INTERNATIONAL STANDARD

ISO 21806-1

First edition
2020-09

Road vehicles — Media Oriented Systems Transport (MOST) —

Part 1: General information and definitions

Véhicules routiers — Système de transport axé sur les médias —

Partie 1: Information générale et définitions

Reference number
ISO 21806-1:2020(E)

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Published in Switzerland

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Foreword

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 31, *Data communication*.

A list of all parts in the ISO 21806 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The Media Oriented Systems Transport (MOST) communication technology was initially developed at the end of the 1990s in order to support complex audio applications in cars. The MOST Cooperation was founded in 1998 with the goal to develop and enable the technology for the automotive industry. Today, MOST[1)] enables the transport of high quality of service (QoS) audio and video together with packet data and real-time control to support modern automotive multimedia and similar applications. MOST is a function-oriented communication technology to network a variety of multimedia devices comprising one or more MOST nodes.

Figure 1 shows a MOST network example.

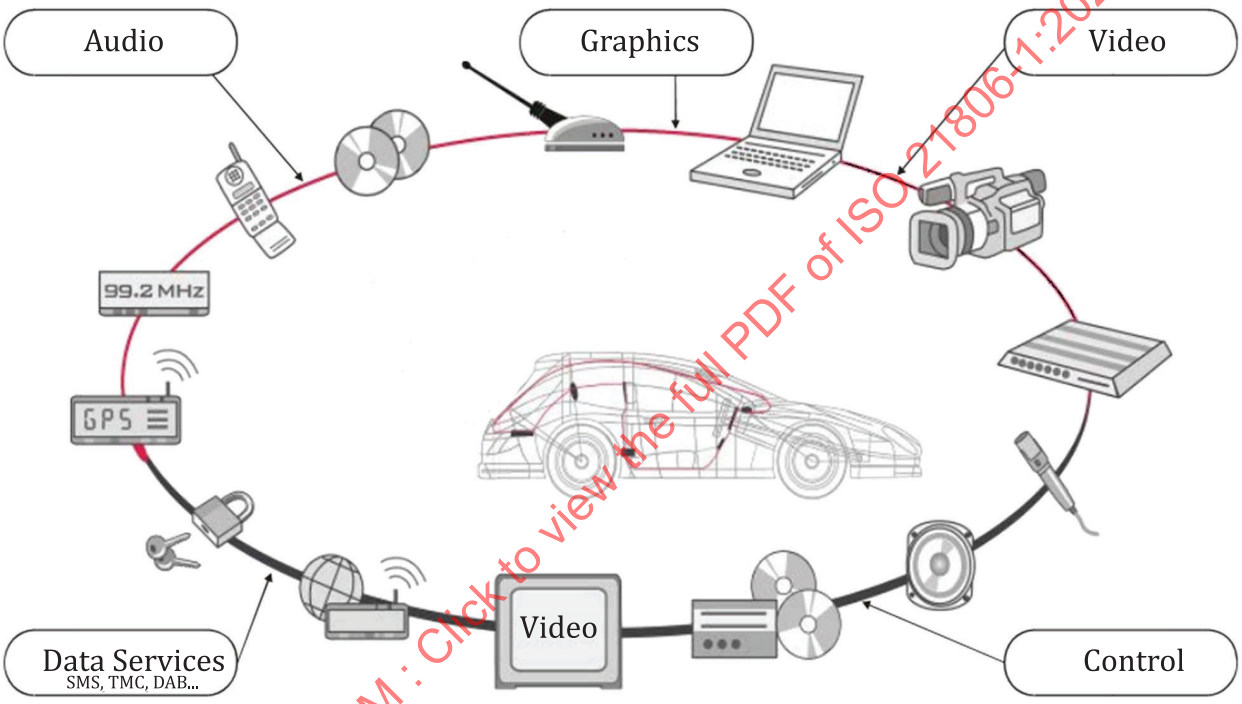

Figure 1 — MOST network example

The MOST communication technology provides:

— synchronous and isochronous streaming,

— small overhead for administrative communication control,

— a functional and hierarchical system model,

— API standardization through a function block (FBlock) framework,

— free partitioning of functionality to real devices,

— service discovery and notification, and

— flexibly scalable automotive-ready Ethernet communication according to ISO/IEC/IEEE 8802-3[2].

MOST is a synchronous time-division-multiplexing (TDM) network that transports different data types on separate channels at low latency. MOST supports different bit rates and physical layers. The network clock is provided with a continuous data signal.

1) MOST® is the registered trademark of Microchip Technology Inc. This information is given for the convenience of users of this document and does not constitute an endorsement by ISO.

Within the synchronous base data signal, the content of multiple streaming connections and control data is transported. For streaming data connections, bandwidth is reserved to avoid interruptions, collisions, or delays in the transport of the data stream.

MOST specifies mechanisms for sending anisochronous, packet-based data in addition to control data and streaming data. The transmission of packet-based data is separated from the transmission of control data and streaming data. None of them interfere with each other.

A MOST network consists of devices that are connected to one common control channel and packet channel.

In summary, MOST is a network that has mechanisms to transport the various signals and data streams that occur in multimedia and infotainment systems.

The ISO standards maintenance portal (https://standards.iso.org/iso/) provides references to MOST specifications implemented in today's road vehicles because easy access via hyperlinks to these specifications is necessary. It references documents that are normative or informative for the MOST versions 4V0, 3V1, 3V0, and 2V5.

The ISO 21806 series has been established in order to specify requirements and recommendations for implementing the MOST communication technology into multimedia devices and to provide conformance test plans for implementing related test tools and test procedures.

To achieve this, the ISO 21806 series is based on the open systems interconnection (OSI) basic reference model in accordance with ISO/IEC 7498-1[1] and ISO/IEC 10731[3], which structures communication systems into seven layers as shown in Figure 2. Stream transmission applications use a direct stream data interface (transparent) to the data link layer.

