User Manual

About this document

Scope and purpose

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

- TLE9250SJ, TLE9250LE, TLE9250VSJ, TLE9250VLE, TLE9250XSJ, TLE9250XLE, TLE9251SJ, TLE9251LE, TLE9251VSJ, TLE9251VLE,

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.

Table of Contents

1 Summary

This document is guideline for the HS CAN transceiver demoboard DSO-8/ TSON-8 from Infineon Technologies AG and provides information for the proper usage of the demoboard.

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

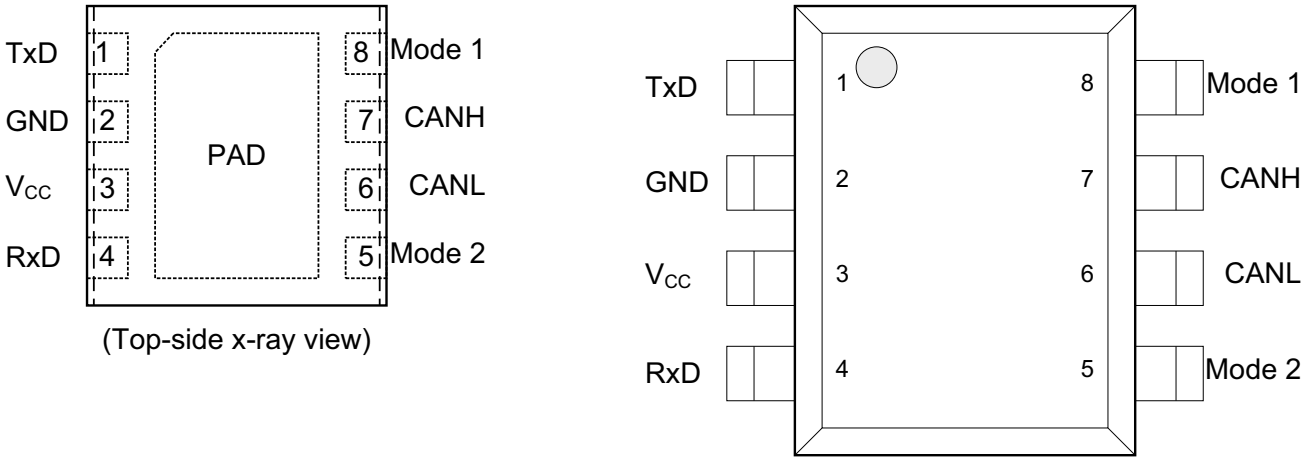

Figure 1 Pin-out of standard 8-pin CAN transceiver

2 General Function

The demoboard can be used for various test cases and various HS CAN transceiver. Power supply failures can be simulated as well as different modes of operation. A configurable bus load on CANH and CANL allows to evaulate the signal form depending on the bus load (standard termination and split termination). The demoboard should be used to evaluate existing and new CAN transceivers on the market. Advantages, risks and disadvantages of competitor devicese versus Infineon devices can be tested an measured.

