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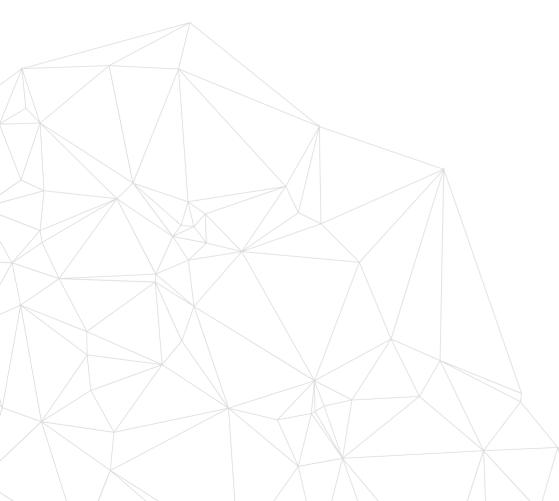
Open Source Hardware Electronics Projects

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77 Universal Intrumentation **Amplifier Module for VSSOP8** Package with **On-Board** Reference

SKU: EL135564

MODULES Universal Instrumentation Amplifier Module for VSSOP8 Package with On Board Reference



This is a universal instrumentation amplifier module that can be used to develop and test instrumentation amplifier circuits. The board can accommodate VSSOP8 devices such as INA126, INA333, INA155, INA156 from Texas Instruments. All capacitors are ceramic type with size 0805 and resistor size is also 0805. It supports dual supply or single supply. You should install R8 0 Ohms for a single supply usage. Various capacitors and resistors can be installed as per application requirements. D1 Power LED. Board has also a 2.5V precision reference voltage chip. Jumper J1 is provided to select the 2.5V reference voltage to the INA333 Amplifier. An external reference voltage can be fed through CN1 Pin 2. In this case Open Jumper J1. Also, a small prototyping area is provided.

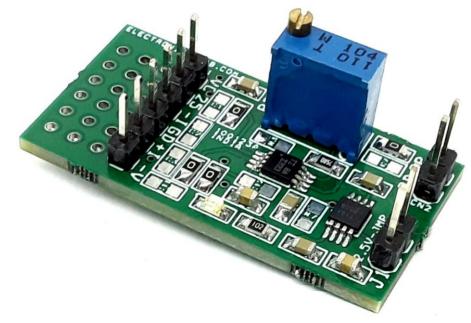
Note: The board can be used with various amplifiers such as INA126, INA333, INA155, and INA156

Features

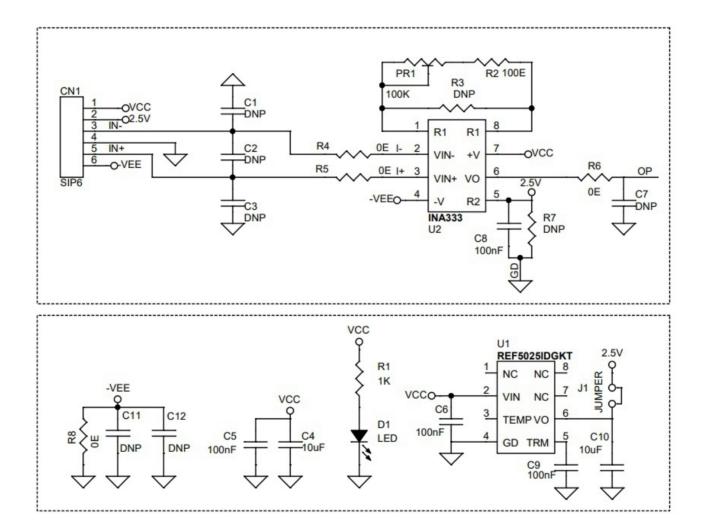
Single Supply 5V DC for INA333 (Range 1.8V to 5.5V), Single Supply: 4.5 V to 36 V, Dual Supply: ±2.25 V to ±18 V On Board Reference Voltage Generator Chip (Available Reference 2.5V, 5V, 1.2V) On Board Power LED On Board Jumper J1 for Reference Voltage Selection, External or Internal Header Connector for Inputs, Outputs, and Supply Small Prototype Area Provided Gain Adjustable 1 to 1000 Using Multiturn Trimmer Potentiometer PCB Dimensions 37.15 x 19.21 mm

Applications

- · Bridge Amplifiers
- · ECG Amplifiers
- · Pressure Sensors
- · Medical Instrumentation
- · Portable Instrumentation
- · Weigh Scales
- · Thermocouple Amplifiers
- · RTD Sensor Amplifiers
- · Data Acquisition

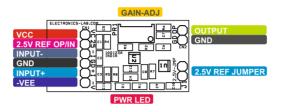


Schematic



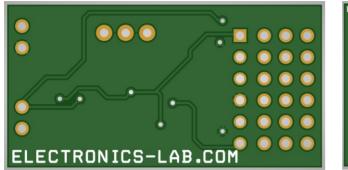
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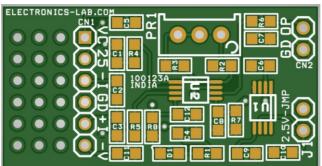
Connections



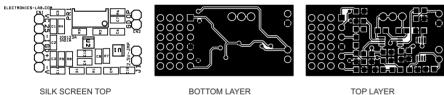
Connections and Other Details

- CN1: Pin1=VCC, Pin2=2.5V RefOut, Pin3=Signal -Input, Pin4=GND, Pin5=Signal +input, Pin6=-VEE
- PR1: Gain Adjust Multiturn Pot 1 To 1000
- D1: Power LED
- Jumper J1: Internal Reference 2.5V Selection, Open for External Reference Input
- U1: Reference Voltage Generator 2.5V Output
- Resistor R8: Use 00hms for Single Supply, Open for Dual Supply Input









SILK SCREEN TOP

PCB DIMENSIONS 37.15 X 19.21 MM

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BOM						
NO.	QNTY.	DESC.	REF.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	6 PIN MALE HEADER PITCH 2.54MM	WURTH		732-5319-ND
2	8	C1,C2,C3,R7,C7,C11,C12,R3	DNP			
3	2	C4,C10	10uF/16V CERMIC SMD SIZE 0805	MURATA/YAGEO		
4	4	C5,C6,C8,C9	100nF/50V CERAMIC SMD SIZE 0805	MURATA/YAGEO		
6	1	D1	LED RED SMD SIZE 0805	OSRAM		475-1278-1-ND
7	1	J1	JUMPER- 2 PIN MALE HEADER PITCH 2.54MM	WURTH		732-5315-ND
8	1	PR1	100K MULTITURN TRIMMER POT	BOURNS		3296W-1-104
9	1	R1	1K 5% SMD SIZE 0805	MURATA/YAGEO		
10	1	R2	100E 1% SMD SIZE 0805	MURATA/YAGEO		
12	4	R4,R5,R6,R8	OE SIMD SIZE 0805	MURATA/YAGEO		
13	1	U1	REF5025IDGKT 8VSSOP	TI		296-24499-1-ND
14	1	U2	INA333 8VSSOP	TI		296-23564-1-ND
15	1	J1-SHUNT	SHUNT FOR JUMPER J1	SULLINS CONNECT		S9001-ND

Notes



Android App

DOWNLOAD



SCAN QR CODE





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from ideas to boards