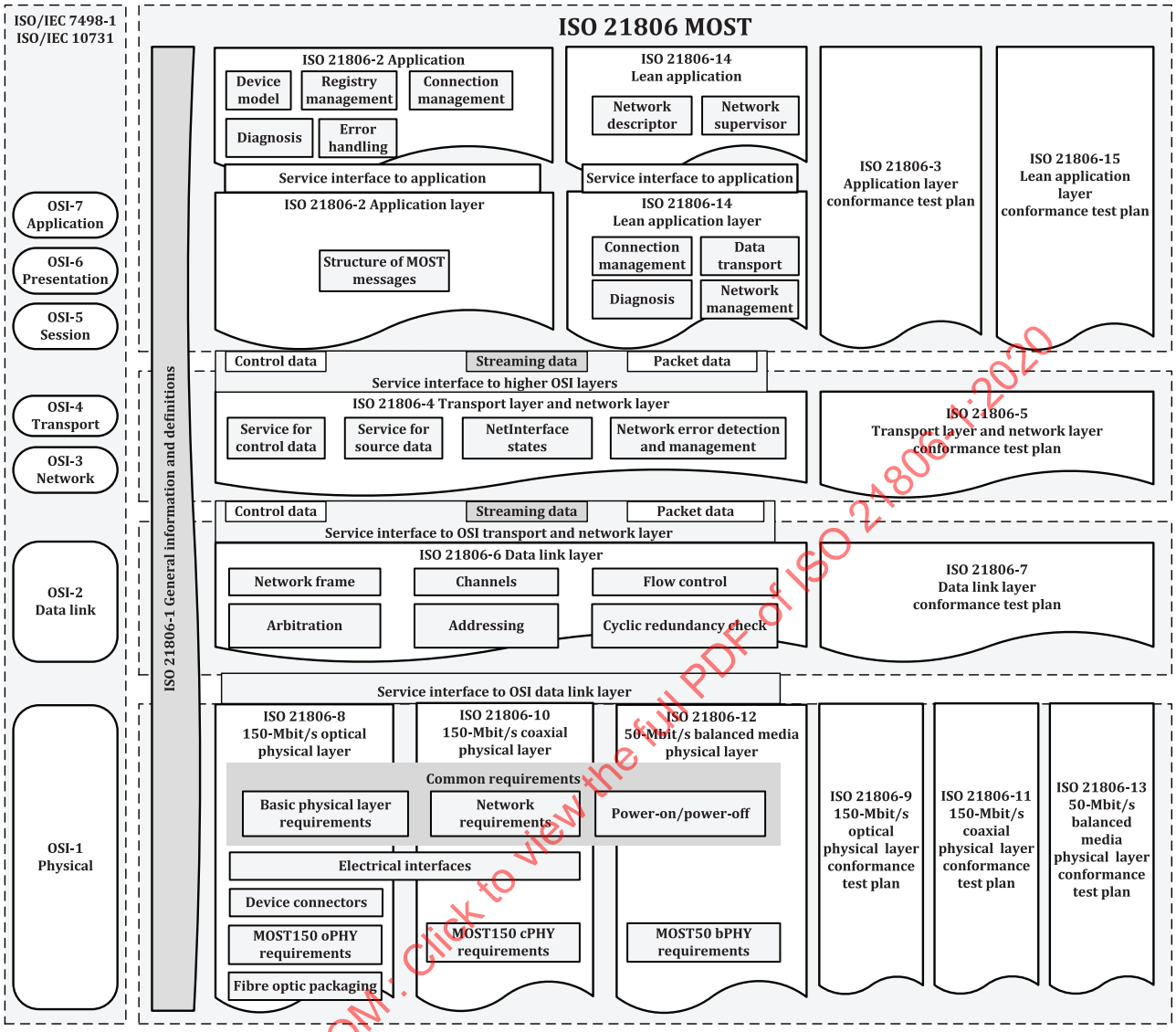

Figure 2 — The ISO 21806 series reference according to the OSI model

The International Organization for Standardization (ISO) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent.

ISO takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured ISO that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO. Information may be obtained from the patent database available at www.iso.org/patents.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those in the patent database. ISO shall not be held responsible for identifying any or all such patent rights.

Road vehicles — Media Oriented Systems Transport (MOST) —

Part 1: General information and definitions

1 Scope

This document provides general information and definitions for Media Oriented Systems Transport (MOST), a synchronous time-division-multiplexing network.

This document describes the access to MOST specifications, which are referenced by the ISO 21806 series.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

MOST Specification Rev. 2.5.0, 10/2006[2)]

MOST Specification Rev. 3.0.0E2, 07/2010[3)]

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
accumulated jitter
portion of *jitter* (3.31) at any point in a *MOST network* (3.43) that is made up entirely of the *transferred jitter* (3.84) from all previous *nodes* (3.57)

3.2
accumulated phase variation
portion of *phase variation* (3.61) at any point in a *MOST network* (3.43) that is made up entirely of the *transferred jitter* (3.84) and *transferred wander* (3.85) from all previous *nodes* (3.57)

3.3
alignment jitter
AJ
jitter (3.31) that affects the reception of data by degrading the receiver eye with horizontal closure

2) See Annex A.

3) See Annex A.

3.4
anisochronous
DEPRECATED: asynchronous
qualifying a time-varying phenomenon, a timescale or a signal the consecutive significant instants of which are separated by time intervals which are not all constrained to have the same rated duration or to have rated durations equal to integral multiples of a unit duration

[SOURCE: IEC Electropedia, 702-04-15, modified — Note 1 to entry was deleted.]

3.5
average pulse width distortion
APWD
average deviation of the signal pulses from their ideal width

3.6
bit rate
BR
number of binary digits transferred per second

[SOURCE: IEC Electropedia, 704-16-07, modified — The term "binary digit rate" was deleted.]

3.7
bits per frame
BPF
number of bits in a *network frame* (3.54)

3.8
boundary descriptor
value that determines the amount of bandwidth allocated for *streaming data* (3.75) and *packet data* (3.60)

3.9
bypass
mechanism that forwards data from Rx to Tx, performing data recovery and clock recovery

3.10
channel
means of transmission of signals in one direction between two points

[SOURCE: IEC Electropedia, 701-02-01, modified — The term was originally "transmission channel" and Notes 1 and 2 to entry were deleted.]

3.11
channel frame
frame (3.26) that is transported on a *channel* (3.10)

3.12
connection label
CL
identifier for a *streaming connection* (3.74)

3.13
control channel
channel (3.10) that is used to transport *control data* (3.14)

3.14
control data
small data packets with low latency

3.15
control frame
frame (3.26) that transports *control data* (3.14)

3.16
critical unlock
CU
unlock (3.88) or series of unlocks that exceed a certain time

3.17
data-dependent jitter
DDJ
jitter (3.31) generated by changes in the transmitted data pattern

3.18
duplex
pertaining to a mode of operation in which information can be transmitted in both directions simultaneously between two points

[SOURCE: IEC Electropedia, 701-03-171, modified — The deprecated term "full duplex" was deleted.]

3.19
electrical wake-up line
external line that initiates a network wake-up event

3.20
electromagnetic compatibility
EMC
ability of equipment or a system to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment

[SOURCE: IEC Electropedia, 161-01-07]

3.21
electromagnetic interference
EMI
degradation of the performance of an equipment, transmission *channel* (3.10) or system caused by an electromagnetic disturbance

[SOURCE: IEC Electropedia, 161-01-06, modified — Notes 1 and 2 to entry were deleted.]

