

# CAN(FD) Transceiver Evaluation Board User's Manual

## NCV7344A3V1GEVB

### Introduction

This document describes the CAN(FD) evaluation board for the **onsemi** family of CAN transceivers in SOIC8 package. The board provides basic connections for wide range of transceivers.

### Evaluation Board Features

- One-Row Pin Header, Providing Access to All the Device Pins, Enables Easy Insertion of the Evaluation Board into a More Complex Application Setup
- On-Board 5 V LDO for VCC Supply (Can Be Disconnected)
- On-Board 3.3 V LDO for VIO Supply (Can Be Disconnected)
- Standard CAN Termination
- Position for Optional Common Mode Choke
- Position for Optional ESD Protection

### List of Supported CAN Transceivers

- NCV7340
- NCV7342
- NCV7344
- NCV7349
- NCV7351

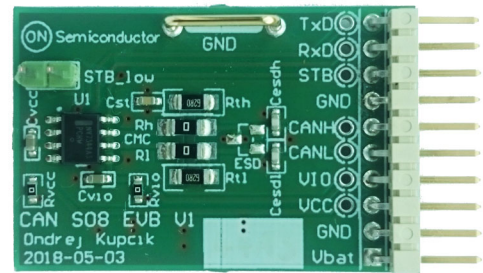


Figure 1. CAN(FD) Evaluation Board

# NCV7344A3V1GEVB

## SCHEMATIC

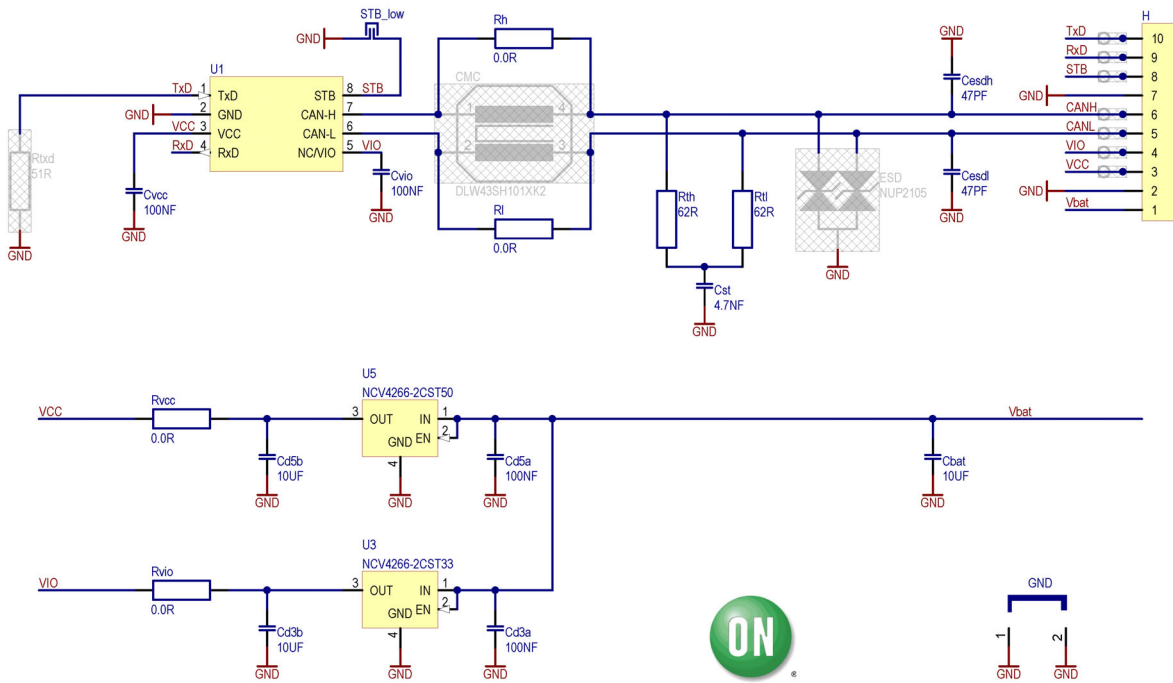


Figure 2. CAN(FD) Transceiver Evaluation Board Schematic

### ABSOLUTE MAXIMUM RATINGS

Rating	Pins	Min.	Max.	Unit
Battery Supply Voltage	Vbat	-40	40	V
Transceiver Supply Voltage	VCC, VIO (Rvcc and Rvio Not Used)	-0.3	6	V
Digital Inputs / Outputs Voltage	TxD, RxD, STB	-0.3	6	V
CAN Bus Line Voltage	CANH, CANL · NCV7340 / 42 / 49 / 51 · NCV7344	-50 -42	50 42	V
CAN Transceiver Junction Temperature		-40	+170	°C
Board Temperature		-40	+125	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

### RECOMMENDED BOARD OPERATING CONDITIONS

Rating	Pins	Min.	Max.	Unit
Battery Supply Voltage	Vbat	6	28	V
Transceiver Supply Voltage	VCC (Rvcc Not Used)	4.75	5.25	V
Transceiver Supply Voltage	VIO (Rvio Not Used)	2.8	5.5	V
Digital Inputs / Outputs Voltage	TxD, RxD, STB	0	VIO	V
CAN Bus Line Voltage	CANH, CANL · NCV7340 / 42 / 49 / 51 · NCV7344	-50 -42	-50 -42	V
CAN Transceiver Junction Temperature		-40	+170	°C
Board Temperature		-40	+125	°C



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## PCB DRAWINGS

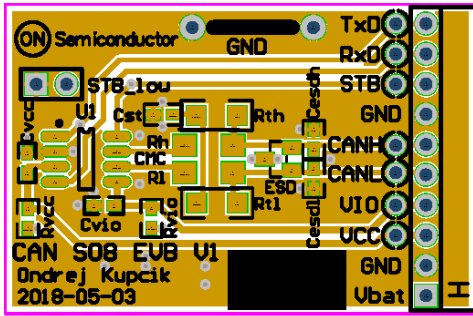


Figure 5. CAN EVB PCB Top Drawing

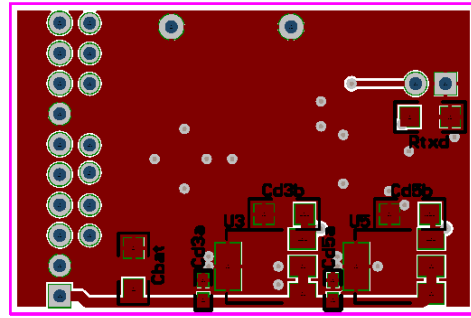


Figure 6. CAN EVB PCB Bottom Drawing  
(Bottom View)

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