

Breakout Board for ATX Power Supply, Benchtop Power Supply

ATX Power supply breakout board enables users to use ATX power unit as benchtop power supply. Project can be very useful to power the physical computing, embedded, micro-controller projects. Projects provides 4 different voltages 3.3V, 5V, 12V, -12V, slide switch provided for output ON/OFF. All lines have LEDs. Basically, the projects split 20 or 24 pin ATX power supply connector into 4 different power lines. All outputs are accessible through banana connectors.

Note: Breakout board also can be connected to very old type of ATX SMPS with -5V output, in this case use Jumper J1 select the -5V and CN4 banana connector provides -5V output. Otherwise connect the Jumper J1 to GND and CN4 is available as GND output.

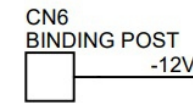
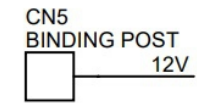
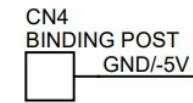
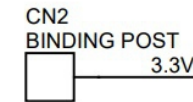
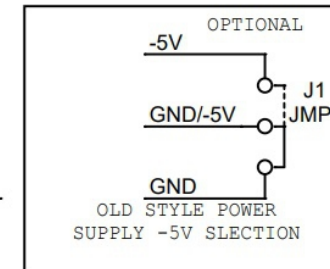
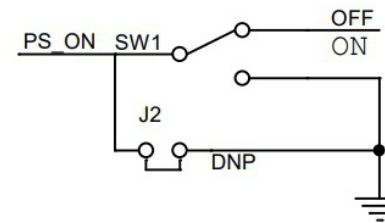
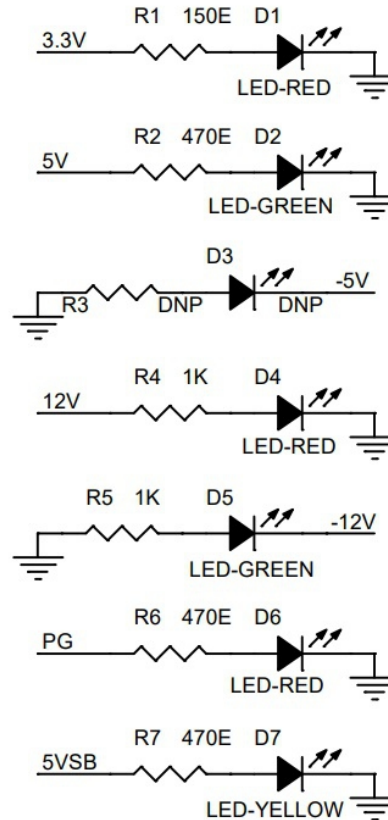
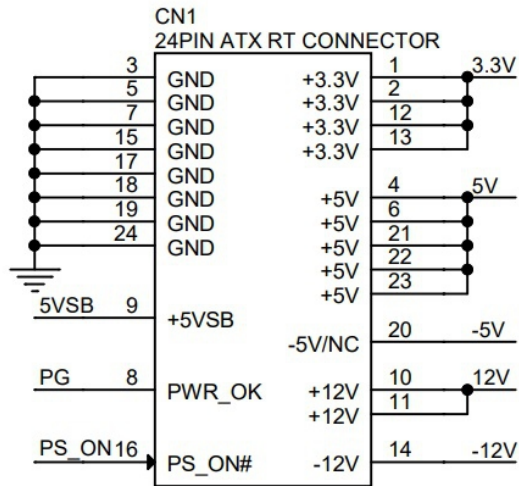
Connections and Components info

- D1 LED-Red Indicates 3.3V
- D2 LED-Green Indicates 5V
- D3 LED Do Not Install (Use with old style power supply with -5V Output)
- D4 LED-Red Indicates 12V
- D5 LED-Green Indicates -12V
- D6 LED-Red Indicates Power Goods
- D5 LED-Yellow Indicates Power Supply Standby Condition
- CN1 20 or 24 ATX Connector for Power In (Molex Digi-Key # WM20494-ND)
- CN2 3.3V DC Output
- CN3 5V DC Output
- CN4 GND or -5V for Optional Old-Style Power Supply
- CN5 12V DC Output
- CN6 -12V DC Output
- CN7 GND

Key features of the project

- 20 or 24 ATX Connector as Input
- Outputs 3.3V, 5V, 12V, -12V, GND
- Load Current depends on ATX power Ratings
- 6X Banana Connectors for 3.3V, 5V, 12V, -12V and 3 X GND
- Power Good LED
- On/OFF Slide Switch
- LEDs for 3.3V, 5V, 12V, -12V
- LED for Power Good Indication
- LED for 5V Standby
- Board Can accommodate 20 or 24 Male Connector
- Banana Connector Holes 6.5MM with 13MM Solder Pads
- 4 X 4.2MM Mounting Holes
- PCB Dimensions 98.27MM x 53.34MM