3.22
electronic control unit
ECU
unit adjustable by other than mechanical means (e.g. sensing unit), containing electronic components and controlling the output via electronic components

[SOURCE: IEC Electropedia, 442-04-22]

3.23
established MOST specification
documents that comply with MOST version 3V0, or 2V5

3.24
eye diagram
"eye-shaped" oscilloscope pattern obtained from the superposition of the signal waveforms from successive time intervals each allocated to one digit

Note 1 to entry: The eye diagram is used to indicate the amplitude and time margins available to decode the digital signal.

[SOURCE: IEC Electropedia, 723-10-75, modified — The term "eye pattern" was deleted and "the" was removed from the beginning of the definition.]

3.25
fall time
time interval between the instants at which the instantaneous value of a pulse again reaches a specified upper value and then a specified lower value

Note 1 to entry: Unless otherwise specified, the upper and lower values are fixed at 90 % and 10 % of the pulse magnitude.

[SOURCE: IEC Electropedia, 702-03-06, modified — The term "decay time" was deleted.]

3.26
frame
repetitive set of consecutive time-slots constituting a complete cycle of a signal or of another process in which the relative position of each time-slot in the cycle can be identified

[SOURCE: Electropedia, 704-14-01, modified — Notes 1 and 2 to entry were deleted.]

3.27
frequency reference
device, usually crystal controlled, that provides an accurate and low drift frequency standard for the *MOST network controller* (3.44) and *MOST network* (3.43) timing

3.28
Golden PLL
hardware or software entity that is used to recover the clock required to form an *eye diagram* (3.24)

3.29
isochronous
qualifying a time-varying phenomenon, a timescale, or a signal the consecutive significant instants of which are separated by time intervals that all have the same rated duration or have rated durations equal to integral multiples of a unit duration

[SOURCE: IEC Electropedia, 702-04-13, modified — The deprecated term "synchronous" was deleted and the Note 1 to entry was deleted.]

3.30
isochronous channel
channel (3.10) that is used to transport *isochronous* (3.29) data on the *network frame* (3.54)

3.31
jitter
set of short-term non-cumulative variations in the significant instants of a digital signal from their ideal positions in time

[SOURCE: IEC Electropedia, 704-16-13, modified — Notes 1 and 2 to entry were deleted.]

3.32
link
signal path between a sending *MOST network controller* (3.44) and a receiving MOST network controller

3.33
listen-only node
node (3.57) that does not change the content of *network frames* (3.54)

3.34
lock
reception of three consecutive PREAMBLEs that are aligned to the bit stream and occur at the correct bit location in the *network frame* (3.54)

3.35
lock flag
flag that the *TimingMaster* (3.81) sets when it reaches stable *lock* (3.34)

3.36
logical node address
address value for point-to-point transfers between *nodes* (3.57) that may be assigned independent of the node position

3.37
low-level retry
retransmission of the *channel frame* (3.11) after a certain waiting period

3.38
MOST50
MOST network (3.43) with a *bit rate* (3.6) of 50 Mbit/s

3.39
MOST150
MOST network (3.43) with a *bit rate* (3.6) of 150 Mbit/s

3.40
MOST component
hardware part of a *MOST device* (3.41)

Note 1 to entry: MOST components are, for example, EOC, OEC, MNC, and pigtail. A MOST component can consist of other MOST components.

3.41
MOST device
electronic control unit (3.22) that contains optical or electrical *MOST components* (3.40)

3.42
MOST module
MOST components (3.40) that consists of multiple MOST components

3.43
MOST network
communication network connecting *MOST devices* (3.41)

3.44
MOST network controller
MNC
MOST components (3.40) that performs routing and manages *MOST network* (3.43) resources

3.45
MOST network service
intermediate layer providing routines to simplify the handling of the *MOST network controller* (3.44)

3.46
MOST node
entity in the *MOST network* (3.43) with an assignable *logical node address* (3.36) and an implemented *MOST network service* (3.45) library

3.47
MOST output
output of the *MOST network controller* (3.44)

3.48
MOST port
MOST network controller's (3.44) connection point to the *MOST transceiver* (3.49)

3.49
MOST transceiver
transceiver for the *MOST network* (3.43)

3.50
multi-node device
MOST device (3.41) that contains more than one *node* (3.57)

3.51
NetInterface
communication section of the *TimingMaster* (3.81) or a *TimingSlave* (3.83)

3.52
network activity
presence of *valid MOST data* (3.89) at the input

3.53
network change event
NCE
event that indicates a change of the visible *nodes* (3.57) value

3.54
network frame
underlying *frame* (3.26) for all other frame types in the *MOST network* (3.43)

3.55
network frame rate
Fs
periodic repetition frequency of the *network frame* (3.54)

Note 1 to entry: The default sampling frequency and the network frame rate in a *MOST network* (3.43) are identical. Therefore, the abbreviation Fs is used.

3.56
network owner
entity that is responsible for the initial integrity of the network at design time

3.57
node
TimingMaster (3.81), *TimingSlave* (3.83), or *listen-only node* (3.33)

3.58
node position address
addresses that is based on the *node* (3.57) counter value

3.59
packet channel
channel (3.10) that is used to transport *packet data* (3.60)

3.60
packet data
anisochronous (3.4) data packets

3.61
phase variation
time deviation between the edges of a real signal and the edges of a *reference signal* (3.63)

3.62
probability density function
PDF
for the distribution function f of the argument *x*, derivative d*f*(*x*)/d*x*

[SOURCE: IEC Electropedia, 103-08-09, modified — The term "probability density" was deleted.]

3.63
reference signal
ideal signal formed according to the *reference time base* (3.64)

3.64
reference time base
network frame rate (3.55) as defined by the crystal oscillator of the *TimingMaster* (3.81)

3.65
remote-controlled node
TimingSlave (3.83) that is not required to implement the *MOST network service* (3.45)

3.66
rise time
interval of time between the instants at which the instantaneous value of a pulse first reaches a specified lower value and then a specified upper value

[SOURCE: IEC Electropedia, 702-03-05, modified — Note 1 to entry was deleted.]

3.67
segment
control frame (3.15) in a segmented transfer

3.68
serial data analyser
SDA
instrument used to perform industry standard *jitter* (3.31) and amplitude measurements and operations on a serial data stream

3.69
shutdown flag
flag that indicates an imminent shutdown

3.70
simplex
pertaining to a method of operation in which information can be transmitted in either direction, but not simultaneously, between two points

[SOURCE: IEC Electropedia, 701-03-161, modified — The deprecated term "half-duplex" was deleted.]

3.71
source address
logical node address (3.36) of the sender

3.72
source data
streaming data (3.75) and *packet data* (3.60)

3.73
specification point
SP[n]
interface that is a boundary between a transmitting and a receiving *MOST component* (3.40)

3.74
streaming connection
reserved bandwidth on the network identified by a *connection label* (3.12)

3.75
streaming data
content, such as audio or video data, which is transmitted *synchronously* (3.77) or *isochronously* (3.29)

3.76
sudden signal off
SSO
unexpected disappearance of *network activity* (3.52)

3.77
synchronous
qualifying two time-varying phenomena, time-scales, or signals characterized by corresponding significant instants which are separated by time intervals of a constant desired duration

Note 1 to entry: In practice, any variations of the time intervals are constrained within specified limits.

Note 2 to entry: Two phenomena, time-scales, or signals may be synchronous without being *isochronous* (3.29).

Note 3 to entry: For periodic phenomena, time-scales or signals, the corresponding significant instants occur at the same average rate.

[SOURCE: IEC Electropedia, 704-13-15]

3.78
synchronous channel
channel (3.10) that is used to transport *synchronous* (3.77) data on the *network frame* (3.54)

3.79
target address
node position address (3.58), logical address, or group address

3.80
telegram
single *control frame* (3.15)

3.81
TimingMaster
provider of the network clock

3.82
TimingMaster delay tolerance
T_{MDT}
maximum amount of propagation delay through the *MOST network* (3.43) that the *TimingMaster* (3.81) accepts without failure

3.83
TimingSlave
node (3.57) that obtains the network clock from the *MOST network* (3.43)

3.84
transferred jitter
TJ
jitter (3.31) that is propagated through the network

3.85
transferred wander
wander (3.90) that is propagated through the network

3.86
uncorrelated jitter
jitter (3.31) that is not correlated to any other *jitter* (3.31) source in the *MOST network* (3.43)

3.87
unit interval
UI
longest time interval such that the rated durations of the significant intervals of a signal are all whole multiple of the duration of this interval

[SOURCE: IEC Electropedia, 721-02-32, modified — The term "signal element" was deleted.]

3.88
unlock
failure to receive an aligned PREAMBLE at the correct bit location for two consecutive *frames* (3.26), once locked

3.89
valid MOST data
direct-current-adaptive-encoded data that meets defined *link* (3.32) quality parameters and *bit rate* (3.6) requirements

3.90
wander
long-term non-cumulative variations in the significant instants of a digital signal from their ideal positions in time

[SOURCE: IEC Electropedia, 704-16-14]

4 Symbols and abbreviated terms

4.1 Symbols

--- empty cell/undefined

4.2 Abbreviated terms

AJ	alignment jitter
AL	application layer
API	application programming interface
BR	bit rate
CL	connection label
CT	conformance test
CTC	conformance test case
CTP	conformance test plan
DLL	data link layer
DTCP	Digital Transmission Content Protection
ECU	electronic control unit
ePHY	electrical physical layer
FBlock	function block

Fs	network frame rate
HDCP	High-bandwidth Digital Content Protection
IUT	implementation under test
LSb	least significant bit
LT	lower tester
MNC	MOST network controller
MOST	Media Oriented Systems Transport
MSb	most significant bit
NCE	network change event
NL	network layer
oPHY	optical physical layer
PHY	physical layer
PL	presentation layer
PLL	phase locked loop
POF	plastic optical fibre
QoS	quality of service
REQ	requirement
SL	session layer
SSO	sudden signal off
STP	shielded twisted pair
TDM	time-division-multiplexing
TJ	transferred jitter
TL	transport layer
UT	upper tester
UTP	unshielded twisted pair

5 Access to MOST specification versions

5.1 General

The ISO standards maintenance portal provides references to the normative and supplemental MOST specifications. The documents listed in Annex A shall be applied for the selected MOST version. The documents listed in Annex B contain additional information for the selected MOST version. These documents comprise different MOST versions:

— MOST version 4V0 specifications are referenced by the ISO 21806 series. Under ISO conformance, deviations are managed between the manufacturers. The ISO 21806 series is technically equivalent.

— MOST version 3V1 specifications are referenced by the ISO 21806 series. Under ISO conformance, deviations are managed between the manufacturers. The ISO 21806 series is technically equivalent.

— MOST version 3V0 specifications are only referenced by this document. MOST version 3V0 implementations shall be in accordance with MOST Specification Rev. 3.0.0E2, 07/2010. The compliance test specifications in the MOST version 3V0 are used for conformance testing according to this document ("conformity according to ISO 21806-1, MOST version 3V0"). Under ISO conformance, deviations are managed between the manufacturers.

— MOST version 2V5 specifications are only referenced by this document. MOST version 2V5 implementations shall be in accordance with MOST Specification Rev. 2.5.0, 10/2006. The compliance test specifications in the MOST version 2V5 are used for conformance testing according to this document ("conformity according to ISO 21806-1, MOST version 2V5"). Under ISO conformance, deviations are managed between the manufacturers.

5.2 ISO standards maintenance portal

The ISO standards maintenance portal is accessible using this URL: https://standards.iso.org/iso/21806/-1/ed-1/en.

Figure 3 shows where the document, for example "Access_To_MOST_Versions_2019-07.pdf", is located. The "Access_To_MOST_Versions_2019-07.pdf" document contains hyperlinks to the content that is listed in Annex A and Annex B.

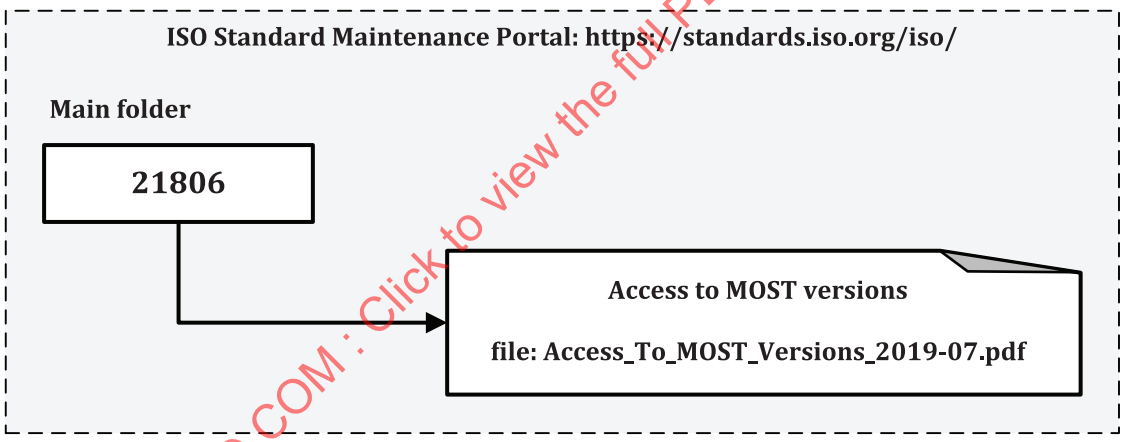

Figure 3 — Overview of directory structure

The "Access_To_MOST_Versions_2019-07.pdf" document filename is modified each time a newer version is available. The release date (year: 2019, month: July) is encoded in the filename.

