Mac G5 11.2 hardware list

Here is the list of the hardware upgrades that G5 11.2 supports. If you have an opinion about hardware to add, change or classify it differently, please tell me in the thread. I want to make this list as large as possible with a lot of information about everything that this version of mac can support. We can resolve doubts that some people have in the first place, so there is no need to start new threads.

1. RAM

Power Mac G5 (Late 2005) 16 GB Max ECC / Non-ECC (8 x 2 GB).

Works:

- PC2-4200U or just PC2-4200 - Unbuffered/unregistered. Regular type
- PC2-4200E - Regular + Error Code Correction. This is the best way to go

Doesn’t work:

- PC2-4200F - Fully buffered
- PC2-4200P - Should be parity
- PC2-4200S - SO-DIMM for laptops

The best configuration of RAM is PC2-4200. Because not all DDR2-666, 800 will have a latency of 4-4-4 at 533MHz.

While the 666MHz or 800MHz memory will work, it will downclock to the speed of the motherboard supported, the recommended working speed 533 MHz. System report will in that case show much slower speeds (PC2-3200-288) because memory is sending wrong information.

General info about RAM:

- 2GB: RAM size, per stick
- 1Rx8: The number of memory modules per stick ("1" "R"ow of "8")
- PC2: Semiconductor jargon meaning DDR2 (PC3 is DDR3), the type of RAM
- 4200: Speed grade, 533 MHz here
- 444: Timings, 4-4-4 (CLERCD,ERP)
- 12: CAS Latency (ns)

Timings are negotiated by the mainboard

Parity vs ECC=almost the same results but with different methods of work.

2. Graphics:

OEM - Original equipment manufacturer
F - Flashable PC retail card
xxxxx - OpenGL score

Nvidia:

- Quadro FX4500 512MB (OEM / F) *15769*
- 7800 GTX 512MB (F) *19468*
- 7800 GT 256MB (OEM / F) *12700*
- 6600 256MB (OEM) *5484*
- 6600 LE 256MB (OEM) *5326*

Ati:

- Radeon X1950XT 256MB (F) *16040*
- Radeon X1900XT 256MB (F)
- Radeon X1900GT 256MB (OEM / F) *16040*

There is no difference in scores between flashed cards and OEM cards.

There is a never ending dilemma for some cards, which ones can be flashed, which ones don't, and here is the explanation. Flashing tools and guides are in another folder.

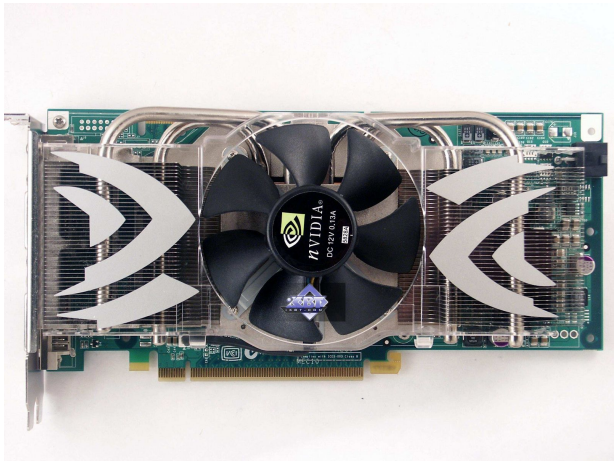
All Nvidia cards use the same method for flashing, there is no exception.
Also for Ati, all cards use the same method for flashing.

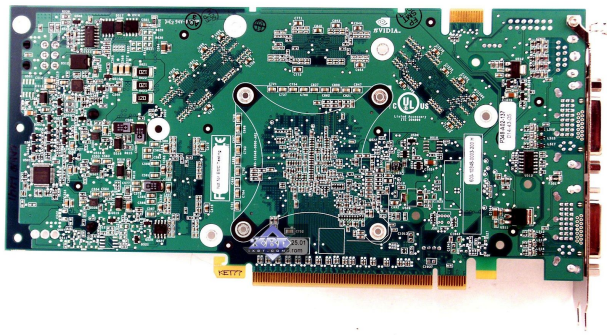
- Quadro FX4500 512MB:

This card needs to have VRAM on the back, the L shaped metal piece is an indicator that this card is compatible.

