

ATX power supply connector pin assignment

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.

Several units (on hand) show pin-12 as Brown (not Blue), pin-18 as Blue (not White), and pin-8 as White (not Gray). Pin 9 (standby) goes from 0 to 5V and 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.

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
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