EXAMPLE "Access_To_MOST_Versions_2020-01.pdf" is an example of a document released in January 2020.

5.3 MOST versions directory structure

Figure 4 illustrates the MOST versions directory structure as listed in Annex A and Annex B.

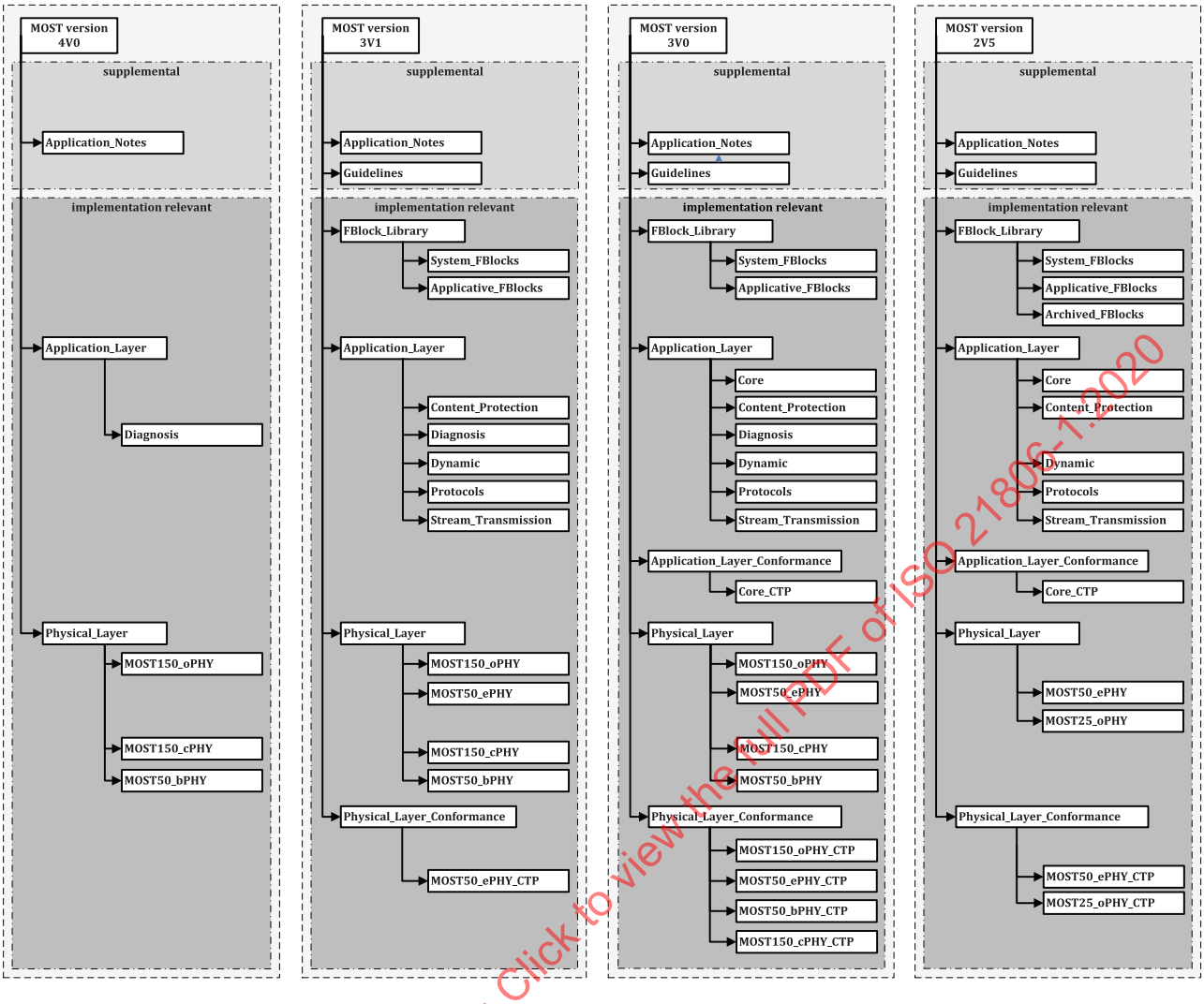

Figure 4 — MOST versions directory structure

The general directory structure consists of 1st and 2nd level. If a MOST version has no applicable specifications for a specific directory, then this directory is not shown.

Annex A
(normative)

List of implementation relevant documents

Attention is drawn to the possibility that some of the elements of the referenced documents in Table A.1 are the subject of patent rights. The holders of these patent rights have assured that they are willing to negotiate licenses under reasonable and non-discriminatory terms and conditions with applicants throughout the world.

Table A.1 specifies the list of MOST versions documents that are implementation relevant. Various MOST specifications are applicable for more than one MOST version.

Table A.1 — List of implementation relevant documents

MOST				1st-level folder	2nd-level folder	MOST document title	ZIP archive	Contained files
4V0	3V1	3V0	2V5					
---	X	---	---	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock ConnectionMaster Rev. 3.1.0, 12/2016	FBlock_Connection Master_3V1-0.zip	MOST_FBlock_ConnectionMaster_3V1.pdf MOST_FBlock_ConnectionMaster_3V1.xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock ConnectionMaster Rev. 3.0.2, 03/2011	FBlock_Connection Master_3V0-2.zip	FunctionBlock ConnectionMaster_3V0-2.pdf FunctionBlock ConnectionMaster_3V0-2.xml fcat.dtd
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock ConnectionMaster – Speed Grade MOST25 Rev. 2.5.1, 10/2007	FBlock_Connection Master_oPhy25_ 2V5-1.zip	MOST25 FunctionBlock ConnectionMaster_Rev2_5_1.pdf MOST25_ConnectionMaster_2_5_1.xml fcat.dtd
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock ConnectionMaster – Speed Grade MOST50 Rev. 2.5.1, 10/2007	FBlock_Connection Master_ePhy50_ 2V5-1.zip	MOST50 FunctionBlock ConnectionMaster_Rev2_5_1.pdf MOST50_ConnectionMaster_2_5_1.xml fcat.dtd
---	X	---	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock NetBlock Rev. 3.1.0, 01/2017	FBlock_NetBlock_ 3V1-0.zip	MOST_FBlock_NetBlock_3V1.pdf MOST_FBlock_NetBlock_3V1.xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock NetBlock Rev. 3.0.4, 02/2017	FBlock_NetBlock_ 3V0-4.zip	MOST_FBlock_NetBlock_3V0-4.pdf MOST_FBlock_NetBlock_3V0-4.xml fcat.dtd
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock NetBlock – Speed Grade MOST25 Rev. 2.5.1, 10/2007	FBlock_NetBlock_ oPhy25_2V5-1.zip	MOST25 FunctionBlock NetBlock_ Rev2_5_1.pdf MOST25_NetBlock_2_5_1.xml fcat.dtd
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock NetBlock – Speed Grade MOST50 Rev. 2.5.1, 10/2007	FBlock_NetBlock_ ePhy50_2V5-1.zip	MOST50 FunctionBlock NetBlock_ Rev2_5_1.pdf MOST50_NetBlock_2_5_1.xml fcat.dtd
---	X	---	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock NetworkMaster Rev. 3.1.0, 12/2016	FBlock_Network Master_3V1-0.zip	MOST_FBlock_NetworkMaster_3V1.pdf MOST_FBlock_NetworkMaster_3V1.xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock NetworkMaster Rev. 3.0.2, 03/2011	FBlock_Network Master_3V0-2.zip	FunctionBlock NetworkMaster_3V0-2.pdf FunctionBlock NetworkMaster_3V0-2.xml fcat.dtd
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock NetworkMaster – Speed Grade MOST25 Rev. 2.5.1, 10/2007	FBlock_NetworkMaster_ oPhy25_2V5-1.zip	MOST25 FunctionBlock NetworkMaster_Rev2_5_1.pdf MOST25_NetworkMaster_2_5_1.xml fcat.dtd

