

ISO 14229-7:2015-02 (E)

Road vehicles - Unified diagnostic services (UDS) - Part 7: UDS on local interconnect network (UDSonLIN)

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms, definitions, symbols, and abbreviated terms	2
3.1	Terms and definitions	2
3.2	Symbols and abbreviated terms	2
4	Conventions	2
5	Document overview	2
6	UDSonLIN implementation requirements	4
6.1	General	4
6.2	Definition of diagnostic classes	4
6.2.1	Overview	4
6.2.2	Diagnostic class I	4
6.2.3	Diagnostic class II	4
6.2.4	Diagnostic class III	4
6.3	LIN node requirements	5
6.3.1	Master node requirements	5
6.3.2	Slave node requirements	5
6.4	Signal-based diagnostics	5
6.4.1	Slave implementation	5
6.4.2	Master implementation	6
6.5	Tool suite support	6
7	Unified diagnostic services implementation on LIN	6
7.1	UDSonLIN services overview	6
7.2	Diagnostic and communication control functional unit	7
7.2.1	CommunicationControl (0x28) service	7
7.2.2	ResponseOnEvent (0x86) service	8
8	Application layer requirements	8
8.1	Application layer services	8
8.2	Application layer protocol	8
8.3	Application layer timing	8
8.3.1	General	8
8.3.2	Application layer timing parameter values	9
9	Presentation layer requirements	11
10	Session layer requirements	11
11	Transport/network layer interface adaptation	11
11.1	General information	11
11.2	LIN transport/network layer interface adaptation	11

11.2.1	Mapping of data link independent service primitives onto LIN data link dependent service primitives	11
11.2.2	Mapping of T_PDU onto N_PDU for message transmission	11
12	Network layer diagnostic implementation requirements	12
12.1	LIN slave node network layer requirements	12
12.2	LIN master node network layer requirements	13
12.2.1	Network address requirements	13
12.2.2	Use of functional addressing	13
13	Data link layer diagnostic implementation requirements	13
	Bibliography	14