

MegaRAID Controller Firmware Update Procedure

*** Firmware file Name: smc[xxxx].rom
 *** Utility: MegaCLL.exe

Two methods to flash MegaRAID firmware

1. MegaCLI Utility
2. MegaRAID Storage Management Utility

1. Using MegaCLI under DOS

1) Boot from USB key and use following command or run SMC[xxxx].bat file.

C:\>Megacli -AdpFwFlash -f smc[xxxx].rom -a0

ex) MegaRAID firmware flash via MegaCLI utility

```
C:\SAS2208\FW_318~1.04->MegaCLI.exe -AdpFwFlash -f SMC2208.ROM -a0
DOS/32A -- Protected Mode Run-time Version 7.2
Copyright (C) Supernar Systems, Ltd. 1996-2002
DOS/32A warning (9004): mouse initialization failed

Adapter 0: Supermicro SMC2208
Vendor ID: 0x1000, Device ID: 0x005B

Package version on the controller: 23.2.1-0033
Package version of the image file: 23.5.0-0027
Download Completed.
Flashing image to adapter...
Adapter 0: Flash Completed.

Exit Code: 0x00
```

ex) MegaRAID firmware flash via batch file (smc[xxxx].bat file include above command)

```
C:\SAS2208\FW_318~1.04->dir

Volume in drive C is HO LEE
Volume Serial Number is 543E-C63D
Directory of C:\SAS2208\FW_318~1.04-

.                <DIR>                04-16-12   1:51p
..               <DIR>                04-16-12   1:51p
MEGACLI  EXE                753,664    04-11-12   8:46a
RELEAS~1  TXT                   505        04-16-12  12:27p
SMC2208  BAT                   434        04-16-12  12:25p
SMC2208  FW                8,388,608  03-19-12   5:12p
MEGASAS  LOG                   1,496      04-27-12  10:26a
2208DC   FW                8,388,608  04-03-12   2:48p
        6 file(s)         17,533,315 bytes
        2 dir(s)         1,863,221,248 bytes free

C:\SAS2208\FW_318~1.04->SMC2208.BAT
```

