User Manual

About this document

Scope and purpose

This document provides description and information for the LIN Demoboard. This Demoboard can be used for all Infineon 8-pin standard CAN transceivers:

- TLE7257SJ, TLE7258SJ, TLE7259-3G

Note: The following information is given as a hint for the implementation of our devices only and shall not be regarded as a description or warranty of a certain functionality, condition or quality of the device.

Intended audience

This document is intended for engineers who develop applications.

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1 Summary

This document is guideline for the DSO-8 LIN transceiver demoboard in DSO-8 package from Infineon Technologies AG and provides information for the proper usage of the demoboard.

The demoboard can be used for all standard LIN transceiver on the market, which fulfill the OEM required standard pinout for DSO-8 package (see **Figure 1**).

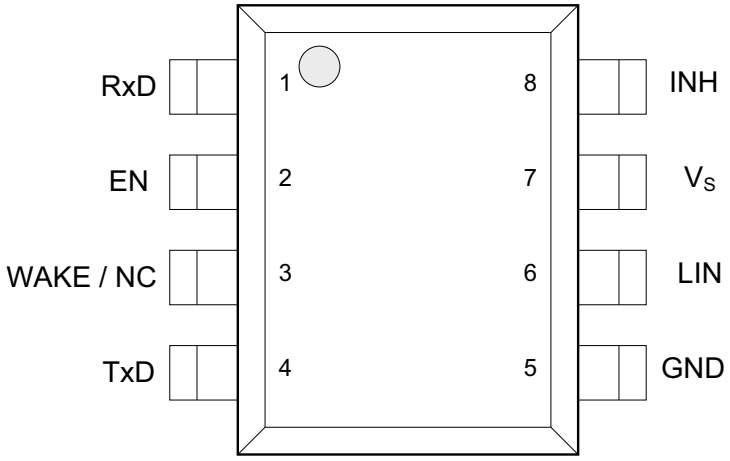

Figure 1 Pin-out of standard 8-pin LIN transceiver

2 General Function

The demoboard can be used for various test cases and various LIN transceiver. Power supply failures can be simulated as well as different modes of operation. A local switch is available to simulate a local wake-up event via the WAKE pin. The demoboard should be used to evaluate existing and new LIN transceivers on the market. Advantages, risks and disadvantages of competitor devicese versus Infineon devices can be tested an measured.