Table A.1 *(continued)*

MOST				1st-level folder	2nd-level folder	MOST document title	ZIP archive	Contained files
4V0	3V1	3V0	2V5					
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FunctionBlock NetworkMaster – Speed Grade MOST50 Rev. 2.5.1, 10/2007	FBlock_NetworkMaster_ ePhy50_2V5-1.zip	MOST50 FunctionBlock NetworkMaster_Rev2_5_1.pdf MOST50_NetworkMaster_2_5_1.xml fcat.dtd
---	X	---	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock EnhancedTestability Rev. 3.1.0, 02/2017	FBlock_Enhanced Testability_3V1-0.zip	MOST_FBlock_EnhancedTestability_3V1. pdf MOST_FBlock_EnhancedTestability_3V1. xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock EnhancedTestability Rev. 3.0.4, 02/2017	FBlock_Enhanced Testability_3V0-4.zip	MOST_FBlock_EnhancedTestability_ 3V0-4.pdf MOST_FBlock_EnhancedTestability_ 3V0-4.xml fcat.dtd
---	---	---	X	FBlock_ Library	1_System_ FBlocks	MOST FBlock EnhancedTestability Rev. 2.6.2, 10/2014	FBlock_Enhanced Testability_2V6-2.zip	MOST_FBlock_EnhancedTestability_ 2V6-2.pdf MOST_FBlock_EnhancedTestability_ 2V6-2.xml fcat.dtd
---	X	---	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock DebugMessages Rev. 3.1.0, 12/2016	FBlock_Debug Messages_3V1-0.zip	MOST_FBlock_DebugMessages_3V1.pdf MOST_FBlock_DebugMessages_3V1.xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock DebugMessages Rev. 1.0.1, 07/2010	FBlock_Debug Messages_1V0-1.zip	MOST FBlock DebugMessages_1V0-1.pdf MOST FBlock DebugMessages_1V0-1.xml fcat.dtd
---	---	X	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock Diagnosis Rev. 3.0.2, 05/2012	FBlock_Diagnosis_ 3V0-2.zip	MOST_FBlock_Diagnosis_3V0-2.pdf MOST_FBlock_Diagnosis_3V0-2.xml fcat.dtd
---	X	---	---	FBlock_ Library	1_System_ FBlocks	MOST FBlock ExtendedNetwork Control Rev. 3.1.0, 12/2016	FBlock_Extended NetworkControl_ 3V1-0.zip	MOST_FBlock_ExtendedNetworkControl_ 3V1.pdf MOST_FBlock_ExtendedNetworkControl_ 3V1.xmlmostfcat_3_1_0.xsd
---	X	---	---	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock Template GeneralFBlock Rev. 3.1.1, 01/2018	FBlock_Template_ GeneralFBlock_ 3V1-1.zip	MOST_Template_GeneralFBlock_3V1-1.pdf MOST_Template_GeneralFBlock_3V1-1. xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock Template GeneralFBlock Rev. 3.0.7, 01/2018	FBlock_Template_ GeneralFBlock_ 3V0-7.zip	MOST_Template_GeneralFBlock_3V0-7.pdf MOST_Template_GeneralFBlock_3V0-7. xml fcat.dtd
---	---	---	X	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock Template – Speed Grade MOST25 GeneralFBlock Rev. 2.5.1, 10/2007	FBlock_Template_ GeneralFBlock_ oPhy25_2V5-1.zip	MOST25 FunctionBlock GeneralFBlock_ Rev2_5_1.pdf MOST25_GeneralFBlock_2_5_1.xml fcat.dtd
---	---	---	X	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock Template – Speed Grade MOST50 GeneralFBlock Rev. 2.5.1, 10/2007	FBlock_Template_ GeneralFBlock_ ePhy50_2V5-1.zip	MOST50 FunctionBlock GeneralFBlock_ Rev2_5_1.pdf MOST50_GeneralFBlock_2_5_1.xml fcat.dtd
---	---	X	X	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FunctionBlock AmFmTuner Rev. 2.4.2, 09/2003	FBlock_AmFmTuner_ 2V4-2.zip	MOST FunctionBlock AmFmTuner.pdf AmFmTuner.xml fcat.dtd
---	---	X	X	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FunctionBlock Audioamplifier Rev. 2.4.3, 07/2011	FBlock_AudioAmplifier_ 2V4-3.zip	FunctionBlock AudioAmplifier_2V4-3.pdf FunctionBlock AudioAmplifier_2V4-3.xml fcat.dtd
---	---	X	X	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock AuxIn Rev. 3.5.2, 02/2013	FBlock_AuxIn_ 3V5-2.zip	MOST_FBlock_AuxIn_3V5-2.pdf MOST_FBlock_AuxIn_3V5-2.xml fcat.dtd
---	---	X	X	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock DABTuner Rev. 4.0.1, 11/2011	FBlock_DABTuner_ 4V0-1.zip	MOST_FBlock_DABTuner_4V0-1.pdf MOST_FBlock_DABTuner_4V0-1.xml fcat.dtd
---	---	X	---	FBlock_ Library	2_Ap- plicative_ FBlocks	MOST FBlock DVDVideoPlayer Rev. 3.0.2, 12/2012	FBlock_DVDVideo Player_3V0-2.zip	MOST_FBlock_DVDVideoPlayer_3V0-2.pdf MOST_FBlock_DVDVideoPlayer_3V0-2.xml fcat.dtd