- 7800 GTX 512MB:

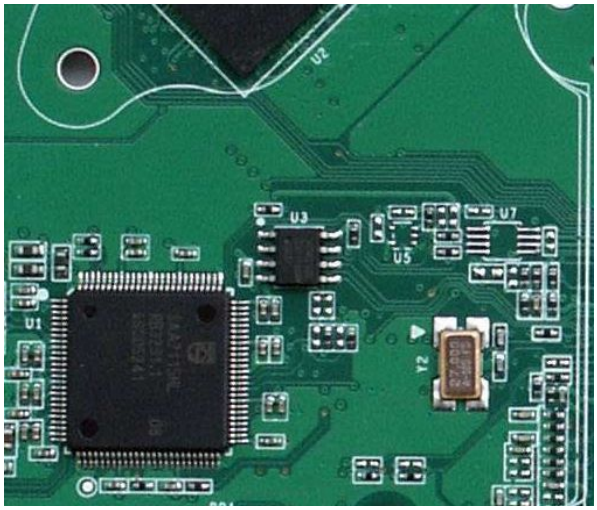
Version with 512MB VRAM doesn't have a metal L piece like the Quadro. All VRAM is on the front side unlike the 256MB version that has the same backside as the Quadro.





- 7800 GT 256MB:

For this card to be successfully flashed, you need to replace the EEPROM chip or the BIOS chip with a larger one. The size of the Mac ROM is 128kb and the size of the EEPROM chip on PC Cards is only 64kb.
There is no reduced ROM for this card, so this is the only method.



- Radeon X1950XT and X1900XT 256MB:

There seems to be a saying that only specific models made by Sapphire can be flashed. Versions with 512MB can’t be flashed, only 256MB ones.

- Radeon X1900GT 256MB:

There are two versions of this card, one with a cooler like on the X1950XT or X1900XT and one with the cooler in the image below. Only the one with the low profile cooler can be flashed.

Important:

When you add a more powerful graphics card, you will need a mini 6Pin to regular 6Pin PCIe cable adapter or the card will not work.

Each PCIe slot will supply 75W of power to the GPU, the connector would supply the rest. 6-pin PCIe connectors are rated for 75W of power.

3. Storage:

OS X doesn’t natively support TRIM function on the software level, so the best choice is to pick one with hardware level TRIM support. Usually, good SSDs won't be slowed down if you leave 20% free space of the total capacity for swap.

Also, every SSD needs to have a SATA 1 & 2 backwards compatibility, or the G5 won't recognize it.

When upgrading an SSD in G5 and lesser Macs, you want the default HFS Partition type and Mac OS Extended (Journaled).

SSDs:

- SanDisk SDSSDA24
- KingDian 480GB
- Intenso top 128GB
- Plextor M6V

SSD with hardware level TRIM:

- OCZ Vertex 2
- Intel 320

SSD without TRIM:

- Samsung Evo 850
- Samsung Evo 840

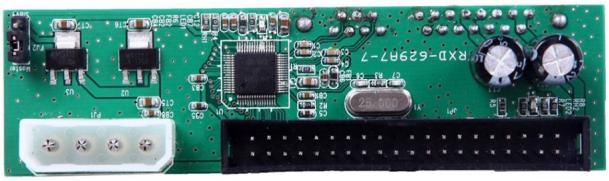
4. WiFi & BT card info:

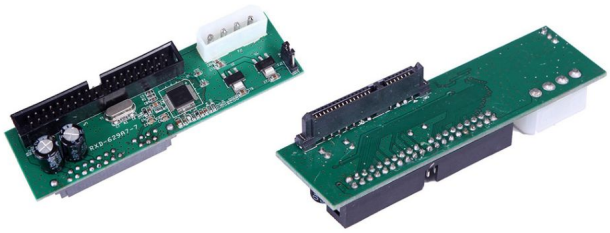
Apple AirPort Extreme Combo card & Runway Card A1126 (661-3692 or MA252G/A) & snap rivets (922-7106)

5. Optical drives:

- 6X DL "SuperDrive"
- Any Parallel ATA DVD drive
- Any Serial ATA (SATA) DVD drive

To use a SATA DVD drive, you will need an adapter like in the image below





6. USB expansions:

Wifi adapter:

Bluetooth adapter:

- Belkin USB BT 2.0

Webcam:

- Logitech HD C510

Encoders:

- Elgato Turbo H.264

7. PCIe expansions:

Wifi:

Storage:

USB:

Firewire: