

## Upgrade to Samsung 500GB SSD Drive (840 Series)

New drive:	Samsung 500GB SSD 840 Series	Model: MZ-7TD500
Old drive:	Samsung 500GB Spinpoint M6	Model: HM500LI

I upgraded an early 2007 Macbook Pro 15" (Model #A1211) running OSX 10.7.5, Core 2 Duo 2.16 and 3GB DDR2 SRAM. Many of the major components have been replaced over the years, so it's definitely not the original laptop. This is my full-time work computer and gets used at least ten hours every day.

It was getting pretty slow and prone to long delays with the spinning rainbow wheel. A clean install of Snow Leopard helped a little, but it's been getting pretty frustrating to use over the past year. After installing Menu Meters, it was pretty clear most of the time was spent accessing the hard drive, so I decided to splurge and purchase one of the new SSD drives before spending \$2,500 on a new Macbook Pro.

The previous hard drive was installed about four years ago to upgrade the original Macbook Pro hard drive. It took about 30 minutes to install the SSD drive and another 2.5 hours to restore two partitions from a USB clone using Super Duper backup.

The improvement is tremendous and it feels like a brand new laptop. Most tasks are basically instantaneous and I haven't had any of the usual slowdowns where the laptop just cranks away doing (apparently) nothing for 30-90 seconds with the spinning rainbow wheel. My early 2007 MBP is too old to support SATA3, so I'd expect even better performance from a newer MBP.

These are the typical tasks I do many times each day. For comparison purposes, I ran each test separately, let the hard drive indicator stop between each test and averaged out 3-4 runs of each test. Since Screenflow exports to video usually max out the CPU, I didn't expect to see any improvements and the tests didn't show any improvement.

*Note: All times are in seconds except for those formatted as mm:ss. Those are minutes + seconds.*

<b>Task</b>	<b>Samsung Disk Drive</b>	<b>Samsung SSD 840 Series</b>
Black Magic Disk Speed Test	52.9 Mb/s write 44.4 Mb/s read	128.2 Mb/s write 134.9 Mb/s read
Boot to login screen	100 seconds	55 seconds
Launch Firefox	10 seconds	< 2 seconds
Open Excel spreadsheet	10 seconds	< 2 seconds
Open Word document	10 seconds	< 2 seconds
Launch Mail & check messages	47 seconds	4 seconds
Launch Screenflow	16 seconds	< 3 seconds
- export 1:00 minute Screenflow clip	30 seconds	30 seconds
- export 13:30 minute Screenflow clip	8:25 (mm:ss)	8:25 (mm:ss)
Open Quickbooks for Windows (using Parallels 8)	150 seconds	45 seconds
Shutdown Parallels	45 seconds	< 3 seconds