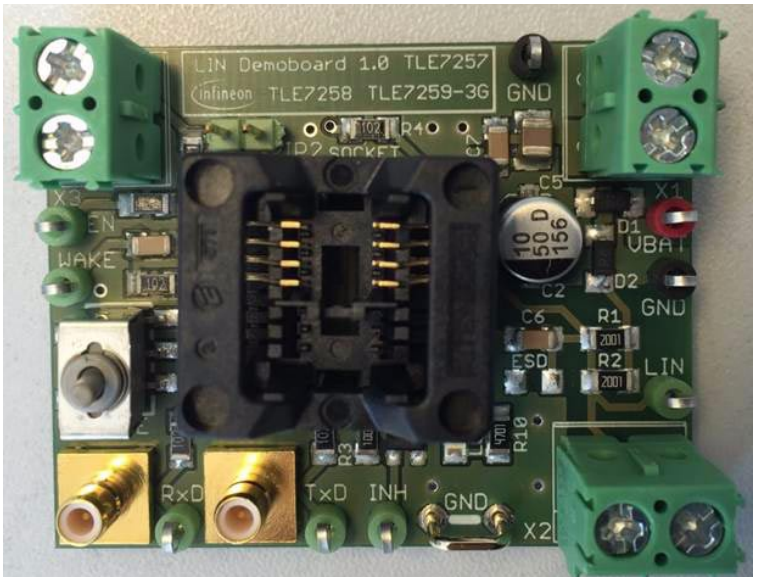

Figure 2 Photo of the DSO-8 LIN Demoboard

3 Schematic and PCB Layout

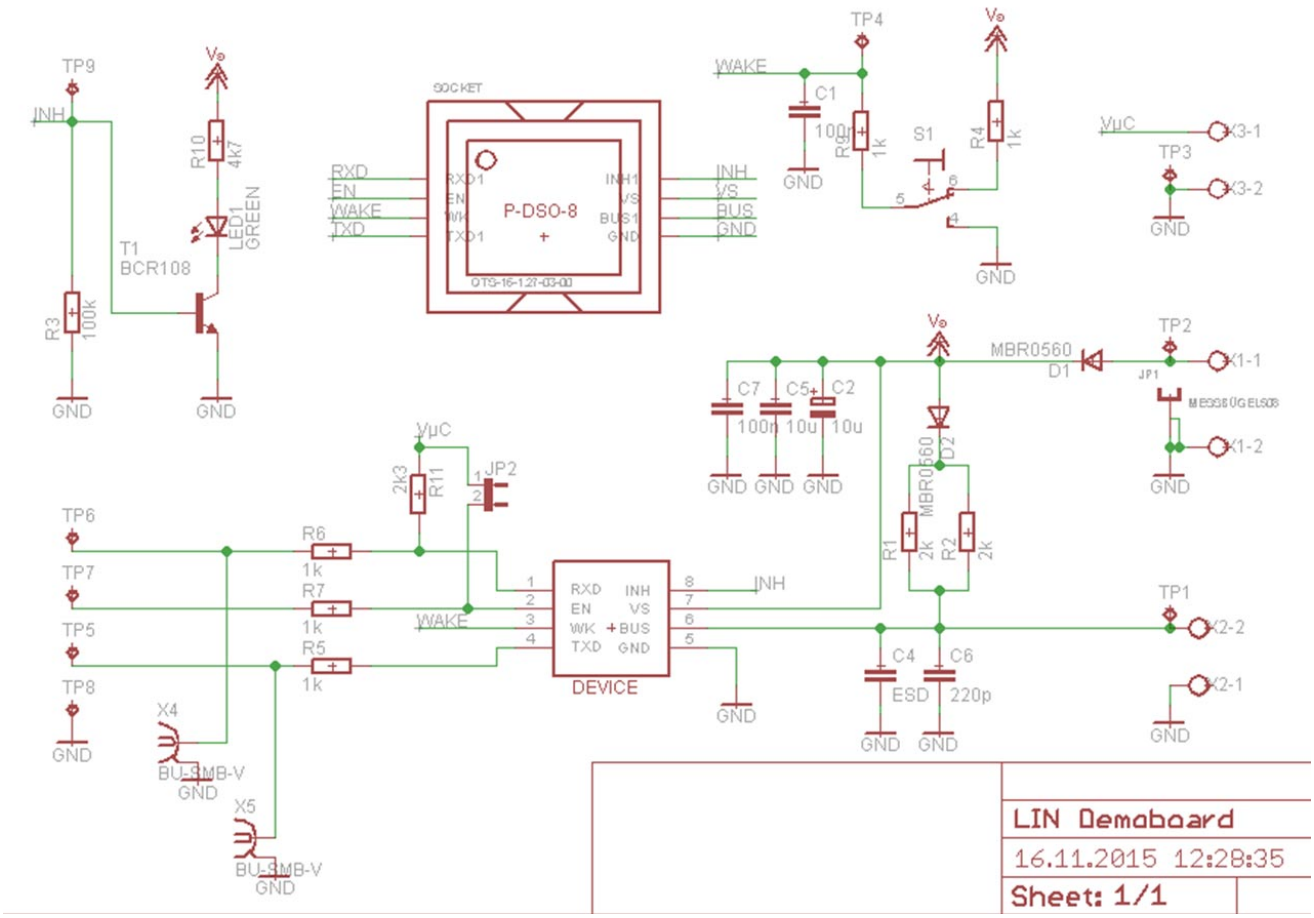

Figure 3 Schematic of DSO-8 LIN Demoboard

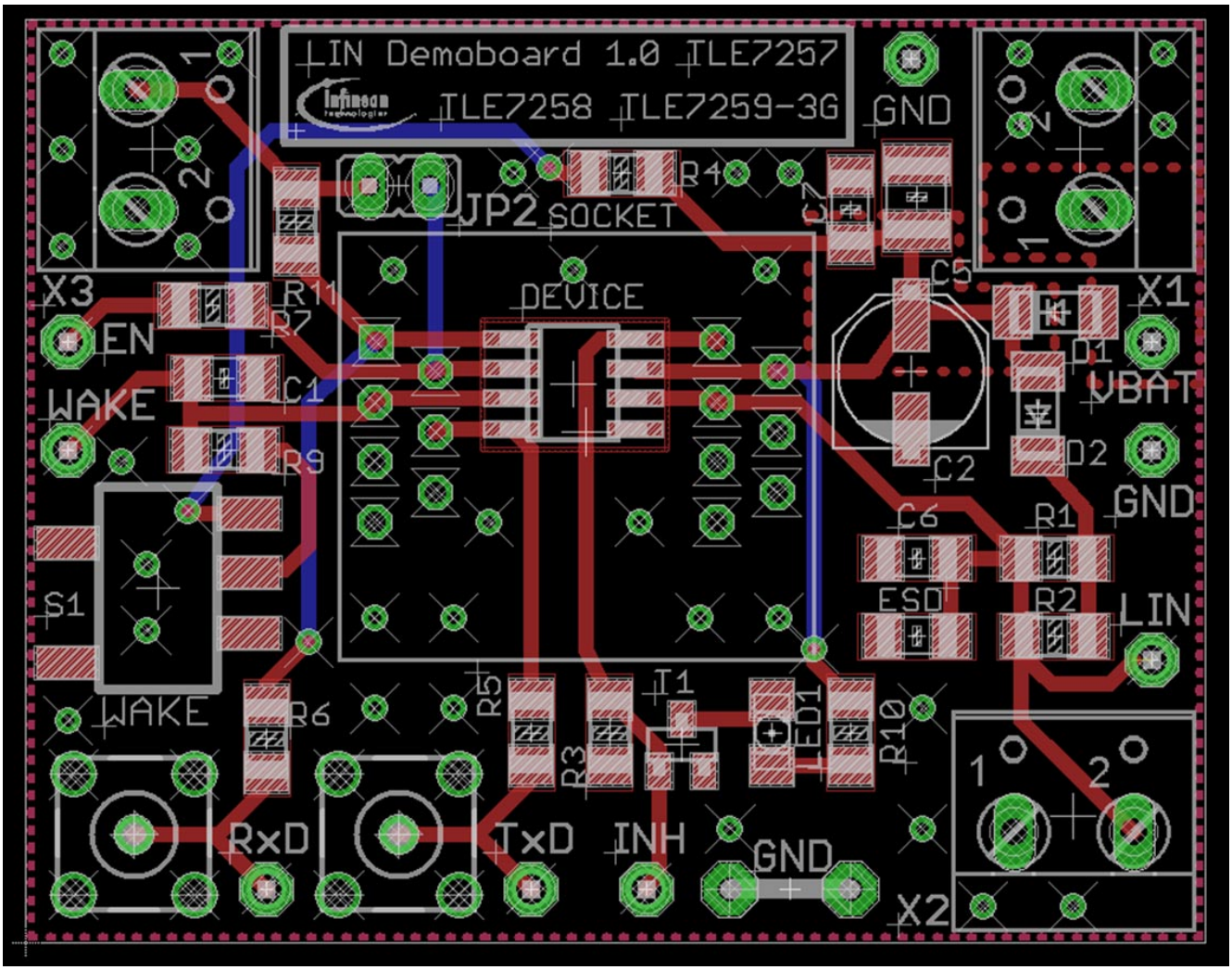

Figure 4 PCB layout of DSO-8 LIN Demoboard (Top + Bottom)

Table 1 Bill of Material

Part	Value	Device	Package
C1	100nF	Capacitor	C1206
C2	10µF	Capacitor	C1206
C4	n.b.	Place holder for optional ESD protection	C1206
C5	10µF.	Capacitor	C1206
C6	220pF	Capacitor	C1206
C7	100nF	Capacitor	C1206
D1	MBR0560	Diode	C1206
D2	MBR0560	Diode	C1206
Device	-	TLE7257S/ TLE7258SJ / TLE7259-3GE	DSO-8
JP1	-	Jumper	p1-13 (0.05 inch diameter)
LED1	100µH	LED	1206
R1	-	CAN Transceiver (e.g. TLE9251V)	R1206

Table 1 Bill of Material

Part	Value	Device	Package
R2	-	Connector	R1206
R3		Resistance	R1206
R4		Resistance	R1206
R5		Resistance	R1206
R6		Resistance	R1206
R7		Resistance	R1206
R8		Resistance	R1206
R9		Resistance	R1206
R10		Resistance	R1206
R11		Resistance	R1206
TP1 -TP9	-	Test Points	P1-13 (0.05 inch diameter)
T1	BCR108	NPN Transistor	SOT23
X1 / X2	-	Coax Connector	BU-SMB-V
X3 / X4 / X5	-	Connectors	W237-132 (0.2 pitch)
SOCKET	-	optional SOCKET for PG DSO-8 Package	0.1 pitch
S1	-	WAKE Switch	

4 Summary

Revision	Date	Changes
1.0	2018-08-20	Demoboard Guideline created

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Do you have a question about any aspect of this document?
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