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>> High Speed Solid State Drive

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Valuable Choice to Upgrade Your Capacity— **Mtron SSD MOBI**





reduce long and tedious tasks



Safe Protection of Valuable Data Remarkable durability and stronger reliability Data stability against impact or vibration



Energy Efficiency Power consumption half of HDD Prolonged battery life

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Shortcut to

Brand New Exciting

Computing World

Faster and Complete Task Processing

Significant improvement in data processing speed to

Powerful Performance and Convenient Mobility—

Beginning of the Digital Life You've Been Waiting for

Remarkable Reduction of Booting Time

The booting speed is determined by the time required for the hard disk to read the data required for OS operation, regardless of CPU or memory performance. Accordingly, it is difficult to expect fundamental improvement in booting speed without addressing the structural problem associated with the hard disk. Mtron SSD MOBI uses the flash memory to resolve the problem. With a maximum read speed of 100MB/s, data is read three times faster than a hard disk, remarkably expediting your booting process.

Improved Work Efficiency for Heavy Load Tasks including Photoshop, Premiere and CAD

Applications that involve large-scale images or videos such as Photoshop, Premiere and CAD require substantial amounts of time for rendering and storing data. Mtron SSD MOBI reduces the work time so that professional photographers, graphic designers, video professionals and architects conduct tasks efficiently and maximize cost reduction.

• Seamless Game Experience

Online and PC games such as Lineage and Battle Field involve large scale data exceeding 1GB, extending the time required to load the game and read new data when accessing a new map. Mtron SSD MOBI expedites the loading process and allows users to experience uninterrupted, optimal game environments.

Outstanding Durability Optimized for Mobile System

Thanks to the ubiquitous environment that allows networking regardless of time and place, various types of mobile devices have become essential part of our lives. However, it is not easy to maintain data security in mobile and portable devices that are always on the move. Mtron SSD MOBI is a semiconductor storage device built with flash memories. It is light and sturdy, minimizing the risk of damaging the data against drops, impact or vibration.

Reduced Battery Power Consumption for Longer Notebook Computer Use

Being able to use a notebook PC or a mobile device even for 10 minutes longer is very important. Since the devices are often reboot or taken to the standby mode in the mobile environment, power consumption by the hard disk is inevitably high. Mtron SSD MOBI only consumes 0.5W in the idle state, allowing significant power saving for the notebook computer.

Notebook Computer without Noise and Heat

Noise from a computer can be more annoying than subways or vehicles. Since Mtron SSD MOBI consumes power only when accessing the semiconductor chip, there is very little heat, which reduces fan mechanism, the main source of computer noise, and creates a quite computing environment.



Top Technology in its Class

High Performance, Outstanding Durability, Low Power Consumption— All in One!

What is Mtron SSD MOBI?

- A storage device that can immediately replace your HDD without any software installation
- Unlike an external disk, SSD MOBI is easily installed right into your PC or notebook computer for immediate access
- Using a high performance controller, SSD MOBI offers higher performance, stability and lifetime compared to USB drive or CF/SD card



Remarkable Speed Improvement Achieved by World's Finest Controller Technology

SSD is not implemented by simply assembling flash memories. The difference in SSD technology depends on the controller that controls the flash memories used for storage. Mtron SSD MOBI uses the proprietary Multi-Channel Parallel Array controller technology to achieve maximum read and write speeds of 100MB/s and 80MB/s, respectively, which is three times faster than conventional hard disks.

	Mtron SSD MOBI 3000 (2.5")	SSD - Vendor A (2.5")	SSD - Vendor B (2.5")
Avg. Data Access	0.1msec	< 1msec	0.9msec
Max. Read Speed	100MB/s	58MB/s	30MB/s
Max. Write Speed	80MB/s	32MB/s	20MB/s

Test PC: AMD Athlon 3200+ (2GHz), 1GB RAM, Promise TX2+ (UDMA133/SATA1), Windows XP SP2



Outstanding Durability and Faster Data Access based on Semiconductor-Electronic Structure

Mtron SSD MOBI is implemented with flash memory and electronic structures, free from conventional hard disk mechanisms, overcoming the slow and faulty structure of the hard disk and allowing faster data access.

