

DIN EN 16603-50-53:2015-05 (E)

Space engineering - SpaceWire - CCSDS packet transfer protocol; English version
EN 16603-50-53:2015

Foreword	4
1 Scope	5
2 Normative references	6
3 Terms, definitions and abbreviated terms	7
3.1 Terms defined in other standards	7
3.2 Terms specific to the present standard	7
3.3 Abbreviated terms.....	7
3.4 Conventions.....	7
4 Principles	8
4.1 Purpose	8
4.2 Protocol features	8
4.3 Services.....	9
4.4 Guide to this document.....	10
5 Requirements	11
5.1 Service parameters.....	11
5.1.1 CCSDS packet.....	11
5.1.2 Packet length	11
5.1.3 Status code	11
5.1.4 Target SpaceWire Address	11
5.1.5 Target Logical Address	12
5.1.6 User Application Value.....	12
5.2 Service primitives.....	12
5.2.1 CCSDS Packet Transfer Service.....	12
5.2.2 CCSDS_PACKET_SEND.request.....	12
5.2.3 CCSDS_PACKET_RECEIVED.indication	13
5.3 CCSDS Packet Transfer Protocol fields.....	14
5.3.1 Target SpaceWire Address field.....	14
5.3.2 Target Logical Address field.....	14
5.3.3 Protocol Identifier field.....	14

5.3.4	Reserved field	14
5.3.5	User Application field	14
5.3.6	Packet field	15
5.4	CCSDS Packet Transfer Protocol format	15
5.5	CCSDS Packet Transfer Protocol Action	16
5.5.1	Overview	16
5.5.2	Send request.....	16
5.5.3	Transfer packet.....	17
5.5.4	Receive indication	17
Annex A (informative) Managed parameters		19
Bibliography.....		20
Figures		
Figure 4-1:	Protocol configuration.....	8
Figure 5-1:	Encapsulated CCSDS Packet format	15
Figure 5-2:	CCSDS Packet Transfer Protocol Packet Transfer.....	16