



DEMOBOARD USERMANUAL



ON Semiconductor

NCP2817

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REVISION HISTORY

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I INTRODUCTION

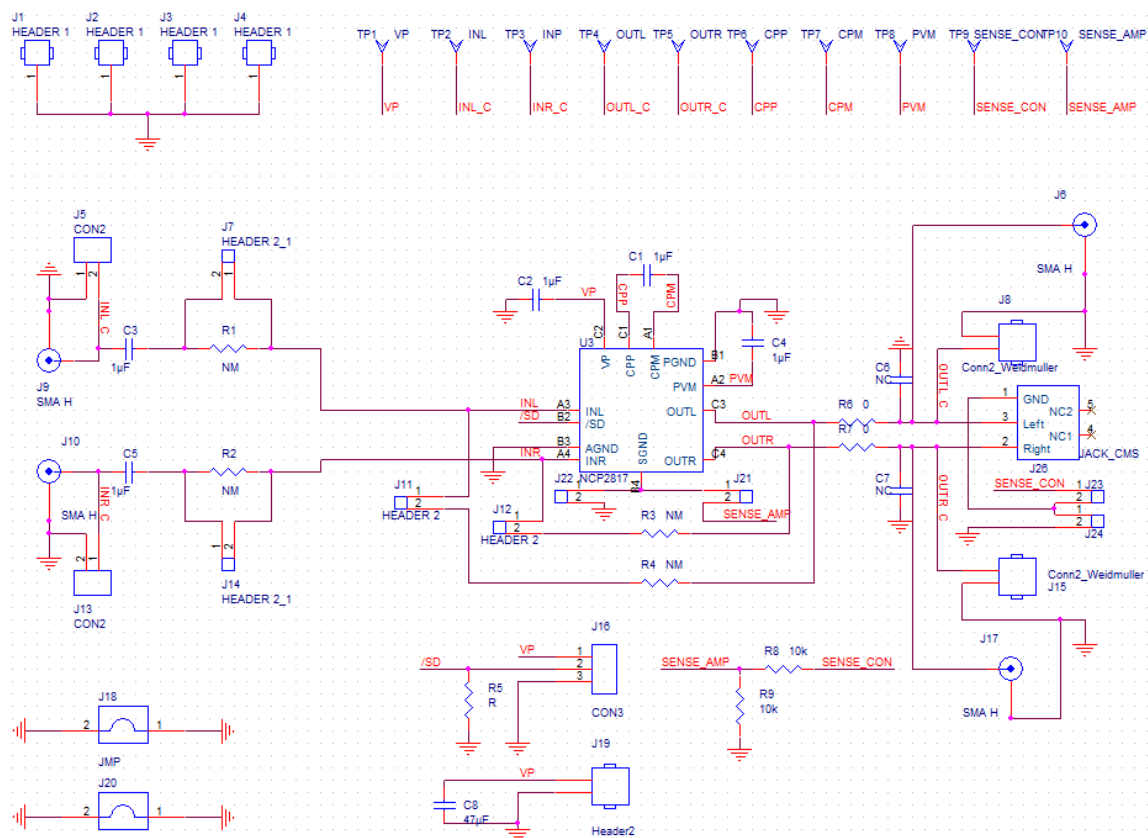
I.1 GOAL OF DOCUMENT

- The purpose of the document is to explain how to use the NCP2817.

