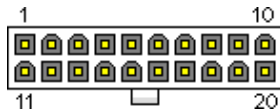




ATX, WTX and other standard and proprietary power supply (PSU) cables connectors pinouts > 0 pinouts

ATX power supply connector pinout

power cable and connector



20 pin MiniFit Jr 5566-20 male
(MOLEX 39-29-9202) connector
at the motherboard

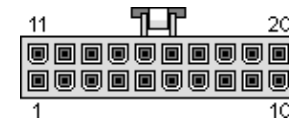
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v 1.x with 20 pin connector was widely used at PC motherboard.
Replaced by v 2.x with 24 pin connector

**ATX
specification
includes not
only Power
Supply Unit,
but also
interface to
case and**

**motherboard. In addition to the old AT
standard, ATX 2.0 has one extra voltage
line available (+3.3V), a connector
chain-lined to the single 20-pin and a
power-on wire that allows Software to
turn off the PSU.**

The ATX specification requires the power supply to produce three main outputs, +3.3 V (± 0.165 V), +5 V (± 0.25 V) and +12 V (± 0.60 V). Low-power -12 V (± 1.2 V) and 5 VSB (standby) (± 0.25 V) supplies are also required. A -5 V output was originally required because it



20 pin MiniFit Jr 5557-20 female
(MOLEX 39-01-2200) connector
at the cable



Pinout status: +124 / -7

According to [133 reports](#) in our database (124 positive and 7 negative) this pinout should be correct.

Is this pinout



correct



incorrect

[4 Related pinout\(s\)](#)

NO DIY devices

ATX power supply connector
visual pinout:

was supplied on the ISA bus, but it became obsolete with the removal of the ISA bus in modern PCs and has been replaced in later versions of the ATX standard.



[click to enlarge](#)

Originally the motherboard was powered by one 20-pin connector. Current version of ATX12V 2.x power supply provides two connectors for the motherboard: a [4-pin auxiliary connector](#) providing additional power to the CPU, and a main [24-pin ATX 2 power supply connector](#), an extension of the original 20-pin version.

ATX connector pinout

Pin	Name	Color	Description
1	3.3V	Orange	+3.3 VDC
2	3.3V	Orange	+3.3 VDC
3	COM	Black	Ground
4	5V	Red	+5 VDC
5	COM	Black	Ground
6	5V	Red	+5 VDC
7	COM	Black	Ground
8	PWR_OK	Gray	Power Ok is a status signal generated by the power supply to notify the computer that the DC operating voltages are within the ranges required for proper computer operation (+5 VDC when power is Ok)
9	5VSB	Purple	+5 VDC Standby Voltage (max 10mA) 500mA or more typical
10	12V	Yellow	+12 VDC (may sometimes have a colored stripe to indicate which rail it's

			on)
11	3.3V	Orange	+3.3 VDC
12	-12V	Blue	-12 VDC
13	COM	Black	Ground
14	/PS_ON	Green	Power Supply On (active low). Short this pin to GND to switch power supply ON, disconnect from GND to switch OFF.
15	COM	Black	Ground
16	COM	Black	Ground
17	COM	Black	Ground
18	-5V	White	-5 VDC (2002 v1.2 made optional, 2004 v2.01 removed from specification)
19	5V	Red	+5 VDC
20	5V	Red	+5 VDC

/PS_ON activated by pressing and releasing the power button while the power supply is in standby mode.

Activating /PS_ON turns on the power supply.

In several power supply units pin-12 may be Brown (not Blue), pin-18 may be Blue (not White), and pin-8 may be White (not Gray). In addition, some PSU violate color coding of wires.

Pin 9 (standby) supply 5V even when PSU is turned off. Pin 14 goes from 0 to 3.7 when PSU switch is turned on.

Shorting pin 14 (/PS_ON) to GND (COM) causes power supply to switch ON and PWR_OK to change to +5V.

Source(s) of this and additional information: [ATX Spec v2.03](#) at [Platform Development Support](#), from [Hardware Book](#), http://www.formfactors.org/developer%5Cspecs%5CPSU_DG_rev_1_1.pdf Table 21, I have a old (2001) computer w FSP235-60GT 235W power supply w 20 pin connector, None

Contributor(s): Dave Johnson, Bart, Scot Norris, Christopher Chavasse, Jan Goldberg, Campbell Watson
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