2) Reboot the system and check firmware version in controller OPROM banner during boot and in MSM

```

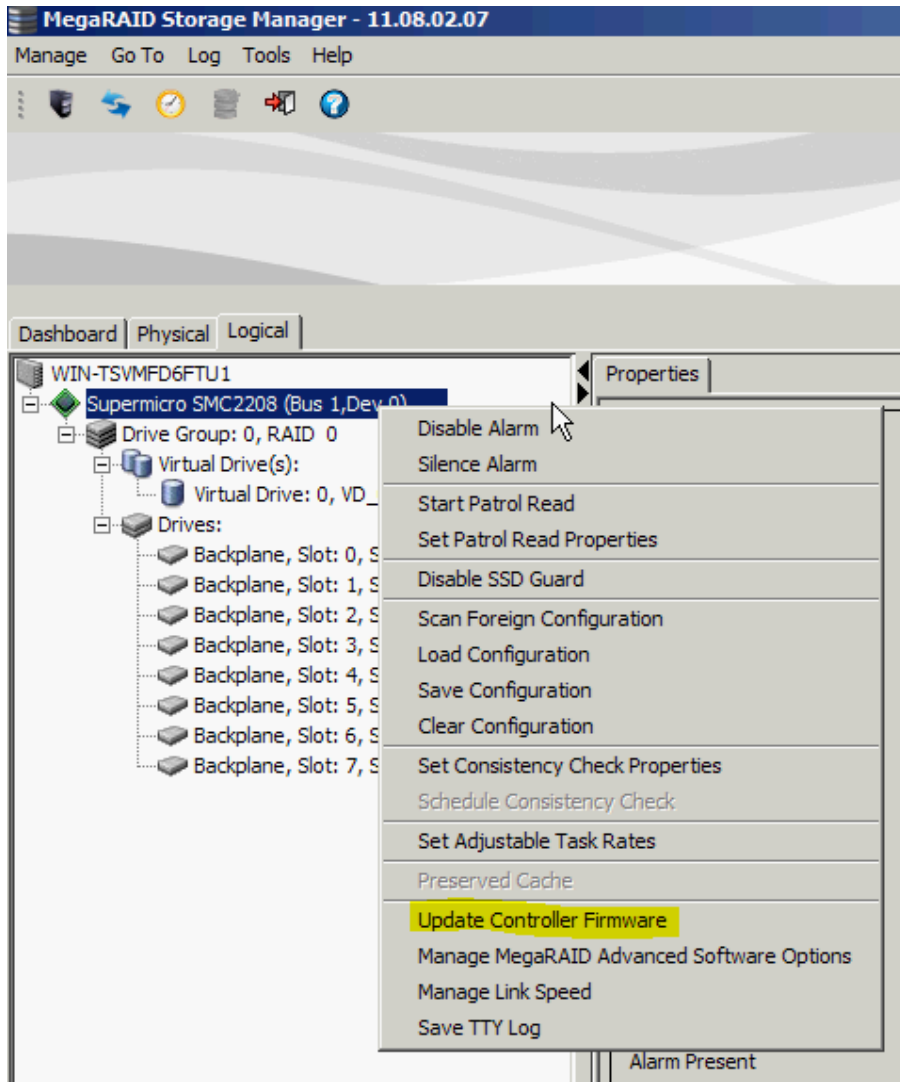
LSI MegaRAID SAS-MFI BIOS
Version 5.32.00 (Build February 02, 2012)
Copyright(c) 2012 LSI Corporation

HA -0 (Bus 1 Dev 0) Supermicro SMC2208
Battery Status: Not present

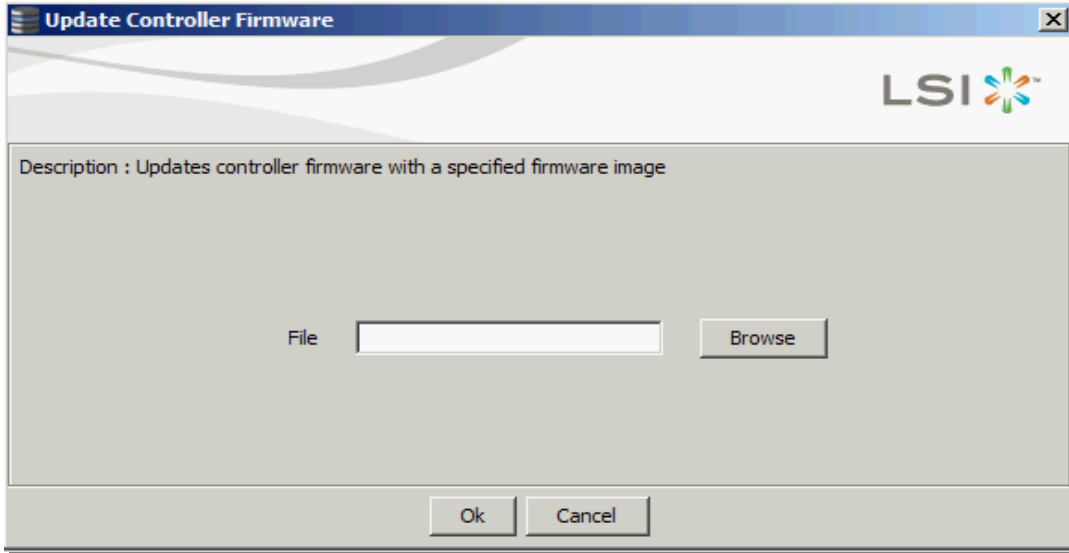
PCI SLOT ID LUN VENDOR PRODUCT REVISION CAPACITY
-----
0 0 LSI Supermicro SMC2208 ->3.180.05-1562 1024MB
0 8 0 TOSHIBA MK4001GR2B 010B 381554MB
    
```

