

## SR2600-2S-S1 Test Report

Date:2006/05/15 V1.0

### A.Environmental Configuration

1.The test is that using interface as SATA on the MSI M/B or other Brand name with 2 pcs of SATA hard drives to connect them with this subsystem to test their performance at the same time.

2.There are two subjects as platform's configuration and SR2600 Subsystem's configuration which be shown info in the table.

<b>Subject PC</b>	
OS	Windows XP Professional version 2002 SP2
CPU	Intel Celeron(R) CPU 2.80GHz
RAM	512*2 MB DDR2 533
Main Board	MSI 945PL Neo(MS-7236)
SATA Interface	On board
Hardware Device	Seagate 40GBytes (ST340014A)
<b>Subject SR2600</b>	
RAID 0 Firmware Version	STARDOM RAID-0 V.26.A20
RAID 1 Firmware Version	STARDOM RAID-1 V.26.B20
Hardware Device	WDC WD800JD-00LSA0*2

## B.Performance Testing Results

1.The Iometer software is admitted by storage producers for testing transferring speed.

It can get some values of performance that using Raid subsystem with 2 pcs of SATA Hard Drives to run transferring test under different raid mode and operation system for Raid subsystem through Iometer software .

2.Kindly using this transferring speed operation mode as Read/Write(100%)+Sequential(100%) which will get better performance than other operation mode, and it is usually the Random mode apply to database access as not specific data transferring for user of transferring data , the Sequential mode apply to video / graph as specific and mass data transferring for user of transferring data.

3. Because the setting's environments are not top level.

If you want to get the high values and to enhance the whole performance, please kindly change Hardware devices as high level of CPU and high rotational speed of the same brand name of Hard drives.

4. We make the test report which can get a complete comparison and provide some referable information, and make sure SR2600 is admitted by storage product for high performance device.

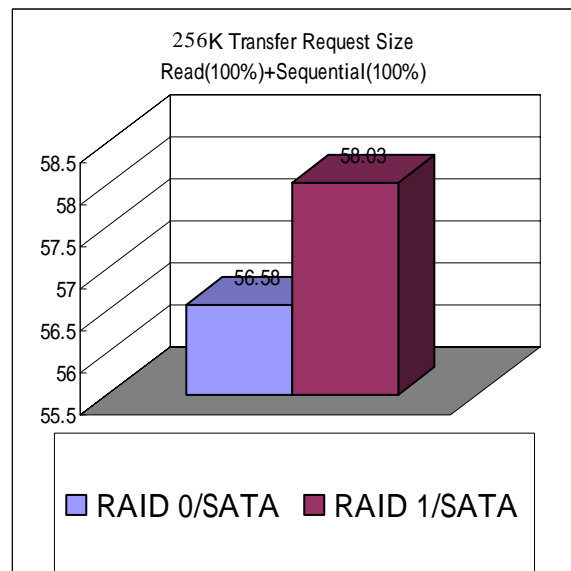
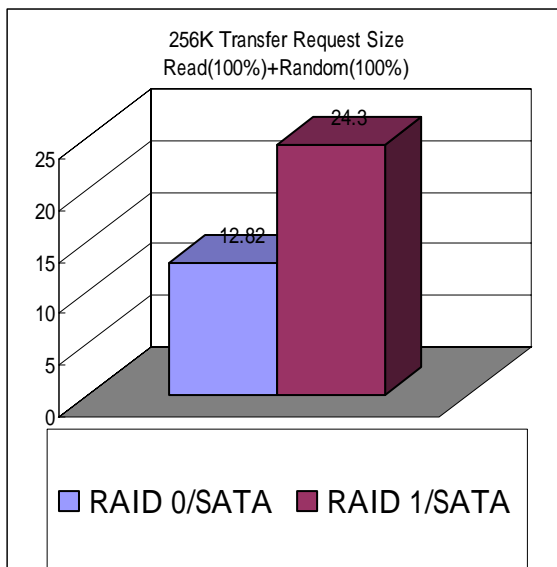
### ■ 2 pcs of Hard Drives on S2600: One PC Worker

