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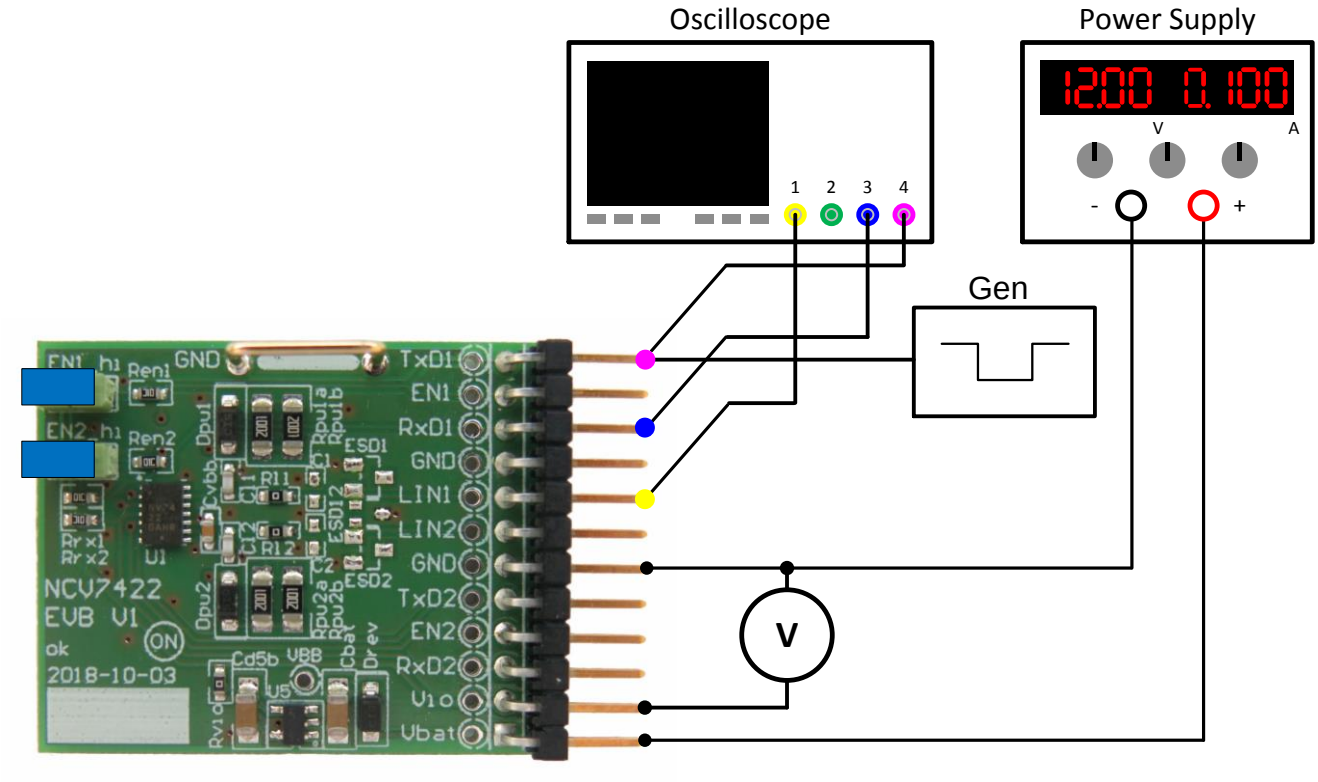
Test Procedure for the NCV7422V1GEVB Evaluation Board



Required Equipment

- Oscilloscope
- Bench Power Supply
- Signal Generator
- NCV7422 Evaluation Board

Test procedure Step 1 (Standby mode):

1. Connect the setup as shown above
2. Keep EN1/2_hi open
3. Check VIO voltage
4. Check I_{Vbat} current

Table 1: Desired Results

VIO see DC characteristics below
I_{Vbat} < 0.2 mA

Test procedure Step 2 (Normal mode, recessive):

1. Close (short) EN1/2_hi
2. Check I_{Vbat} current

Table 2: Desired Results

I_{Vbat} = < 0.4 mA – 2.6 mA >

Test procedure Step 3 (Normal mode, square-wave):

1. Apply Square-wave signal to TxD1/2 (0-5 V, 10 kHz)
2. Check RxD1/2 Signal and voltage levels
3. Check LIN1/2 Signal and voltage levels

Table 3: Desired Results

RxD HIGH / LOW
LIN RECESSIVE / DOMINANT

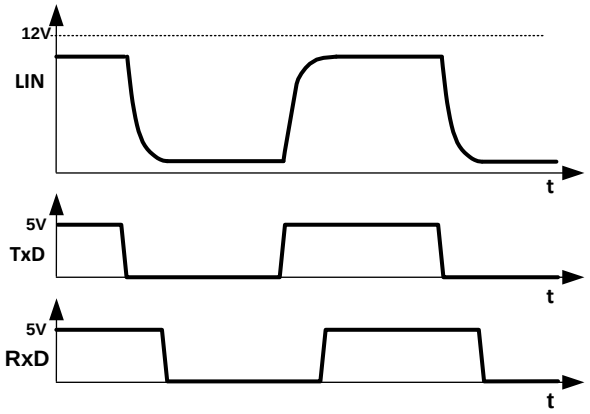


Figure 1: Desired Signals

DC Characteristics

	MIN	TYP	MAX
VIO	4.8 V	5.0 V	5.2 V
RxD LOW		0 V	0.4 V
RxD HIGH	2 V	VIO	
LIN RECESSIVE	Vbat – 2 V		
LIN DOMINANT			2 V