

ISO 17987-1:2025-05 (E)

Road vehicles - Local Interconnect Network (LIN) - Part 1: General information and use case definition

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	2
5	Conventions	2
6	Use case overview and principles	3
6.1	Basic principles for use case definition	3
6.2	Use case clusters	3
7	LIN communication system use case definition	3
7.1	UC 1 Commander task cluster	3
7.1.1	UC 1.1 Generate LIN frame header	3
7.2	UC 2 Responder task cluster	4
7.2.1	UC 2.1 Break/sync byte field sequence detector	4
7.2.2	UC 2.2 LIN frame processor	4
7.2.3	UC 2.3 Responder node configuration	4
7.2.4	UC 2.4 Responder error status reporting	5
7.2.5	UC 2.5 Diagnostic responder node capabilities	5
7.3	UC 3 LIN communication protocol cluster	6
7.3.1	UC 3.1 Synchronization	6
7.3.2	UC 3.2 Checksum	6
7.3.3	UC 3.3 Responder bit rate detection	6
7.4	UC 4 LIN physical layer cluster	7
7.4.1	UC 4.1 Performance in non-operation supply voltage range	7
7.4.2	UC 4.2 Loss of supply voltage	7
7.5	UC 5 LIN network management	7
7.5.1	UC 5.1 LIN cluster network management	7
Bibliography		8