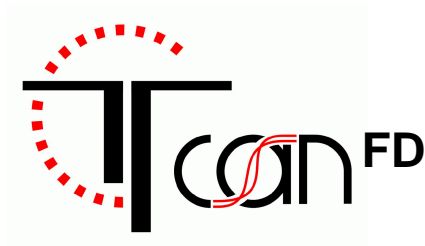


M_TTCAN

Controller Area Network

Support of optional ISO 11898-1 Features

04.04.2016



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Revision History

Revision	Date	Changes
REL20150123	23.01.2015	Initial version.
REL20150824	24.08.2015	M_TTCAN Release Overview updated.
REL20160324	24.03.2016	References to ISO updated.
REL20160404	04.04.2016	Document restructured.

M_TTCAN Release Overview

Release	CREL	Date of Delivery	M_TTCAN Spec	Remark
0.9.0	090 0 09 27	27.09.2010	v1.00	first release
1.0.0	100 0 12 20	20.12.2010	v1.01	implementation complete
1.0.1	101 1 03 14	14.03.2011	v1.02	release for MDG1 RC1, conformance tested
2.0.0	200 2 03 21	21.03.2012	v2.00	release with CAN FD8 support and CU interface, conformance tested
3.0.0	300 3 02 28	28.02.2013	v3.0.2	release with CAN FD64 support, conformance tested
3.0.1	301 3 05 08	17.05.2013	v3.0.2	bug-fix release
3.1.0	310 4 07 31	31.07.2014	v3.1.0	update to ISO/CD11898-1, Tx handling optimized, known errata fixed, conformance tested
3.2.0	320 4 12 19	19.12.2014	v3.2.0	CAN FD frame format updated, known errata fixed
3.2.1	321 5 03 23	25.03.2015	v3.2.1	bug-fix release, conformance tested

The release implemented in a specific device can be identified by reading out the Core Release Register **CREL** on module address 0x000. For details about the coding of the Core Release Register see the M_TTCAN User's Manual.

M_TTCAN support of ISO 11898-1:2015 Non-mandatory Implementation Features

No	Non-mandatory Feature according to ISO 11898-1:2015, Table A.2	Remark	Rev.
1	FD frame format	Classical CAN and CAN FD frame format supported	R3.2.0 or later
2	Disabling of frame formats	Disabling of FD format (Classical CAN only) supported, FD only operation not supported	all revisions
3	Limited LLC frames	All base/extended IDs and data fields with up to 64 byte supported	R3.0.0 or later
4	No transmission of frames including padding bytes	In case the data length code DLC of a Tx Buffer element is configured to a value equal or lower than the configured Tx Buffer data field size TXESC.TBDS, no padding bytes are inserted	not supported
5	LLC abort interface	Transmit cancellation supported	all revisions
6	ESI and BRS bit values		R2.0.0 or later
7	Method to provide MAC data consistency	Switch to restricted operation mode on Message RAM error or Message RAM access failure	all revisions
8	Time and time triggering		all revisions
9	Time stamping	16-bit internal/external time stamp	all revisions
10	Bus monitoring mode		all revisions
11	Handle	Supported by Message Marker	all revisions
12	Restricted operation		all revisions
13	Separate prescalers for nominal bits and for data bits		R2.0.0 or later
14	Disabling of automatic retransmission		all revisions
15	Max number of retransmissions	Not configurable	not supported
16	Disabling of protocol exception event on res bit detected recessive		R3.1.0 or later
17	PCS_Status	Module-internal interface, needed for feature #20	all revisions
18	Edge filtering during the bus integration state		R3.1.0 or later
19	Time resolution for SSP placement	Full time resolution for SSP placement implemented	R3.0.0 or later
20	FD_T/R message	Signalled by m_can_rxfd and m_can_txfd	R2.0.0 or later

Table 1: M_TTCAN ISO 11898-1:2015 non-mandatory implementation features support