

## Universal OPAMP Board for SMD SOT23-5 Package

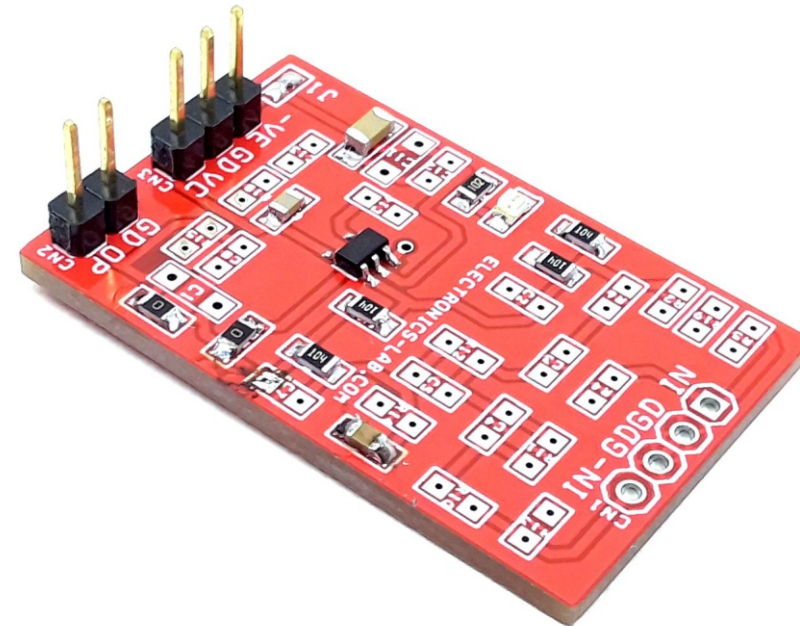
This is easy to build and very useful project for hobbyists and students to learn and create OPAMP-based projects. The project accommodates a single OPAMP in the SOT23-5 package. The project provides the user with multiple choices and extensive flexibility for different applications circuits and configurations. It provides the user with many combinations for various circuit types including active filters, differential amplifiers, and external frequency compensation circuits etc. A few examples of application circuits are given below. LM321 op-amp is the right choice to use for this board or any SOT23-5 OPAMP with the same pin configuration as LM321 can be used. It supports dual supply or single supply, Jumper J1 is provided to use this board with a single supply, D1 power LED.

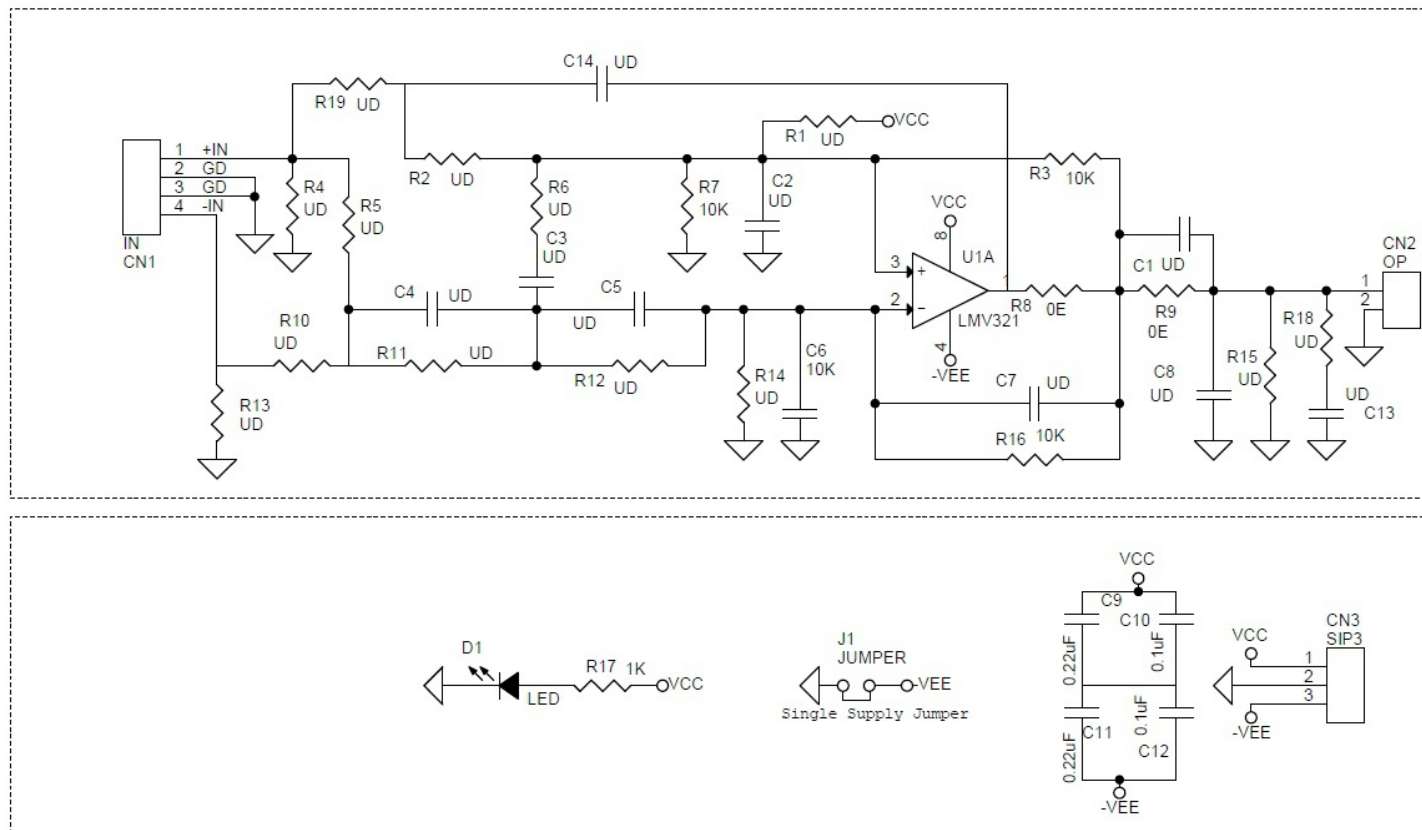
**Note:** Refer to example circuit to test the board, it is a bistable multivibrator, with single supply Jumper J1 closed.