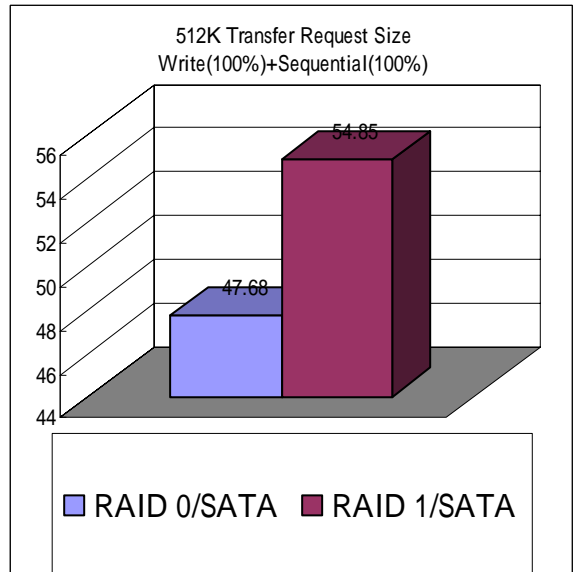
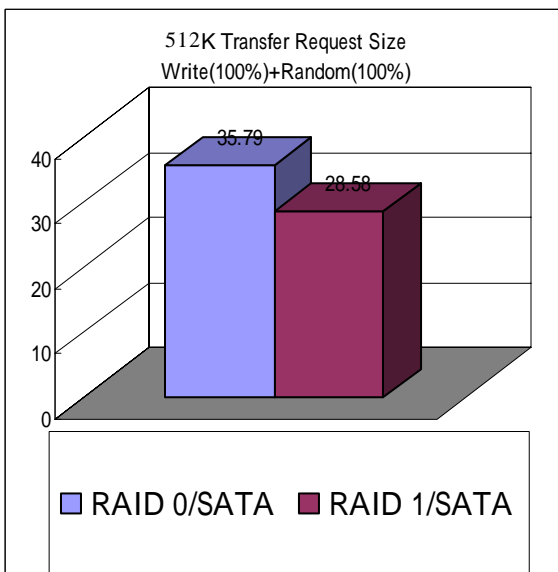
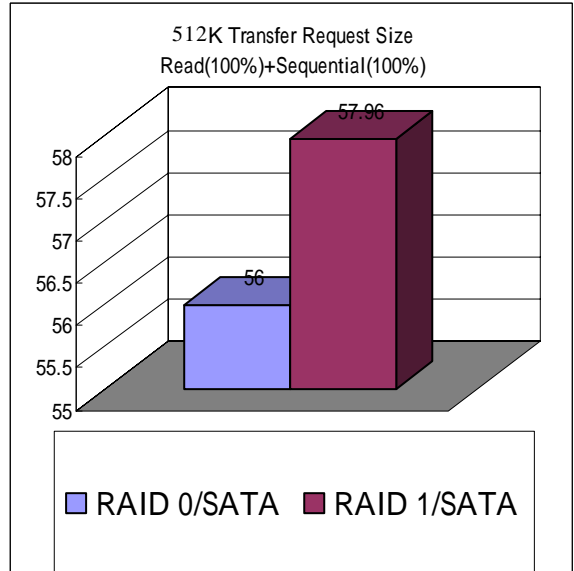
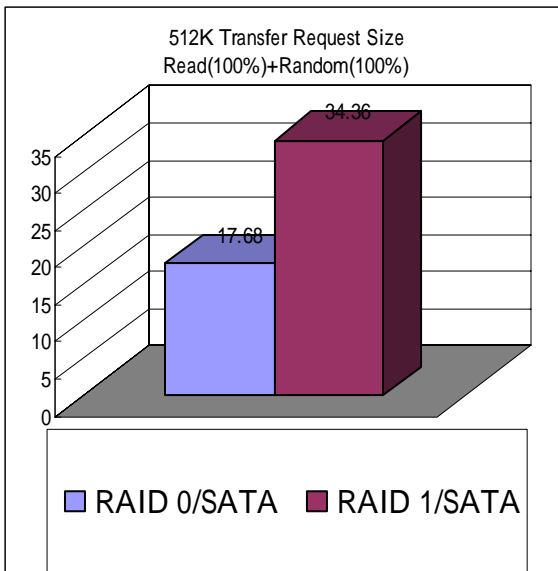
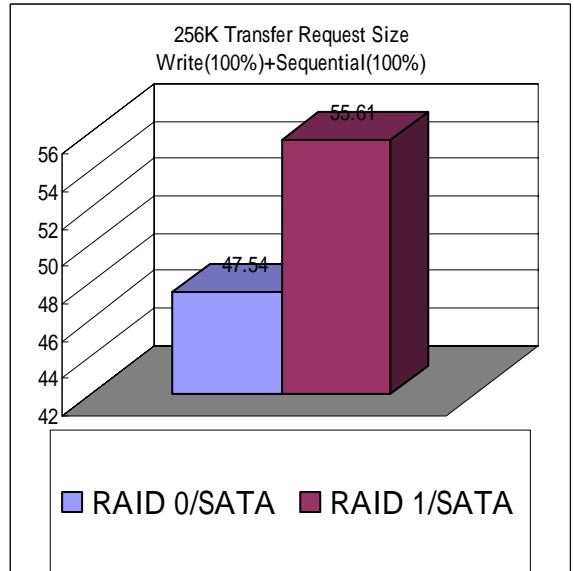
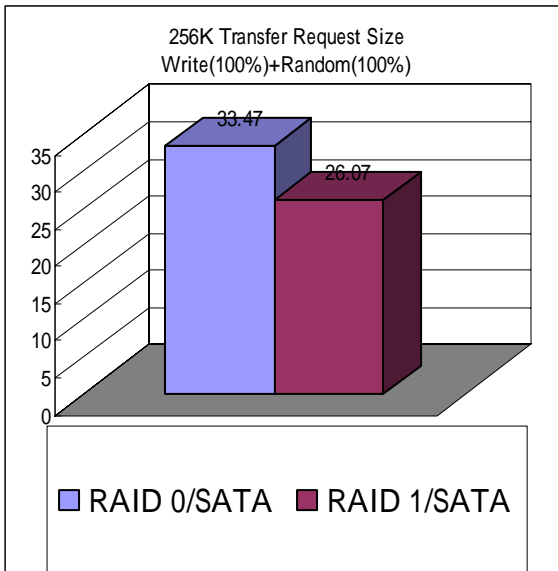
LEVEL: RAID 0			
Test Program : IOMeter 2004.7.30			
Host Interface		SATA controller	
Volume Capacity		160GB	
Transfer Request Size		256 K	512K
Read(100%)+ Random(100%)	Total I/Os Per Second	51.29	35.36
	Total MBs Per Second	12.82	17.68
Read(100%)+ Sequential(100%)	Total I/Os Per Second	226.31	111.99
	Total MBs Per Second	56.58	56.00
Write(100%)+ Random(100%)	Total I/Os Per Second	133.48	71.58
	Total MBs Per Second	33.37	35.79
Write(100%)+ Sequential(100%)	Total I/Os Per Second	190.18	95.36
	Total MBs Per Second	47.54	47.68

