)
	0x5	RegionCode5	The rest of Africa, Former Soviet Union, the Indian subcontinent, Mongolia and North Korea
	0x6	RegionCode6	Mainland China
	0x7	RegionCode7	Reserved for future use (found in use on protected screener copies of MPAA-related DVDs, and "media-copies" of pre-releases in Asia)
	0x8	RegionCode8	International venues such as aircraft, cruise ships, etc.
	0xFF	Mismatch	RC of DVD-V does not match RC of System (for players not able to deliver real RC)

NumberOfRemainingAttempts

This parameter specifies the number of remaining attempts to set the region code property.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Permanent	Permanent
	0x1	LastChange	Last Change
	0x2	Set3Times	Set 3 times
	0x3	Set2Times	Set 2 times
	0x4	Set1Time	Set 1 time
	0x5	NeverSet	Never set
	0x6	SystemwideCounter	Systemwide counter (Player does not have its own counter)

2.1.57 DeckEvent (0x430)

Occurrence: Mandatory

Events concerning the drive or device. Whether the connected device/drive can signal the events to the gateway depends on the characteristics of the external device.

- OverTemperature / UnderTemperature => external device signals temperature problems
- OverVoltage / UnderVoltage => external device signals power problems
- TooMuchPowerDrawn => external device draws too much power

2.1.57.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	DeckEvent (0x430)	Get	
		Status	DeckEvent
		Error	ErrorCode, ErrorInfo

2.1.57.2 Parameter

DeckEvent

Type of event.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NormalOperation	Normal Operation
	0x1	DeckError	Deck Error
	0x2	OverNormalTemperature	Over normal Temperature
	0x3	UnderNormalTemperature	Under normal Temperature
	0x4	UnderVoltage	Under Voltage
	0x5	OverVoltage	Over Voltage
	0x6	TooMuchPowerDrawn	Too much power drawn

2.1.58 MediaEvent (0x431)

Occurrence: Mandatory

Events concerning the current medium that occur during playback of tracks. The usage and generation of events is deployment specific. As rule of thumb the following recommendation is given: The implementation should avoid very fast toggling between different values and should therefore implement a minimum time of status hold time (e.g., 200 ms).

- NormalOperation: set as default if none of the other events are present
- Corrupted File or Track: signaled if the current track/title could not be played due to corruption (e.g., bit errors or unknown DRM format); an implementation specific recovery strategy may apply (e.g., jump to next track/title or stop playback)
- File or Track Change Delayed: should be signaled if track change is delayed (time is implementation specific)
- EndOfTracklist: Signaled if tracklist has reached the end and DeckStatus changes to "Pause" or "Stop"
- SecuredFile: signaled if file is secured (e.g., DRM protection recognized) and file could not be played
- File/Track not found: signaled if a track inside a playlist (e.g., m3u file) is not found; the recovery strategy is supplier-specific.
- Filter with no Media File/Track: signaled if the set filter (SelectMediaListFilter) covers no media files (e.g., empty directory or directory with no media files)

2.1.58.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	MediaEvent (0x431)	Get	
		Status	MediaEvent
		Error	ErrorCode, ErrorInfo

2.1.58.2 Parameter

MediaEvent

Type of event

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	NormalOperation	Normal Operation
	0x1	CorruptedFileOrTrack	Corrupted File or Track
	0x2	EndOfDisc	End of disc
	0x3	CorruptedROMFilesystem	Corrupted ROM Filesystem
	0x4	Startposition	Startposition
	0x5	TOCUnreadable	TOC Unreadable
	0x6	DiscNotAvailable	Disc not available
	0x7	EndOfFile	End of File
	0x8	FileOrTrackChangeDelayed	File or Track Change Delayed
	0x9	EndOfTracklist	End of Tracklist
	0xA	EndOfRandom	End of Random
	0xB	NotReady	Not ready

Basis data type	Code	Name	Description
	0xC	TooManyConsecutiveErrors	Too many consecutive errors
	0xD	UnsupportedFile	Unsupported file
	0xE	Reserved1	reserved
	0xF	Reserved2	reserved
	0x10	SecuredFile	Secured file (e.g., DRM)
	0x11	FileTrackNotFound	File/Track not found
	0x12	FilterWithNoMediaFile	Filter with no MediaFile/Track

2.1.59 Repeat (0x452)

Occurrence: Mandatory

This property is for switching on and off the repeat function. Note:

- Track: automatic repeat of the current track
- Disc: automatic repeat of the current medium
- Magazine: automatic repeat of all media of the current magazine
- All / All Magazines: automatic repeat of all tracks on the medium or magazines. Has a side effect that the Filter is set to contain all possible media titles.
- Chapter: automatic repeat of the current chapter
- Title: automatic repeat of the current title. Note that this does not influence the active Filter.
- AB: automatic repeat of the marked section.
- Folder: automatic repeat within the current folder/directory (optional). Requires a folder as the active filter. Reduces the active Filter to contain this directory only (without subdirectories!)
- SubFolder: automatic repeat within the current folder/directory including subfolder (optional). Requires a folder as the active filter.
- Tracklist: automatic repeat of the currents selected tracklist

It is advised to switch between Repeat Tracklist and Repeat Off only. Other repeat states are kept for backwards compatibility but are difficult to handle, since they either cause side effects or it is unclear what their scope is.