Table A.1 *(continued)*

MOST				1st-level folder	2nd-level folder	MOST document title	ZIP archive	Contained files
4V0	3V1	3V0	2V5					
---	---	X	X	FBlock_Library	2_Applicative_FBlocks	MOST FBlock GeneralPhoneBook Rev. 2.3.3, 12/2011	FBlock_GeneralPhoneBook_2V3-3.zip	MOST_FBlock_GeneralPhoneBook_2V3-3.pdf MOST_FBlock_GeneralPhoneBook_2V3-3.xml fcat.dtd
---	X	---	---	FBlock_Library	2_Applicative_FBlocks	MOST FBlock HDCP Rev. 3.1.1, 01/2018	FBlock_HDCP_3V1-1.zip	MOST_FBlock_HDCP_3V1.pdf MOST_FBlock_HDCP_3V1.xml mostfcat_3_1_0.xsd
---	---	X	---	FBlock_Library	2_Applicative_FBlocks	MOST FBlock HDCP Rev. 1.0.1, 01/2018	FBlock_HDCP_1V0-1.zip	MOST_FBlock_HDCP_1V0-1.pdf MOST_FBlock_HDCP_1V0-1.xml fcat.dtd
---	X	---	---	FBlock_Library	2_Applicative_FBlocks	MOST FBlock DTCP Rev. 3.1.0, 02/2016	FBlock_DTCP_3V1-0.zip	MOST_FBlock_DTCP_3V1.pdf MOST_FBlock_DTCP_3V1.xml mostfcat_3_1_0.xsd
---	---	X	X	FBlock_Library	2_Applicative_FBlocks	MOST FunctionBlock SDARS Rev. 2.4.0, 06/2004	FBlock_SDARS_2V4-0.zip	MOST FunctionBlock SDARS.pdf SDARS.xml fcat.dtd
---	---	X	X	FBlock_Library	2_Applicative_FBlocks	MOST FunctionBlock TMCTuner Rev. 2.3.1, 09/2003	FBlock_TMCTuner_2V3-1.zip	MOST FunctionBlock TMCTuner.pdf TMCTuner_2_3_1.xml fcat.dtd
---	---	X	X	FBlock_Library	2_Applicative_FBlocks	MOST FunctionBlock Tool Rev. 1.0.0, 06/2007	FBlock_Tool_1V0-0.zip	MOST FunctionBlock Tool_Rev1.0.0.pdf Tool.xml fcat.dtd
---	---	X	X	FBlock_Library	2_Applicative_FBlocks	MOST FBlock TVTuner Rev. 2.3.3, 12/2011	FBlock_TVTuner_2V3-3.zip	MOST_FBlock_TVTuner_2V3-3.pdf MOST_FBlock_TVTuner_2V3-3.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock AudioDiskPlayer Rev. 2.4.0, 09/2003	FBlock_AudioDiskPlayer_2V4-0.zip	MOST FunctionBlock AudioDiskPlayer.pdf AudioDiskPlayer_2_4.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock AudioTapePlayer Rev. 2.3.1, 09/2003	FBlock_AudioTapePlayer_2V3-1.zip	MOST FunctionBlock AudioTapePlayer.pdf AudioTapePlayer_2_3_1.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock DVDVideoPlayer Rev. 2.4.1, 09/2003	FBlock_DVDVideoPlayer_2V4-1.zip	MOST FunctionBlock DVDVideoPlayer.pdf DVDVideoPlayer_2_4_1.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FBlock Template GeneralPlayer Rev. 2.5.1, 10/2007	FBlock_GeneralPlayer_2V5-1.zip	MOST FunctionBlock GeneralPlayer_Rev2_5_1.pdf GeneralPlayer_2_5_1.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock GraphicDisplay Rev. 2.3.0, 09/2003	FBlock_GraphicDisplay_2V3-0.zip	MOST FunctionBlock GraphicDisplay.pdf GraphicDisplay.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock MicrophoneInput Rev. 2.3.1, 09/2003	FBlock_MicrophoneInput_2V3-1.zip	MOST FunctionBlock MicrophoneInput.pdf MicrophoneInput_2_3_1.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock Telephone Rev. 2.3.2, 09/2003	FBlock_Telephone_2V3-2.zip	MOST FunctionBlock Telephone.pdf Telephone_2_3_2.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	MOST FunctionBlock UniqueFunctions Rev. 2.3.0, 09/2003	FBlock_UniqueFunctions_2V3-0.zip	MOST FunctionBlock UniqueFunctions.pdf UniqueFunctions_2_3.xml fcat.dtd
---	---	---	X	FBlock_Library	3_Archived_FBlocks	Specification for Function Block Vehicle Rev. 1.6.0, 09/2002	FBlock_Vehicle_1V6-0.zip	MOSTFBlock_Vehicle.pdf
---	---	X	---	Application	1_Core	MOST Specification Rev. 3.0.0E2, 07/2010	Specification_3V0-0.zip	MOSTSpecification_3V0E2.pdf
---	---	---	X	Application	1_Core	MOST Specification Rev. 2.5.0, 10/2006	Specification_2V5-0.zip	MOSTSpecification.pdf

