Power Supply Verification

To power on, the computer's logic board requires "trickle" power. If the system fails to power on, first reset the SMU (remove power cord for approximately two minutes). If the unit still doesn't power on, follow the procedure outlined below to determine whether the issue is related to the power supply.

Verify trickle power

Diagnostic LED 4 indicates the presence of trickle power required by the logic board to begin the startup process.

- Remove the clear plastic air deflector (fans will go to high while door is removed).
- LED 4 should be on and yellow, indicating that trickle voltage is present.

Verify Power Supply is providing power

Diagnostic LED 3 indicates that the main power is OK and within regulation.

- Plug in AC power cord, and press the power-on button on the front panel.
- Remove the clear plastic air deflector (fans will go to high while door is removed).
- LED 3 should be on and red, indicating that the main power is OK and within regulation.

Voltage Measurements

Note: Due to the size and location of the Power Mac G5 (Late 2005 Quad) processor module, it isn't possible to get access to the power bus bar screws to check the voltages. The following procedure can be used only for Power Mac G5 (Late 2005 Dual 2.0/2.3 GHz) computers.

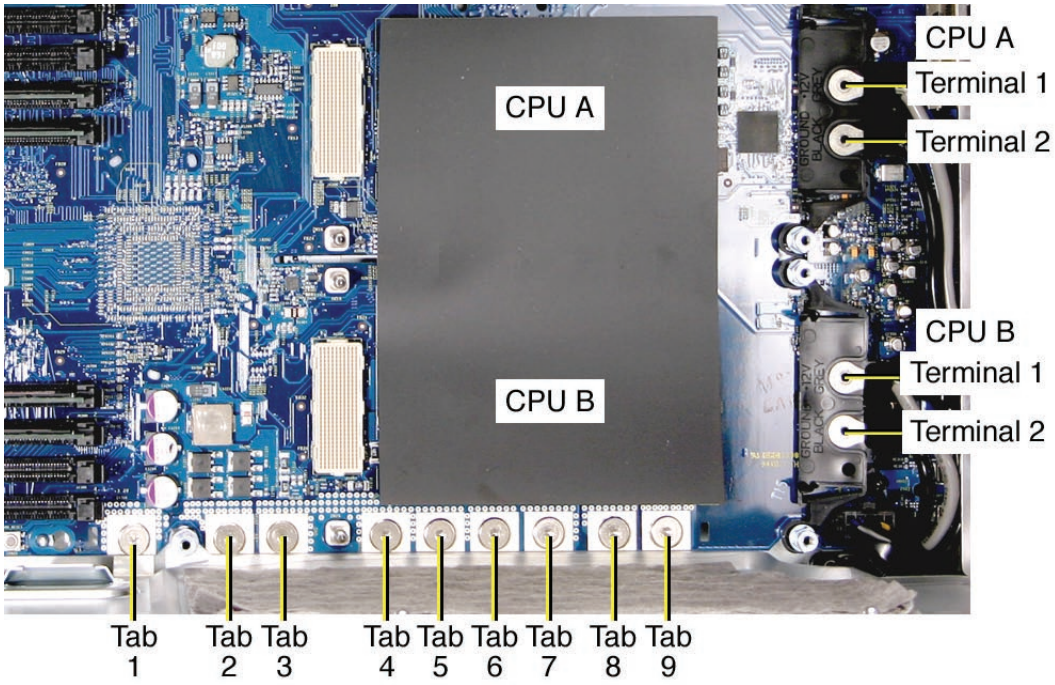
If the computer has trickle power and is capable of starting up, you may measure the voltages available from the power supply. Use a volt meter to take measurements at the screws that attach the power bus bar to the logic board, and at the terminal connections that provide power to the processor module.

Warning: During this procedure, do not let any fingers or the voltage probes come in contact with or get caught in the blades of the fans.

1. Remove the power cord from the computer.
2. Open the computer, and lay it on its side with the access side facing up.
3. Remove the metal G5 heatsink cover (let the unit cool before attempting measurements).
4. Plug a known good power cord into the computer and press the power button on the front of the unit.
5. Measure the voltages as indicated in the following tables.

Location of Bus Bar Tabs and Terminals

Note: This is a top view of the main logic board with the processor module removed. You must test the voltages with the processor module installed.



MLB Power Bus Bar

Voltage	Positive Lead	Ground Lead
3.3 V	Tab 1	Tab 4
5.1 V	Tab 2	Tab 4
0 V	Tab 3	Tab 4
0 V	Tab 4	Tab 5
0 V	Tab 5	Tab 4
0 V	Tab 6	Tab 4
0 V	Tab 7	Tab 4
12 VDC	Tab 8	Tab 4
12 VDC	Tab 9	Tab 4

Nominal	Min	Max
+3.3 VDC	3.14 VDC	3.48 VDC
+5.1 VDC	4.85 VDC	5.35 VDC
+12 VDC	11.4 VDC	12.60 VDC
+12 VDC	11.4 VDC	12.60 VDC

CPU Terminals CPU A

Voltage	Positive Lead	Ground Lead
12 V	Terminal 1	Terminal 2
0 V	Terminal 2	Tab 4

Nominal	Min	Max
+12 VDC	10.8 VDC	13.2 VDC

CPU Terminals CPU B

Voltage	Positive Lead	Ground Lead
12 V	Terminal 1	Terminal 2
0 V	Terminal 2	Tab 4

Nominal	Min	Max
+12 VDC	10.8 VDC	13.2 VDC