

?:????????,?????????.????????

??Apple???DVD-Ram????

????Macbook ??? 13.3 ,Macbook Pro 13.3 GS23N ?????RPC1 ???DVD-RAM????  
GS23N?? Renesas soultion chipset(????)

?.?? .GS23N firmware?

<http://forum.rpc1.org/download/file.php?id=673>

Bootcamp??Windows 2000,XP,7

**MediaCodeSpeedEdit tool for DVD-Writers**

<http://ala42.cdfreaks.com/MCSE/>

OS X?????

??devilsclaw ? ??Flash??

?? ?????? id

flasher -D

dumps drives firmwares

flasher -d [Drive ID] -m main\_firmware.bin

flasher -d [Drive ID] -c core\_firmware.bin

flashes drive with new firmware

flasher -d [Drive ID] -f firmware.bin

verify firmware on drive from file (might require rebooting before it works)

flasher -d [Drive ID] -V firmware.bin

Rips the firmware files out of the windows update executable

flasher -r firmware.exe

flasher -D

AVAILABLE DRIVES AND IDs:

Drive ID: 1 Name: DVDRAM GMA-4020B

Drive ID: 2 Name: DVD-ROM GDR8164B

if I want to dump the DVDRAM GMA-4020B drives firmware it would look like this

```
flasher -d 1 -m main_firmware.bin
```

```
flasher -d 1 -c core_firmware.bin
```

```
flasher -d 1 -f main_firmware.bin
```

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1. <http://forum.rpc1.org/viewtopic.php?f=2&t=46137>