2.1.59.1 Format of Function

Function class: Enumeration

FBlock	Function	OPType	Parameter
	Repeat (0x452)	Set	RepeatState
		Get	
		SetGet	RepeatState
		Status	RepeatState
		Error	ErrorCode, ErrorInfo

2.1.59.2 Parameter

RepeatState

Setting the RepeatState to "All" can cause a implicit change of the used filter for playback, if the filter was not set to all media on the connected device. The changed filter can be signaled by the gateway using notification for CurrentMediaListFilter property.

Basis data type	Code	Name	Description
Enum (1 byte)	0x0	Off	Off
	0x1	Track	Track
	0x2	Disk	Disk
	0x3	Magazine	Magazine
	0x4	All	All / All magazines
	0x5	Chapter	Chapter
	0x6	Title	Title

Basis data type	Code	Name	Description
	0x7	AB	AB
	0x8 . . . 0x9		Reserved range.
	0xA	Folder	Folder
	0xB	SubFolder	SubFolder
	0xC	Tracklist	Tracklist

2.1.60 NextTrackToPlay (0x453)

Occurrence: Mandatory

Displays the current or sets a new position as track, which is to be played after the current track.
Datatype: Record of {Track, MagazinePos, MagazineNo}

2.1.60.1 Format of Function

Function class: Record of { Unsigned Word Unsigned Byte Unsigned Byte }

FBlock	Function	OPType	Parameter
	NextTrackToPlay (0x453)	Set	Pos , Data
		Get	Pos
		SetGet	Pos , Data
		Status	Pos , Data
		Error	ErrorCode, ErrorInfo

2.1.60.2 Parameter

Pos

The parameter Pos={x,y} consists of two bytes, x and y, and shows which parameter shall be set or read. Since this is a unidimensional construction, the second byte y is unused (y=0=const) and the simplified notation Pos={x} is valid.
Valid range: x=0..3

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

Data

The content of Data depends on parameter Pos={x,y}.

Basis data type	Description	
Record	Pos	Data
	{ x=0 }	Track , MagazinePos , MagazineNo

Track

Track number.

Basis data type	Unit	Exp.	Step
Unsigned Word	none	0	1

MagazinePos

Position within the magazine.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

MagazineNo

Number of the magazine.

Basis data type	Unit	Exp.	Step
Unsigned Byte	none	0	1

2.1.61 Deemphasis (0x454)

Occurrence: Mandatory

Switches the deemphasis filter for disc drives on or off.

2.1.61.1 Format of Function

Function class: Switch

FBlock	Function	OPType	Parameter
	Deemphasis (0x454)	Get	
		Status	OnOff
		Error	ErrorCode, ErrorInfo

2.1.61.2 Parameter

OnOff

Basis data type
Boolean

2.1.62 SlowFwSpeed (0x455)

Occurrence: Mandatory

Displays the current speed or sets the new speed for "slow motion forward".

2.1.62.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	SlowFwSpeed (0x455)	Set	SlowSpeed
		Get	
		SetGet	SlowSpeed
		Status	SlowSpeed
		Error	ErrorCode, ErrorInfo

2.1.62.2 Parameter

SlowSpeed

Speed indicator as inverse value (e.g., SlowSpeed=4: Slow motion with 1/4 of normal speed).

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	2 . . . 16	

2.1.63 SlowBwSpeed (0x456)

Occurrence: Mandatory

Displays the current speed or sets the new speed for "slow motion backward".

2.1.63.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	SlowBwSpeed (0x456)	Set	SlowSpeed
		Get	
		SetGet	SlowSpeed
		Status	SlowSpeed
		Error	ErrorCode, ErrorInfo

2.1.63.2 Parameter

SlowSpeed

Speed indicator as inverse value (e.g., SlowSpeed=4: Slow motion with 1/4 of normal speed).

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	2 . . . 16	

2.1.64 FastFwSpeed (0x457)

Occurrence: Mandatory

Displays the current speed or sets the new speed for "fast motion forward".

2.1.64.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	FastFwSpeed (0x457)	Set	FastSpeed
		Get	
		SetGet	FastSpeed
		Status	FastSpeed
		Error	ErrorCode, ErrorInfo

2.1.64.2 Parameter

FastSpeed

Speed value (e.g., FastSpeed=4: Fast motion with 4 * normal speed).

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	2 . . . 32	

2.1.65 FastBwSpeed (0x458)

Occurrence: Mandatory

Displays the current speed or sets the new speed for "fast motion backward".

2.1.65.1 Format of Function

Function class: Number

FBlock	Function	OPType	Parameter
	FastBwSpeed (0x458)	Set	FastSpeed
		Get	
		SetGet	FastSpeed
		Status	FastSpeed
		Error	ErrorCode, ErrorInfo

2.1.65.2 Parameter

FastSpeed

Speed value (e.g., FastSpeed=4: Fast motion with 4 * normal speed).

Basis data type	Unit	Exp.	Step	Range of values	Range description
Unsigned Byte	none	0	1	2 . . . 32	