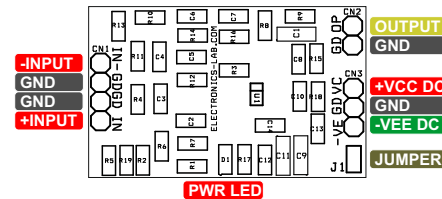
**Credits:** All example schematics are from Analog Devices application notes.

### Features

- Single or Dual Supply User defined (Jumper)
- 4 Pin Male Header Connector for inputs
- 3 Pin Male Header for Supply input (Single or Dual)
- Jumper J1 Close for single Supply, Open for Dual Supply
- LED D1 Power LED
- Any SOT23-5 Op-Amp Can be use Pin configuration Should Match With -Lm321
- PCB Dimensions 37.31MM X 23.50MM

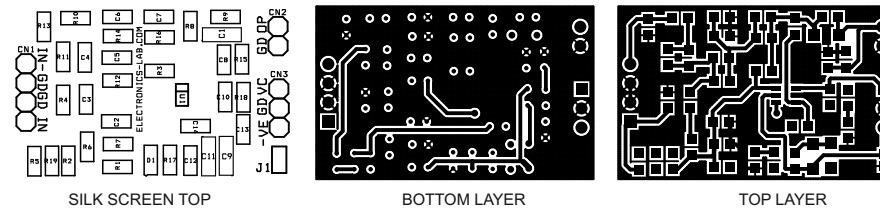






BOM			
NO.	QNTY	REF.	DESC
1	1	CN1	4 PIN MALE HEADER PITCH 2.54MM
2	1	CN2	2 PIN MALE HEADER PITCH 2.54MM
3	1	CN3	3 PIN MALE HEADER PITCH 2.54MM
4	26	R1,C1,R2,C2,R3,C3,R4,C4,C5,R6,C6,R7,R8,C8,R9,R10,R11,R12,R13,C13,R14,R15,R16,R18,R5,C7,C14,R19	USER DEFINED
5	2	C9,C11	CAPACITOR SMD SIZE 1206
6	2	C10,C12	CAPACITOR SMD SIZE 0805
7	1	D1	LED RED SMD SIZE 0805
8	1	J1	PCB SOLDER JUMPER
9	1	R17	ALL RESISTORS SIZE 0805
10	1	U1	OP-AMP SOT23-5 (LM321)
ALL RESISTORS SMD SIZE 0805, OP-AMP DIGIKEY PART # LM321MFX/NOPBCT-ND			





PCB DIMENSIONS 37.31MM X 23.50MM

**BOM-EXAMPLE SCHEMATIC BISTABLE MULTIVIBRATOR**

NO.	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN2	2 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5315-ND
2	1	CN3	3 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5316-ND
3	1	C6	1K PF /50V SMD SIZE 0805	MURATA/YAGEO		
4	1	C9	10uF/25V SMD SIZE 1206	MURATA/YAGEO		
5	1	C10	0.1uF/50V SMD SIZE 0805	MURATA/YAGEO		
6	1	D1	LED RED SMD SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
7	1	J1	CLOSED(PCB JUMPER)			PCB SOLDER JUMPER
8	4	R1,R3,R7,R16	100K 5% SMD SIZE 0805	MURATA/YAGEO		
9	2	R8,R9	0E SMD SIZE 0805	MURATA/YAGEO		
10	1	R17	1K 5% SMD SIZE 0805	MURATA/YAGEO		
11	1	U1	LM321	TI	DIGIKEY	LM321MFX/NOPBCT-ND

