

# ISO 17987-3:2016-08 (E)

## Road vehicles - Local Interconnect Network (LIN) - Part 3: Protocol specification

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms, definitions, symbols and abbreviated terms .....</b>	<b>1</b>
3.1	Terms and definitions .....	1
3.2	Symbols .....	4
3.3	Abbreviated terms .....	4
<b>4</b>	<b>Node concept .....</b>	<b>5</b>
4.1	General .....	5
4.2	Concept of operation .....	6
4.2.1	Master and slave .....	6
4.2.2	Frames .....	6
4.2.3	Data transport .....	7
<b>5</b>	<b>Protocol requirements .....</b>	<b>7</b>
5.1	Signal .....	7
5.1.1	Management .....	7
5.1.2	Types .....	7
5.1.3	Consistency .....	7
5.1.4	Packing .....	7
5.1.5	Reception and transmission .....	8
5.2	Frame .....	9
5.2.1	Transfer .....	9
5.2.2	Structure .....	9
5.2.3	Frame length .....	13
5.2.4	Frame types .....	14
5.3	Schedule tables .....	19
5.3.1	General .....	19
5.3.2	Time definitions .....	19
5.3.3	Frame slot .....	19
5.3.4	Schedule table handling .....	20
5.4	Task behaviour model .....	20
5.4.1	General .....	20
5.4.2	Master task state machine .....	20
5.4.3	Slave task state machine .....	21
5.5	Status management .....	23
5.5.1	General .....	23
5.5.2	Concept .....	23
5.5.3	Event-triggered frames .....	23
5.5.4	Reporting to the cluster .....	23
5.5.5	Reporting within own node .....	24
<b>6</b>	<b>Node configuration and identification .....</b>	<b>24</b>
6.1	General .....	24
6.2	LIN product identification .....	25
6.2.1	Supplier ID, function ID and variant ID .....	25

6.2.2	Serial number .....	25
6.2.3	Wildcards .....	25
6.3	Slave node model .....	25
6.3.1	Memory model .....	25
6.3.2	Slave node configuration variants .....	26
6.3.3	Initial node address .....	27
6.3.4	PDU structure .....	27
6.3.5	Node configuration handling .....	29
6.3.6	Node configuration services .....	29
Annex A (normative) Definition of properties, frame identifiers and various examples .....		35
Annex B (informative) LIN history and version compatibility .....		39
Annex C (informative) LIN auto addressing methods .....		43
Bibliography .....		44