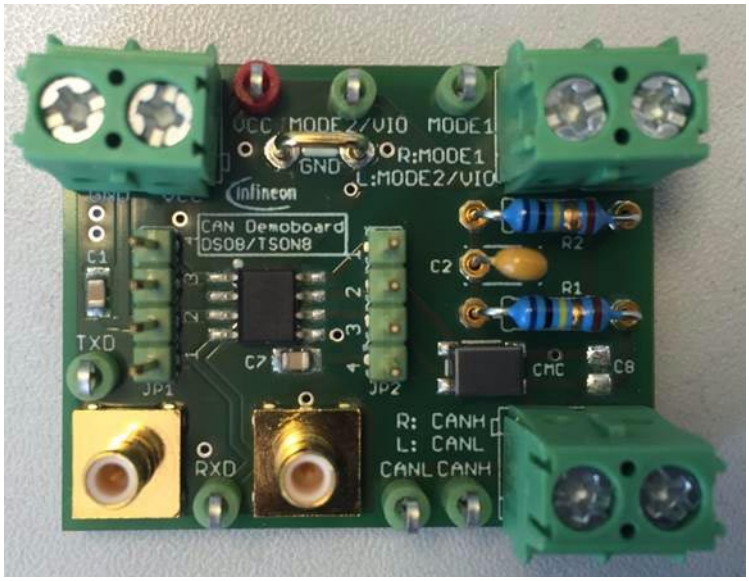

Figure 2 Photo of the DSO-8 / TSON-8 CAN Demoboard

3 Schematic and PCB Layout

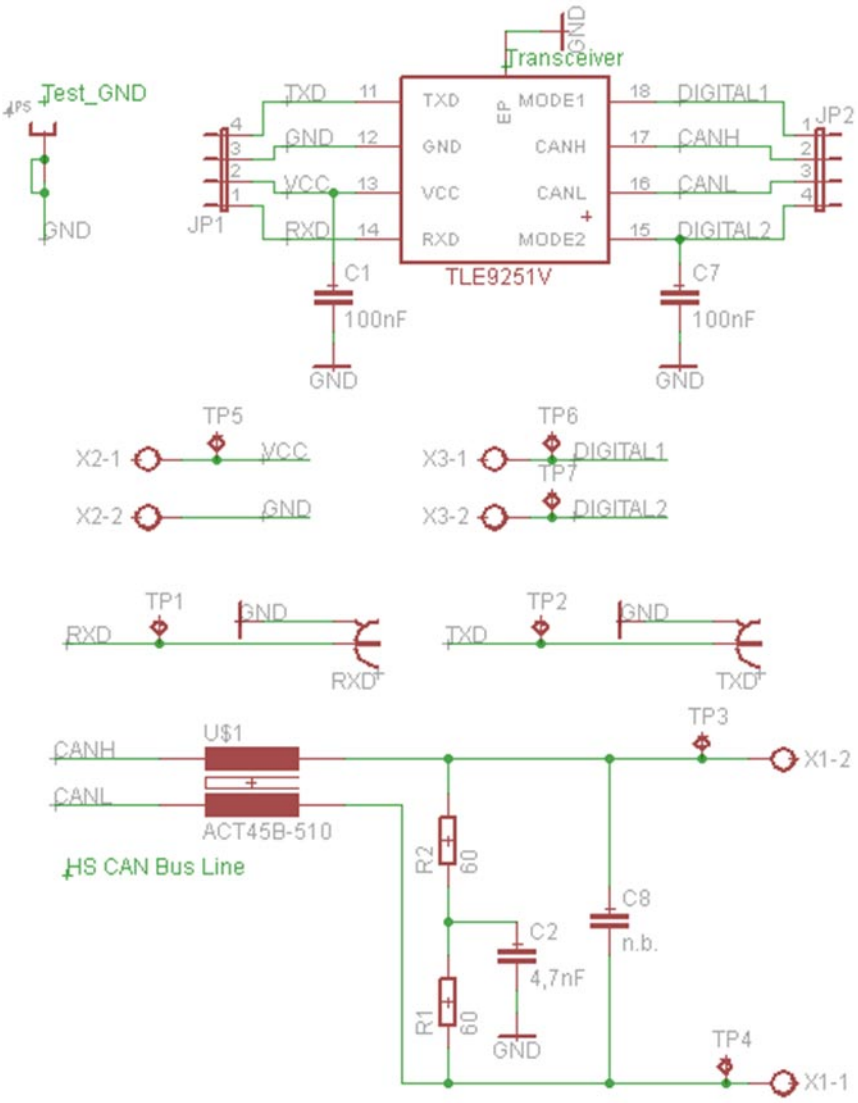

Figure 3 Schematic of DSO-8 / TSON-8 CAN Demoboard

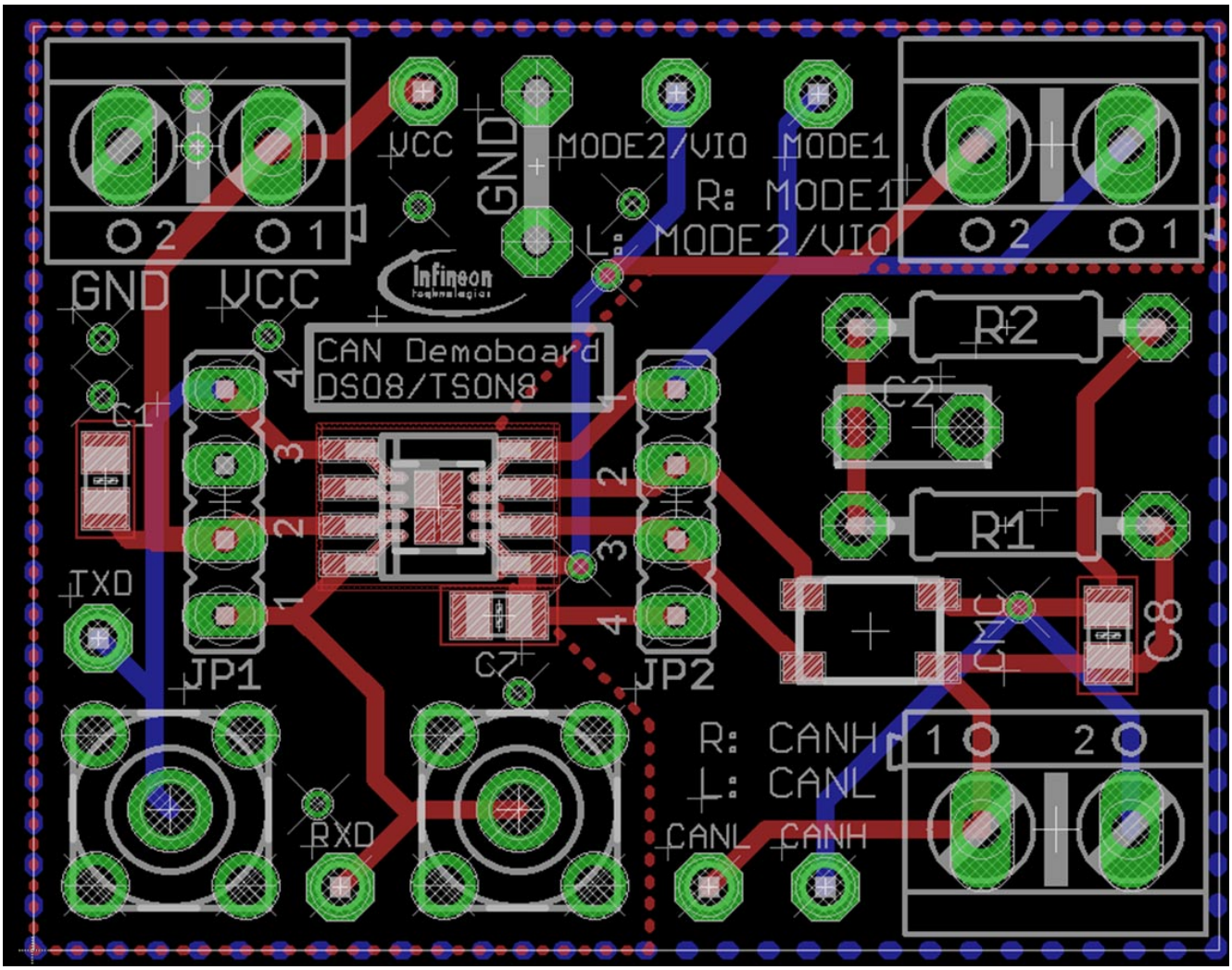

Figure 4 PCB layout of TLE925X demoboard (Top + Bottom)

Table 1 Bill of Material

Part	Value	Device	Package
C1	100nF	Capacitor	C0805
C2	4.7nF	Capacitor	trough hole capacitor (0.05 inch diameter)
C7	100nF	Capacitor	C0805
C8	n.b.	Optional Capacitor	C0805
JP1	-	Header Row	
JP2	-	Header Row	
JP5	-	GND Connection fo Oscilloscope	
R1	60	Resistor	trough hole resistor (0.05 inch diameter)
R2	60	Resistor	trough hole resistor (0.05 inch diameter)

Schematic and PCB Layout

Table 1 Bill of Material

Part	Value	Device	Package
TP1 - TP7	-	Test Points	p1-13 (0.05 inch diameter)
US1	100µH	Common Mode Choke	5.9mm x 3.4mm
US3	-	CAN Transceiver (e.g. TLE9251V)	PG-DSO-8 / PG-TSON-8
X1 - X3	-	Connector	W237-132 (0.2 inch pitch)

4 Summary

Revision	Date	Changes
1.0	2018-07-31	Demoboard Guideline created

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Do you have a question about any aspect of this document?
Email: erratum@infineon.com

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