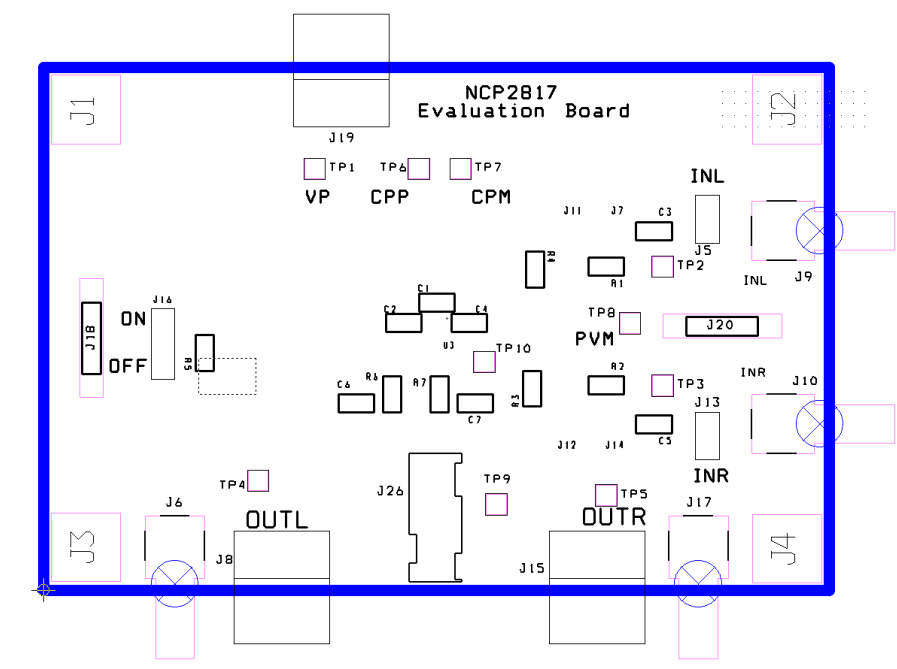
I.2 APPLICABLE & REFERENCE DOCUMENTS

- NCP2817/D : NCP2817 Datasheet

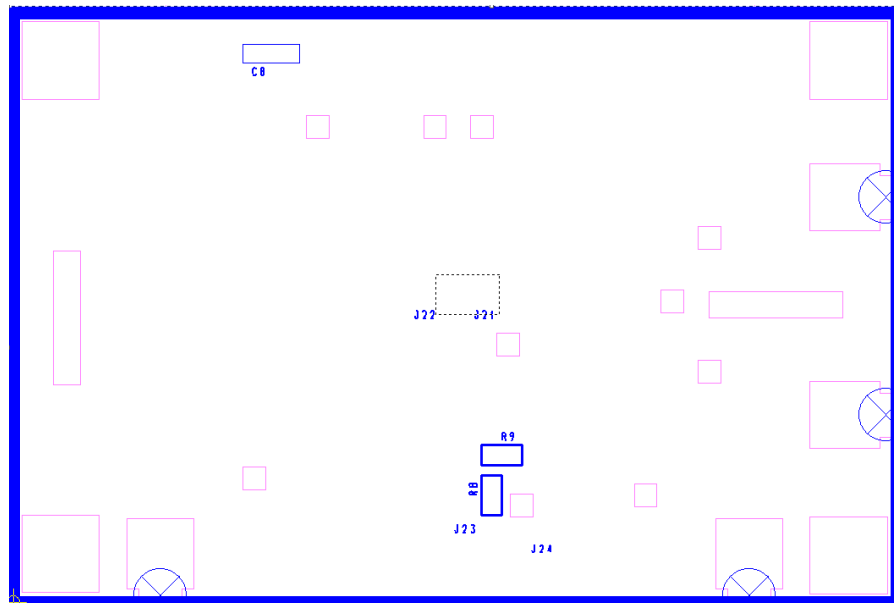
II DEMOBOARD SCHEMATIC



III DEMOBOARD COMPONENT LOCATION



Top View



Bottom View

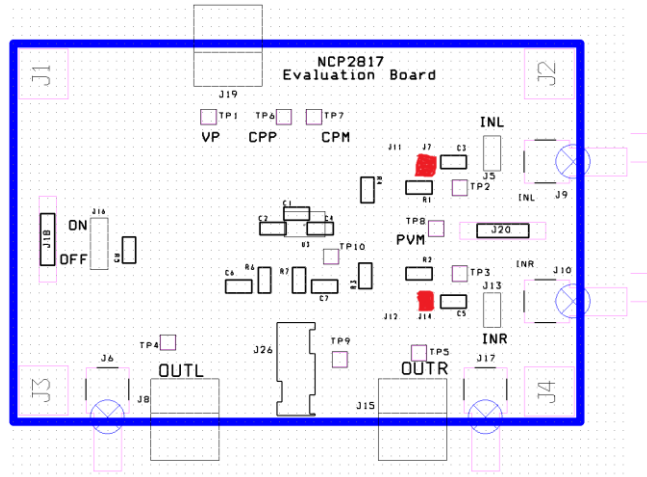


IV BILL OF MATERIAL

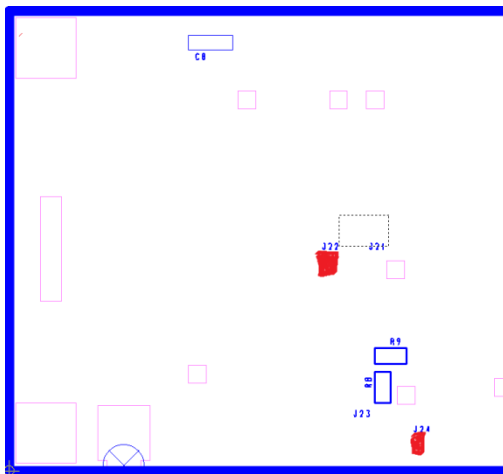
Item	Part description	Ref.	PCB Footprint	Manufacturer	Manufacturer Reference
1	NCP2817 Audio Amplifier	-	-	ON Semiconductor	NCP2817
2	SMD Resistor 10K Ω	R1, R2, R3, R4	0603	Panasonic	ERJ-3GEY103V
3	Ceramic Capacitor 1 μ F 6.3V X5R	C1, C2, C3, C4, C5	0603	Murata	GRM185R60J105KA01
4	Stereo Connector	J26		CUI Inc	SJ1-3523-SMT
5	Jumper Header Vertical Mount, 2 positions, 100mils	J16, J5, J13	100 mils	Tyco Electronics / AMP	5-826629-0
6	I/O Connector, 2 positions	J8, J19, J15	200 mils	Phoenix Contact	1757242
7	Jumper Connector	J18, J20	400 mils	Harwin	D3082-B01
8	Not Mounted	R5, J9, J10, J6, J17, C6, C7			
9	Shorted	R6, R7, J22, J24	0603		

V CONFIGURATION

- Connect J7, J14, J22, J24. (In RED)



TOP: J7, J14



BOTTOM : J22, J24

- Disconnect J11, J12, J23, J21
- Do not mount R1, R2, R3, R4.

VI TEST PROCEDURE

Output Power :

- 1- Set $V_p = 1.8\text{ V}$ to power supply connector (J19).
- 2- Set an $16\ \Omega$ load (resistance) on the output connectors (J8 and J15).
- 3- Connect J16 (Enable) 1-2
- 4- With the function generator, set a single ended signal at 1 kHz and 0.5 Vrms input signal on the left and right inputs. Apply this signal J5 and J13 connectors.
 - a. The gain is internally set to -1.5 V/V, OUTL_C and OUTR_C will see 0.75 Vrms. Place an oscilloscope probe on each output. You should get 0.75Vrms output signal with a “perfect sine wave”. That is to say no clipping at the minima and maxima of the sine wave

Quiescent current :

Check the quiescent current. Place an $16\ \Omega$ load on each output (J8, J15), no input signal. V_p set to 1.8V and J16 connected 1-2. You should measure around 1.6 mA.



VII TEST SHEET



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Tester name :

Date :

NCP2817

S/N :

Test 1	
Test 2	

OK

NOK