

ATXBR01

“ATX BREAKOUT” – ATX Power Supply Connector Terminals and Functionality Tester

General Description

The ATX Breakout is a Small Circuit Board that allows the user to take an ordinary ATX AC-DC power supply and easily convert it to a basic power supply with a very large output current capability. The onboard switch allows the user to turn the Power Supply ON and OFF. There is no modification to the off the shelf ATX AC-DC power supply. Standard Automotive Lugs make connecting the ATX Breakout to the user application very easy.

The ATX Breakout also doubles as an ATX Power Supply Tester. There are 6, LED diodes that indicate the status of the available power supply outputs/signals: +5, +3.3, +12, -12, Power_OK, and +5VSB.

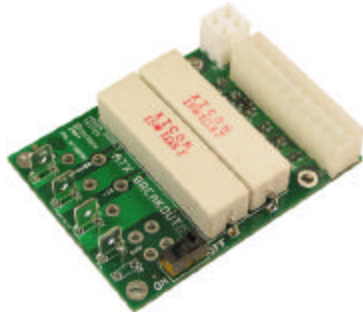


Figure 1
Product Photo:

Features

- “Breaks Out” all major power supply signals to Solder Pads or Spade Lugs
- Power Supply Output LEDs on +12, +5, +3.3, -12, +5VSB
- >20-amp Output on Spade Lugs (+12, +5, +3.3)
- Power Supply Signal LED (Power OK)
- Solder pad points for all main supply outputs
- Compact Board (2.25” by 2.5”)
- On/Off switch
- 2-pin header for remote On/Off switch
- Minimum Load Resistors for power supply compliance
- ATX12V 1.1 compliant

Applications

- 12-volt high-current power supply adaptor for indoor 12-volt computer applications
- Low Cost Bench Supply with multiple outputs
- ATX Power Supply Voltage Tester

Operation

The typical off the shelf ATX AD-DC 300W power supply can supply 15 amps at 12V, 30 amps at 5V, and 20 amps at 3.3V. The typical 300W OEM power supply can cost less than 30 US dollars, making the adaptation of an ATX Power Supply to a bench supply, very cost effective. Many commercially available Open-Frame or Enclosed power supplies with this kind of current capability cost hundreds of dollars. The ATX BREAKOUT LEDs provide a general status to whether or not the corresponding voltage or signal outputs from the power supply are working. The ATX BREAKOUT does not verify that the voltages are within tolerances; the relative intensity of the LEDs can be compared to verify the output voltages. A multi-meter is required to verify the accuracy of the Power Supply outputs.

To use the ATX BREAKOUT board, simply connect the 20-pin connector of an ATX AC-DC power supply, then connect the output terminals to your application. Click the switch and you have a bench supply.

WARNING: The big ceramic resistors get very hot. It is recommended that the ATX Breakout be placed where air is flowing over it. Do not touch the resistors after the ATX Breakout has been on for more than 30 seconds.