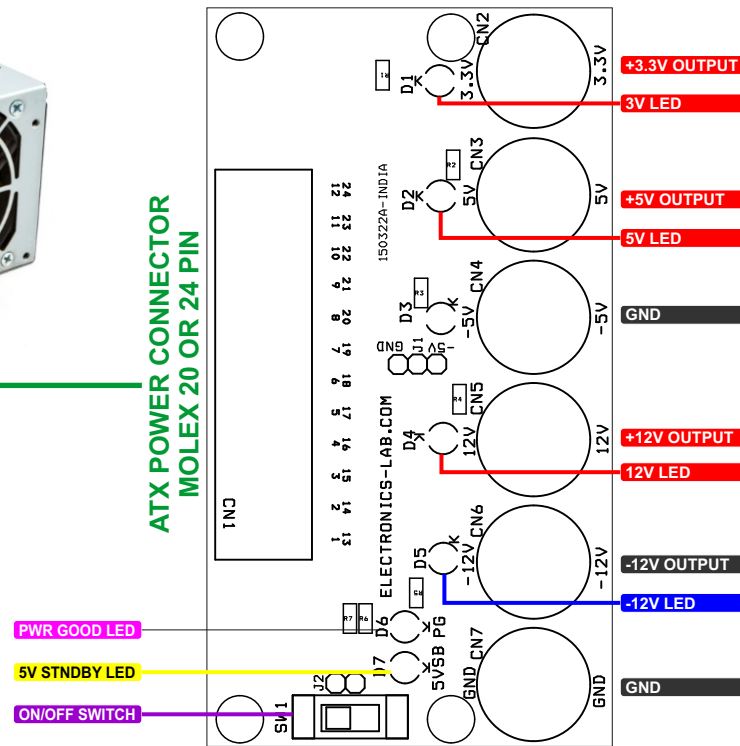


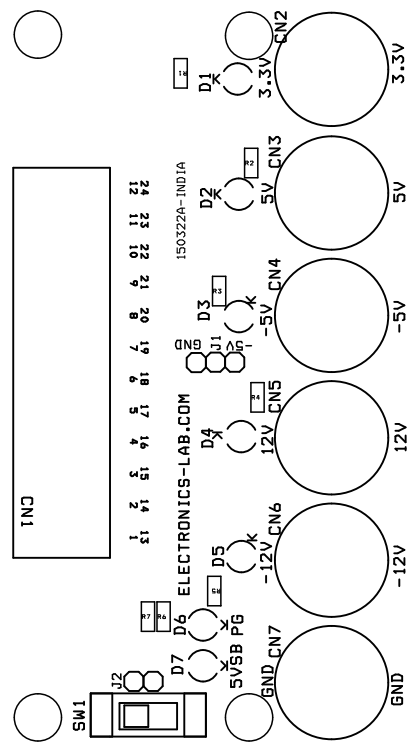
All LED 3MM, All Resistor SMD 0805



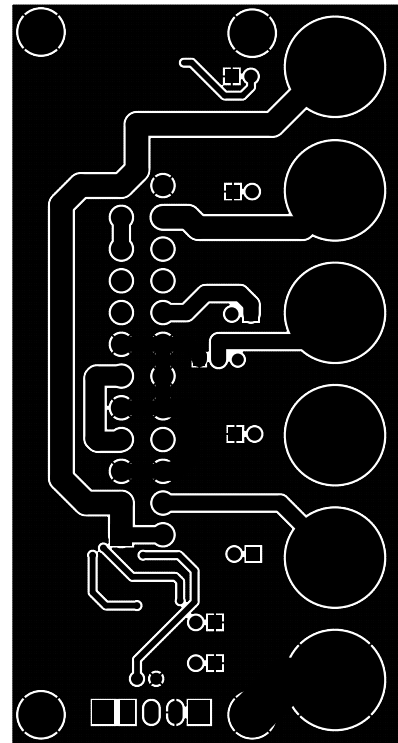


ATX POWER CONNECTOR
MOLEX 20 OR 24 PIN

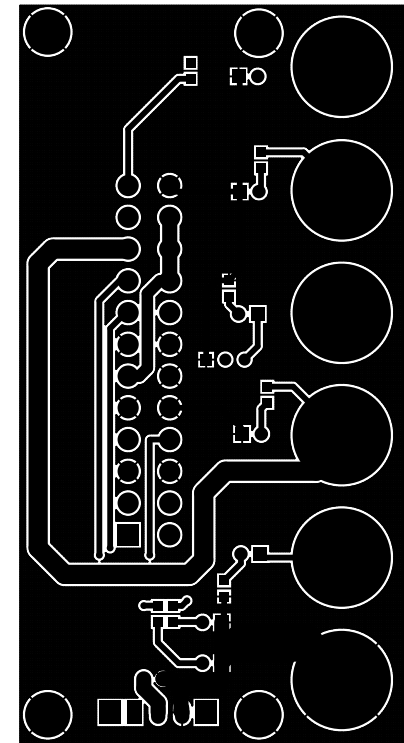




SILK SCREEN TOP



BOTTOM LAYER
PCB DIMENSIONS 65.41MM X 40.32MM



TOP LAYER





BOM						
NO	QNTY	REF.	DESC	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	24 PIN ATX RT CONNECTOR	MOLEX		
2	3	CN2,CN3,CN5	BANANA CONNECTOR RED	POMONA ELEC		501-1095-ND
3	3	D1,D4,D6	LED-RED 3MM	AMERICAN OCTO		2460-L314HD-ND
4	2	D2,D5	LED-GREEN 3MM	AMERICAN OCTO		2460-L314GT-ND
5	3	J2,R3,D3	DNP			
6	1	D7	LED-YELLOW 3MM	AMERICAN OCTO		2460-L314YD-ND
7	1	J1	3 PIN MALE HEADER PITCH 3.5MM	WURTH		732-5316-ND
8	1	R1	150E 5% SMD SIZE 0805	YAGEO/MURATA		
9	3	R2,R6,R7	470E 5% SMD SIZE 0805	YAGEO/MURATA		
10	2	R4,R5	1K 5% SMD SIZE 0805	YAGEO/MURATA		
11	1	SW1	SLIDE SWITCH	E-SWITCH		EG1903-ND
12	1	J1	SHUNT FOR JUMPER J1	SULINS CONNECT		732-5316-ND
13	3	CN4,CN6,CN7	BANANA CONNECTOR BLACK	POMONA ELEC		501-1094-ND

