

ISO 20794-3:2020-02 (E)

Road vehicles - Clock extension peripheral interface (CXPI) - Part 3: Transport and network layer

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	2
4.1 Symbols	2
4.2 Abbreviated terms	2
5 Conventions	3
6 Overview of transport layer and network layer	3
6.1 Properties	3
6.2 Packet types	3
6.3 Error detection and indication	3
7 Service interface parameters (SIP)	3
7.1 SIP — General	3
7.2 SIP — Data type definitions	4
7.3 SIP — TA, target address	4
7.4 SIP — SA, source address	4
7.5 SIP — Ptype, packet type	4
7.6 SIP — ReqId, request identifier	4
7.7 SIP — ReqTypeId, request type identifier	5
7.8 SIP — PDU, protocol data unit	5
7.9 SIP — Length, length of PDU	5
7.10 SIP — NMInfo, network management information	5
7.11 SIP — SCT, sequence count	5
7.12 SIP — Result, result	6
8 Transport layer (TL)	6
8.1 SI — T_Data.req and T_Data.ind service interface	6
8.2 SI — T_Data.req and T_Data.ind service interface parameter mapping	7
8.3 TL — Service interface with T_Ptype parameter mapping	8
8.3.1 TL — T_Data.req and T_Data.ind with T_Ptype = NormalCom (T_Length = NULL)	8
8.3.2 TL — T_Data.req and T_Data.ind with T_Ptype = NormalCom (T_Length ≥ '0')	9
8.3.3 TL — T_Data.req and T_Data.ind interface with T_Ptype = DiagNodeCfg	10
8.4 TL — Internal operation	11
8.5 TL — T_PDU	11
8.5.1 TL — T_PDU definition	11
8.5.2 TL — T_PCI definition	11
8.6 TL — Function models	12
8.6.1 TL — Transmission logic	12
8.6.2 TL — Reception logic	13
8.7 TL — Error detection	14
9 Network layer (NL)	14
9.1 SI — N_Data.req and N_Data.ind service interface	14
9.2 SI — N_Data.req and N_Data.ind service interface parameter mapping	15
9.3 NL — Service interface with N_Ptype parameter mapping	16

9.3.1	NL — N_Data.req and N_Data.ind with N_Ptype = NormalCom (N_Length = NULL).....	16
9.3.2	TL — N_Data.req and N_Data.ind with N_Ptype = NormalCom (N_Length ≥ '0')..	17
9.3.3	NL — N_Data.req and N_Data.ind interface with N_Ptype = DiagNodeCfg.....	18
9.4	NL — Internal operation	19
9.5	NL — N_PDU	19
9.5.1	NL — N_PDU definition.....	19
9.5.2	NL — N_NAD definition	19
9.6	NL — Function models.....	20
9.6.1	NL — Transmission logic.....	20
9.6.2	NL — Reception logic.....	20
9.7	NL — Timing definition.....	21
9.7.1	NL — General.....	21
9.7.2	NL — Timing constraints	21
9.7.3	NL — Timing parameters.....	22
9.8	NL — Error detection.....	22
Bibliography		23