Table A.1 *(continued)*

MOST 4V0	MOST 3V1	MOST 3V0	MOST 2V5	1st-level folder	2nd-level folder	MOST document title	ZIP archive	Contained files
	X	X	X	Application	2_ Content_ Protection	MOST Content Security Rev. 1.3.0, 06/2015	ContentSecurity_ 1V3-0.zip	MOST_ContentSecurity_1V3.pdf
			X	Application	2_ Content_ Protection	MOST Content Protection Scheme DTCP Rev. 2.2.0, 03/2007	Scheme_DTCP_ Implementation_ 2V2-0.zip	MOST_ContentProtectionScheme_DTCP_ Implementation.pdf
	X	X		Application	2_ Content_ Protection	MOST Content Protection Scheme DTCP Rev. 3.0.2, 03/2013	Scheme_DTCP_ Implementation_ 3V0-2.zip	MOST_ContentProtectionScheme_DTCP_ Implementation_3V0-2.pdf
	X	X		Application	2_ Content_ Protection	MOST Content Protection Scheme HDCP Rev.1.2; 03/2018	Scheme_HDCP_ Implementation_ 1V2-0.zip	MOST_ContentProtectionScheme_HDCP_ Implementation_1V2.pdf
		X		Application	3_ Diagnosis	MOST Diagnostic Protocols Adaptation Specification Rev. 1.0.0, 11/2008	Diagnostic_Protocols_ Adaptation_1V0-0.zip	Diagnostic_Protocols_Adaptation_1V0.pdf
	X			Application	3_ Diagnosis	MOST Diagnostic Protocols Adaptation Spec. Rev. 3.1.0, 06/2016	Diagnostic_Protocols_ Adaptation_3V1-0.zip	Diagnostic_Protocols_Adaptation_3V1.pdf
X	X	X		Application	3_ Diagnosis	MOST Electrical Control Line Specification Rev. 1.1.1, 11/2011	Electrical_Control_ Line_1V1-1.zip	Electrical_Control_Line_1V1-1.pdf ERRATA_ Electrical_Control_Line_1V1.pdf
		X		Application	3_ Diagnosis	Evaluation of diagnostic Information by a central component Rev. 1.0.0, 09/2009	Evaluation_Of_ Diagnostic_ Information_1V0-0.zip	Evaluation_Of_Diagnostic_Information_ 1V0.pdf
X	X	X		Application	3_ Diagnosis	MOST150 cPHY Duplex Network Diagnosis Rev. 3.0, 07/2017	MOST150_cPHY_ Duplex_Network_ Diagnosis_3V0.zip	MOST150_cPHY_Duplex_Network_ Diagnosis_3V0.pdf
X	X	X		Application	3_ Diagnosis	MOST50 bPHY Half-Duplex Network Diagnosis Rev .3.1, 10/2018	MOST50_bPHY_ Half-Duplex_Network_ Diagnosis_3V1.zip	MOST50_bPHY_Half-Duplex _Network_Diagnosis_3V1.pdf
	X			Application	4_ Dynamic	MOST Dynamic Specification Rev. 3.1.0 07/2017	Dynamic_Specification_ 3V1-0.zip	MOST_Dynamic_Specification_3V1.pdf
		X		Application	4_ Dynamic	MOST Dynamic Specification Rev. 3.0.2, 10/2012	Dynamic_Specification_ 3V0-2.zip	MOST_Dynamic_Specification_3V0-2.pdf
			X	Application	4_ Dynamic	MOST Dynamic Specification Rev. 1.3.0, 12/2006	Dynamic_Specification_ 1V3-0.zip	MOST_Dynamic_Specification.pdf
	X	X	X	Application	5_ Protocols	MOST High Protocol Specification Rev. 2.3.1, 05/2011	High_Protocol_ Specification_2V3-1.zip	MOSTHighProtocolSpecification_2V3-1. pdf MOST_High_Protocol_2V3-1_ERRATA1.pdf
		X	X	Application	5_ Protocols	MAMAC Specification Rev. 1.1.0, 12/2003	Asynchronous_Medium_ Access_Control_ Specification_1V1-0.zip	MAMACSpecification.pdf
	X			Application	6_Stream_ Transmis-sion	MOST Specification for Stream Transmission Rev. 3.1.1, 03/2018	Stream_Transmission_ Specification_3V1-1.zip	MOST_Stream_Transmission_3V1-1.pdf
		X		Application	6_Stream_ Transmis-sion	MOST Specification for Stream Transmission Rev. 3.0.5, 03/2018	Stream_Transmission_ Specification_3V0-5.zip	MOST_Stream_Transmission_3V0-5.pdf
		X		Application	6_Stream_ Transmis-sion	MOST Specification for Stream Transmission MOST50_Adaptation Rev. 3.0.0, 07/2010	Stream_Transmission_ Specification_MOST50_ Adaptation_3V0-0.zip	MOST_Stream_Transmission_MOST50_ Adaptation_3V0.pdf
			X	Application	6_Stream_ Transmis-sion	MOST Specification for Stream Transmission Rev. 1.3.1, 12/2007	Stream_Transmission_ Specification_1V3-1.zip	MOST_Stream_Transmission_Rev1_3_1.pdf

Table A.1 *(continued)*

MOST				1st-level folder	2nd-level folder	MOST document title	ZIP archive	Contained files
4V0	3V1	3V0	2V5					
		X		Application_Conformance	1_Core_CTP	MOST Core Compliance Test Specification Rev. 3.0.0, 11/2010	Application_Conformance_Test_Specification_3V0-0.zip	MOST_Core_Compliance_Test_Spec_3V0E7.pdf
			X	Application_Conformance	1_Core_CTP	MOST Core Compliance Test Specification Rev. 1.3.1, 09/2010	Application_Conformance_Test_Specification_1V3-1.zip	MOST_Core_Compliance_Test_Specification_1V3-01.pdf ERRATA_MOST_Core_Compliance_Test_Specification_1.3.8.pdf
		X	X	Application_Conformance	1_Core_CTP	MOST Extended Core Compliance Test Specification: MOSTHigh Rev. 1.0.3, 07/2014	Application_Conformance_Test_Specification_High_Protocol_1V0-3.zip	MOST_Extended_Core_Compliance_Test_Specification_MHP_1V0-03E1.pdf
		X		Application_Conformance	1_Core_CTP	MOST Extended Core Compliance Test Specification: Electrical Control Line Rev. 1.1.0, 03/2013	Application_Conformance_Test_Specification_Electrical_Control_Line_1V1-0.zip	MOST_Extended_Core_Compliance_Test_Specification_ECL_1V1.pdf
		X		Physical_Layer	1_MOST150_oPHY	MOST150 oPhy Specification Rev. 1.1.0	MOST150_oPhy_Specification_1V1-0.zip	MOST_Phy_Basic_Spec_1V0.pdf MOST150_oPhy_Sub_Spec_1V1.pdf (10/2011) MOST150_oPhy_Sub_Spec_1V1_Errata2.pdf (12/2012) - MOST150_FO-Transceiver_SMD_AV2.pdf (Drawing date: 20. Dec. 2007 / 29. June 2011) - MOST150_FO-Transceiver_THM_AV2.pdf (Drawing date: 22. Sep. 2007 / 06. Feb. 2009) MOST150_oPhy_Sub_Spec_1V1_AddendumA150.pdf (10/2011) MOST150_oPhy_Sub_Spec_1V1_AddendumB150.pdf (07/2012) - MOST-CON-2-0-SMALL-00.TIF (07/2012) - MOST150_Small_Form_FO-Tranceiver_SMD_7Pin.TIF (07/2012) MOST150_oPhy_Sub_Spec_1V1_AddendumC150.pdf (01/2014) MOST150_FO-Transceiver_THM180deg_AV1.pdf (Drawing date: Dec. 2013) MOST150_oPhy_Sub_Spec_1V1_AddendumD150.pdf (04/2013) MOST150_FOTranceiver_SMD_90deg_AV1.tif (Drawing date: 14. March 2014) ref. MOST Spec of Physical Layer rev.1.1_Add_C_Connector Drawings.zip (05/2007) - MOST-CON-2-0.tif - MOST-CON-2-20-AD-C.tif - MOST-CON-2-4-AD-C.tif - MOST-CON-2_12-AD-C.tif - MOST-CON-4-40.tif - MOST-CON-T.tif - MOST-FM-C.TIF - MOST-FM-I.tif - 114-18063V1.c.tif /*MOST Physical Layer Rev.1.1_AddendumD.pdf (07/2010) */ MOST-FM-C.TIF (Drawing Date: 25. June 2009) - readme.txt - MOST150_Stress_Pattern_1V0.pat MOST_Physical_Media_Dependent_Sublayer_Specification_3V1.pdf