2. Using MegaRAID Storage Manager utility under OS

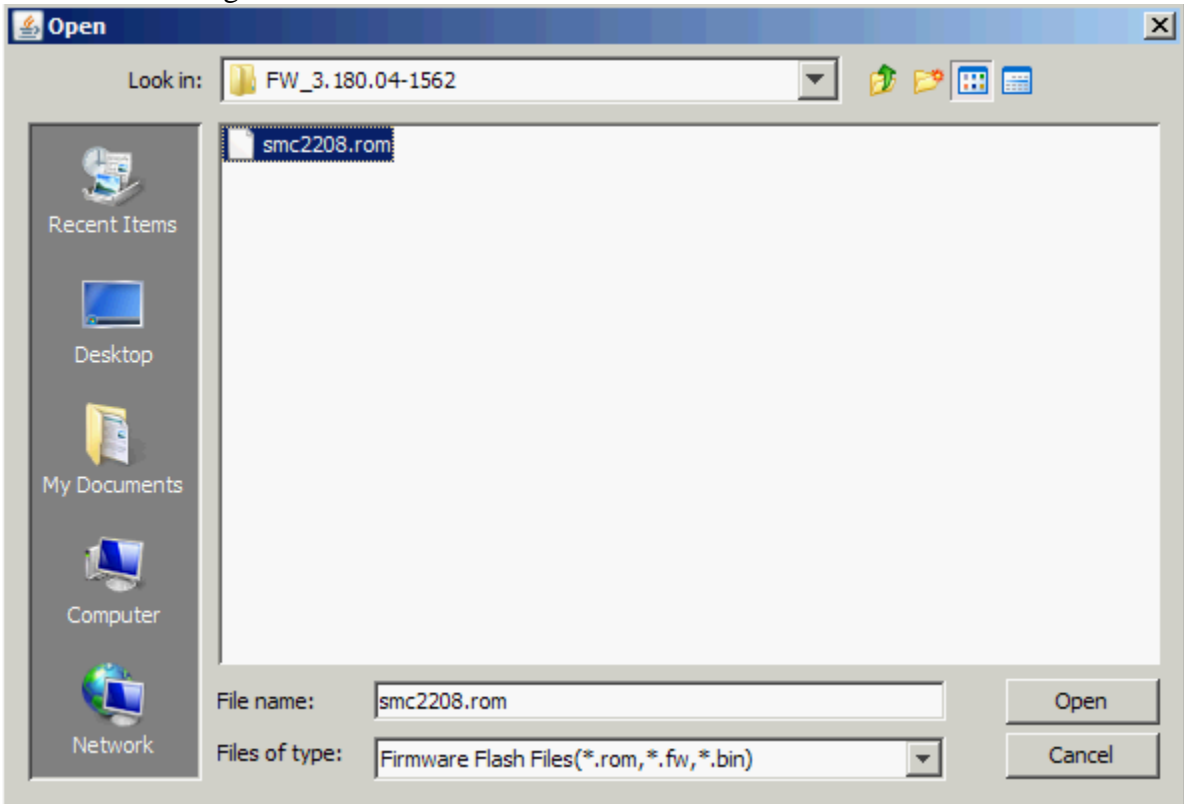
1) Open MSM, Right click on Supermicro MegaRAID controller to be updated and click Update Controller Firmware



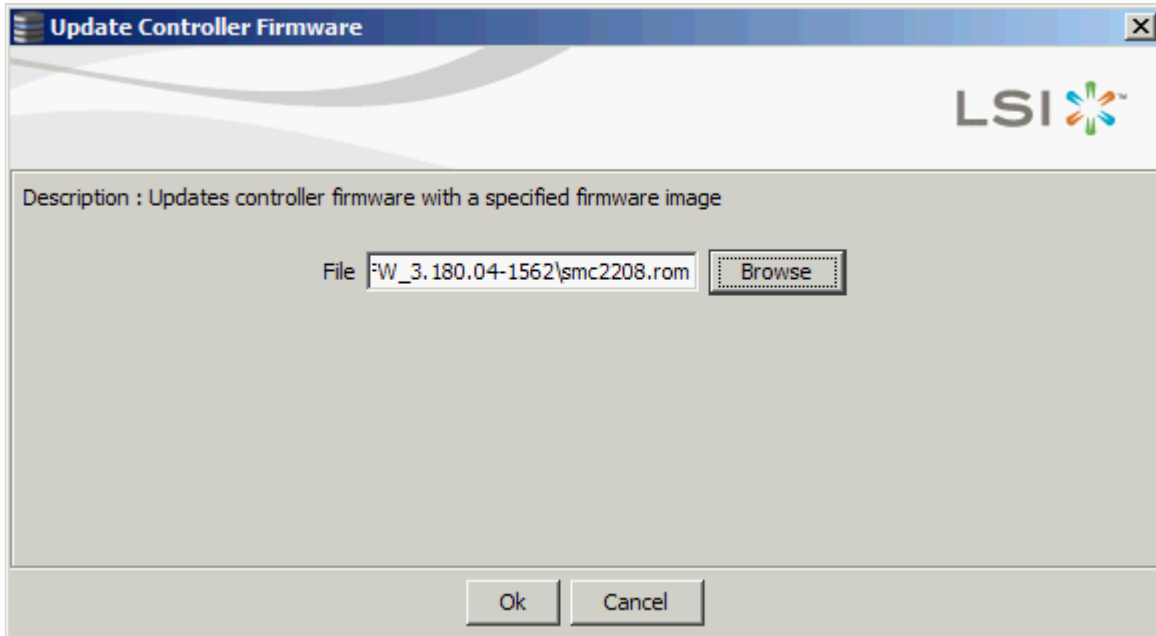
2) Click Browse to search for new firmware