- Data protection from external impact or vibration
- Mean Time Between Failure (MTBF): 1,000,000 hours
- Free from unnecessary mechanisms that involve seek time and latency time
- Faster data access

	Mtron SSD MOBI 3000 (2.5")	HDD (2.5")
Impact	1.500G / 0.5ms	225G / 2.0ms
Vibration	20G(40-2,000Hz)	0.5G(22–350Hz)
Noise	0db	22db
Temperature	0–70°C	5–55℃
Avg. Data Access	0.1msec	17.2msec
Max. Read Speed	100MB/s	27MB/s
Max. Write Speed	80MB/s	30MB/s

Low Power Consumption and Improved Energy Efficiency

Whereas a hard disk is a mechanical structure that consists of a platter and a head to process data and requires high power consumption, Mtron SSD MOBI only consumes power when accessing the flash memory chip.

- Prolonged battery life
- Power consumption: 0.5W Idle / 2W Active

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Data Storage: Flash Memory

Core Control Function: Mtron SSD Controller

Interface: SATA revision 1.0a



Exceptional Performance that Defy Limitations

Multi-Tasking, Large-Scale Applications, High-Capacity Files— **Bid Farewell to the Slow and Sluggish Task Environment**

Optimal Solution for Eliminating System Bottleneck

The lowest speed determinant theory states that the element with the lowest speed determines the overall speed. The theory also applies to the computing environment. Even though there have been remarkable advances in CPU and memory performances, the system bottleneck problem caused by the hard disk could not be resolved. Balanced harmony among the components is very important for achieving improvement of the overall system performance, and Mtron SSD MOBI is the optimal solution for eliminating imbalance.



High Performance for Optimal Task Execution

Mtron SSD MOBI yields startling speeds in reading and processing data. It expedites the booting procedure and produces clearly higher performance than the hard disk for tasks that involve high-capacity files, professional graphics and multi-tasking.

File Copy: 5.52GB Multiple file copy Adobe Photoshop 8: 194 image file editing (20% 355MB memory usage) Test PC: Intel Core 2 Duo E6300 GIGABYTE GA-P35-DS3P 200 --150 --

Windows XP initial booting time







Initial Booting: Lower=Faster

OCZ PC2-8500 NVIDIA SLI-EPP 1GB × 2 NVIDIA GeForce 8600GT SLI

ASUS P5N32-E SLI (nForce 680i)

Avg. Booting: Lower=Faster

NVIDIA GeForce S800 GTS 640M

Mtron SSD MOBI 3000 (2.5", 32GB) WD Raptor 36GB (10000rpm) Seagate 7200.9 120GB (7200rpm)

Optimal Drive for High Performance and Mobile Computing

Mtron SSD MOBI offers higher durability and performance, lower power consumption and less noise compared to conventional hard disks, making it optimal for premium PCs, notebook computers, PMPs, mobile systems and desktop PCs.

	Requirements	Benefits of SSD MOBI
Personal Computing	High performanceOverall system improvement	 Enhanced efficiency in professional graphic work Reduced booting/shutdown time
	 High reliability and stability 	Fast data processing for multi-tasking
Mobile Computing	Strong durability and data security	Data protection from external physical environments
	 Extended battery life 	 Low power consumption and extended usage time
	 Light weight, slim size 	 Light weight suitable for mobile devices
	 Noiseless / No Heat emission 	 Reduced cooling pan because there is almost no heating



Notebook PC Portable PMP Storage Extended Slimme Extended battery life battery life dimension Noiseless Impact Noiseless Light weight protection Light weight Protection from impact

Mtron SSD MOBI



- Increased portability Slimmer
- dimension Extended battery life



improvemer Low power consumption Smaller size

Car PC



Data protectio from external impact



Specifications

Mtron SSD MOBI 3000 Series

Standard Interface Transmission Modes Capacity Avg. Data Access Max. Read Speed Max. Write Speed Impact Tolerance Vibration Tolerance Power Consumption Mean Time Between Failure (MTBF) **Operation Temperature**

* Test Item: MSD-SATA3025-032 (2.5", 32GB, SATA1)
 * Test PC: AMD Athlon 4800+ Dual Core (2.4GHz), 1GB RAM, NVIDIA nForce 570 Ultra MCP(UDMA 133), Window XP SP2

Warranty

Ordering Information

Capacity	Part #
1660	MSD-SATA3025-016
TOGB	MSD-PATA3025-016
2260	MSD-SATA3025-032
32GB	MSD-PATA3025-032
(46)	MSD-SATA3025-064
64GB	MSD-PATA3025-064

2	2.5" Industrial Standard
S	SATA 1.0a Standard / ATA 7 Standard
F	PIO mode (0–4)
0	DMA mode (0–2)
ι	JDMA mode (0–6)
1	6/32/64GB
C).1msec
1	00MB/s
8	BOMB/s
1	,500G
2	20G
C	0.5W Idle, 2W Active
1	,000,000 hours
C)–70°C
3	3 years