■ 2 pcs of Hard Drives on SR2600: One PC Worker

LEVEL: RAID 1			
Test Program : IOMeter 2004.7.30			
Host Interface		SATA controller	
Volume Capacity		80.0 GB	
Transfer Request Size		256 K	512K
Read(100%)+ Random(100%)	Total I/Os Per Second	97.20	48.71
	Total MBs Per Second	24.30	34.36
Read(100%)+ Sequential(100%)	Total I/Os Per Second	232.13	115.94
	Total MBs Per Second	58.03	57.96
Write(100%)+ Random(100%)	Total I/Os Per Second	104.27	57.17
	Total MBs Per Second	26.07	28.58
Write(100%)+ Sequential(100%)	Total I/Os Per Second	222.48	109.69
	Total MBs Per Second	55.61	54.85

■ Different Raid Level and Various interface compare with SR2600 for graph of transfer request performance





### C. Device Inside Temperature Test (Full installation condition)

Room temperature(F)	25.8C
Start 1 minutes inside operating temperature(F)	26.2C
Pass 1 hour inside operating temperature(F)	32.6C
Pass 1 hour inside disks surface temperature(F)	36.9C.

### D. Operation System Compatibility Test

1. Format :We assign this RAID disk to use various formats to do partition as NTFS, FAT and EXT to verify this function for SR2600 under Windows XP/Mac OS10.4.6 that will get test results be shown in this table.

2. File copy:

■ The test item that verify the function of transferring data as copy total capacities of 10GB/s data from source platform to SR2600 subsystem including a compressing files or a uncompressing file. and deletes these files in the target device.

3. OS Compatibilities:

■ Try to use SR2600 subsystem to set up it and test it's compatibility under various Operation system as Windows XP/Mac OS 10.4.6 and to transfer data into the Physical device (logical disk) between above operation system and SR2600 subsystem.  
■ Refer physical devices, interface and confirm the above devices will be already and work fine from device manager of Windows XP.

4. Hardware Storage device Compatibility

We provide this SR2600 subsystem with various hard Drives to test their compatibilities.  
(The compatible test results of hard Drives are listed in the test report.)

5. Peripheral interface Device Compatibility:

We inserted interface card into the previous mentioning platform to connect them with this SR2600 subsystem to test their compatibilities.

(The compatible test results of interface card are listed in the test report.)

6. Mother board Compatibility:

We used various mother boards to connect with this SR2600 subsystem to test their compatibilities.

(The compatible test results of mother board are listed in the test report.)

<b>Test Type</b>	
<b>Platform:PC</b>	
<b>1.Format</b>	
NTFS	pass
FAT 32	pass
EXT 2/3	pass
<b>2.File copy(10GB)</b>	
pass	
<b>OS Compatibility</b>	
Windows XP Professional version SP2	pass
Mac OS 10.4.6	pass
<b>Hardware Storage Device Compatibility</b>	
1.Hitachi 400GB (HDS724040KLSA80)	pass
2.WDC 80GB (WDC WD800JD-00LSA0)	pass
3.Seagate 500GB (ST3500641AS)	pass
4.Hitachi 500GB (HDS725050KLA360)	pass
5.Seagate 160GB (ST3160812AS)	pass
6. Seagate 250GB (ST3250824AS)	pass
7. Seagate 80GB (ST3808110AS)	pass
8. Seagate 200GB (ST3200827AS)	pass
9.Hitachi 160GB (HDS722516VLSA80)	pass
10.Hitachi 250GB (HDS722525VLSA80)	pass
11.WDC 160GB (WDC WD1600JD)	pass
12.Maxtor 80GB SATA (6Y080M0 DiamondMax Plus 9 SATA/150)	pass
13.Samsung 160GB(SP1614C)	pass
14.WD 36.7GB(WD260GD)	pass
15.Seagate 160GB(ST3160827AS)	pass
16.Hitachi 80GB (HDS722580VLSA80)	pass
<b>Mother board Compatibility</b>	
1. GAK8NE	pass
2. GA-8I915G-MF	pass
3. MSI 945PL Neo(MS-7236)	pass