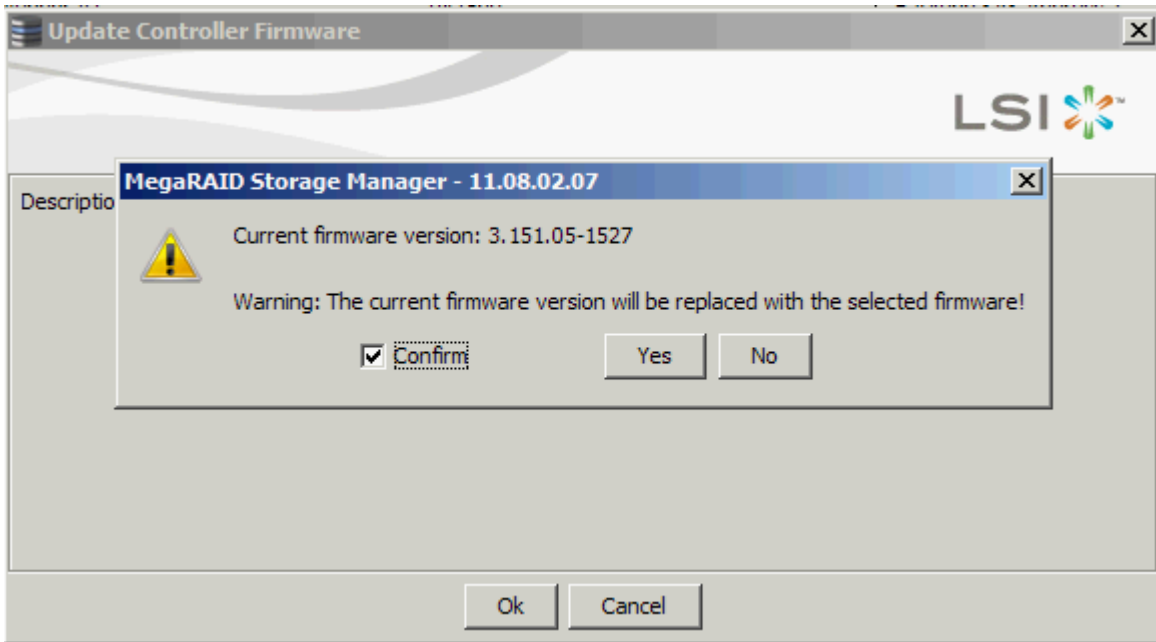
3) Select the new MegaRAID controller firmware



4) Click OK to continue

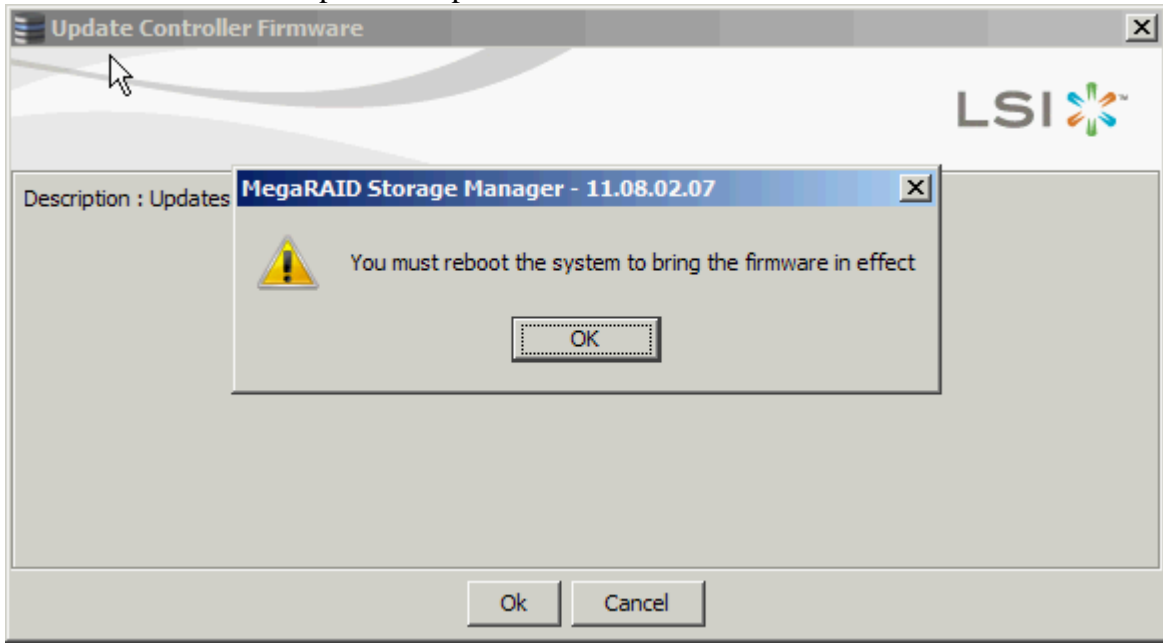


5) Check the “Confirm” box and click OK to continue



*** Wait for around 1~2 minutes to complete

6) Click OK once firmware update completed



7) Reboot the system and check firmware version in controller OPRM banner during boot

```

LSI MegaRAID SAS-MFI BIOS
Version 5.32.00 (Build February 02, 2012)
Copyright(c) 2012 LSI Corporation

HA -0 (Bus 1 Dev 0) Supermicro SMC2208
Battery Status: Not present

PCI SLOT  ID  LUN  VENDOR      PRODUCT                REVISION      CAPACITY
-----  -  -  -
0          0          LSI          Supermicro SMC2208    3.180.05-1562  1024MB
0          8  0  TOSHIBA     MK4001GRZB            0108          381554MB
0          9  0  TOSHIBA     MK4001GRZB            0108          381554MB
0         10  0  TOSHIBA     MK4001GRZB            0108          381554MB
0         11  0  TOSHIBA     MK4001GRZB            0108          381554MB
0         12  0  TOSHIBA     MK4001GRZB            0108          381554MB
0         13  0  TOSHIBA     MK4001GRZB            0108          381554MB
0         14  0  TOSHIBA     MK4001GRZB            0108          381554MB
0         15  0  TOSHIBA     MK4001GRZB            0108          381554MB
Press <CTRL><P> to pause  or <CTRL><U> to skip_
    
```

8) Check firmware version using MSM in OS

The screenshot shows the MegaRAID Storage Manager interface. On the left, a tree view shows the hardware configuration under 'WIN-TSVMFD6FTU1', including a RAID 0 drive group and seven 372.611 G SSD drives. The main area displays the 'Properties' for the 'Supermicro SMC2208' controller. The 'Firmware Version' is highlighted in yellow and is 3.180.05-1562. Below the properties is a log table with columns for ID, Error Level, Date / Time, and Description.

General		Firmware Package Version	
Product Name	Supermicro SMC2208	Firmware Package Version	23.5.0-0027
Serial No		Firmware Version	3.180.05-1562
Vendor ID	0x1000	Firmware Build Time	Mar 08 2012 15:56:27
SubVendor ID	0x15d9	Backend SAS Address 0	0x500003934C88005A
Device ID	0x5b	Backend SAS Address 1	0x500003934C88008E
SAS Address	5003048007064400	Backend SAS Address 2	0x500003934C88001E
Device Port Count	8	Backend SAS Address 3	0x500003934C88005E
Host Interface	PCIe	Backend SAS Address 4	0x500003934C88009A
Metadata Size	512 MB	Backend SAS Address 5	0x500003934C88007A
Host Port Count	0	Backend SAS Address 6	0x500003934C880012
FRU		Backend SAS Address 7	0x500003934C880046
Alarm Present	Yes	Correctable ErrorCount	0
Alarm Enabled	Yes	Memory uncorrectable count	0
Cache Flush Interval	4 sec	Cluster Enable	No
		Cluster Active	No

ID	Error Level	Date / Time	Description
44	[Information, 0]	2012-04-27, 10:43:18	Controller ID: 0 Time established since power on: TIME 2012-04-27, 10:43:18 136 Seconds
10000	[Information, 0]	2012-04-27, 10:43:13	Successful log on to the server User: administrator, Client: 172.23.133.238, Access Mode: Full, Client Time: 2012-04-27, 10:43:13
388	[Information, 0]	2012-04-27, 10:42:01	Controller ID: 0 Host driver is loaded and operational