



# mini PCI Express DiskOnModule®

mini XDOM – m100

## A Real mini PCIE XDOM

CoreSolid Storage (CSS) mini XDOM m100 is worldwide first of mini PCI Express DOM which fully works on PCI Express bus connected with mini PCI Express slot. With single lane link of mini PCIe, mini XDOM m100 utilizes 250MB/sec host bandwidth to transfer data with fast response (low latency), which is higher than SATA 1.5Gbps host bandwidth, to perform fast data read and write with 4-channel flash memory technology.

Contrast with SATA-based mini PCIe DOM for specific PC platform, CSS mini XDOM m100 doesn't need SATA serial pair of signals to transfer host data. With XDOM m100, host doesn't need to implement SATA signals into its mini PCIe slots. To build a true mini PCIe slot in main board will contribute system to have much better I/O expansion capability to customers and it always benefits more to system platform than SATA-PCIe slot.

## Higher Memory Density

With multi-layers flash structure, mini XDOM m100 offers much higher memory capacity but still has a compact form factor that is near to small modular SATA/IDE/USB flash drive or CompactFlash®, Cfast® Card. However, none of foregoing flash drives can reach such high memory density as XDOM m100 did.

For small computer with large volume of data operating systems, mini XDOM is the best data storage solution for clients' applications.

## Extreme Rugged Host Connection

CSS mini XDOM provides a really rugged host connection with packaged screws and lead frame (optional) to maintain system to be working on consecutive vibration conditions and be against abrupt sock impact.

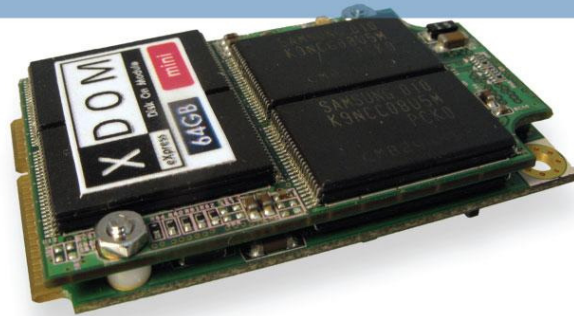
## More SMART

mini XDOM also builds SMART functions in itself that include the report of flash memory status. It can guide host system to diagnose the mini XDOM flash drive health.

## Main Features

- High speed PCI Express bus support
- Compact form factor designed for highly integrated system
- Large memory capacity for operating system and heavy data storage
- Very high data transfer rate for embedded kernel system operation
- Extremely rugged design for severe operating ecosystem
- Bootable for image file loading
- Compliant with NVMe Rev.1.0, AHCI 1.0, and ACPI 2.0
- SMART function reports flash memory status
- Lower power consumption
- Quick Self-Erase for emergency (customized)
- Drive access status LED monitor
- Hardware write protection for system security
- Standard ATA command support
- Support Windows® 7, Vista, XP/XPE and Linux in driver free installation

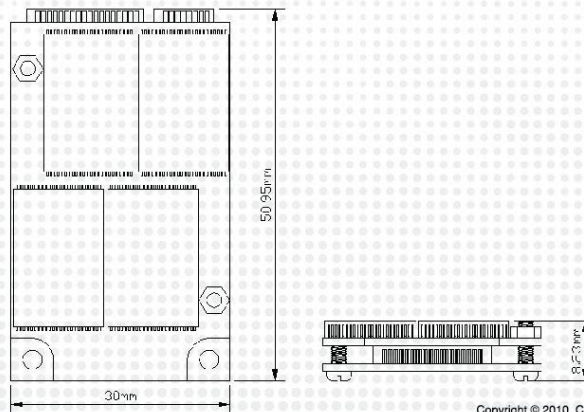




## mini PCI Express DiskOnModule

### m100 Specifications (Preliminary)

Memory Capacity	16GB, 32GB, 64GB
Interface	PCI Express x1 lane
Host Interface Standard	Comply with PCI Express Rev.1.1
Power Management	Comply with ACPI V2.0
Slot	52pin mini PCIe
Operating Voltage	DC 3.3 Voltage
Power Consumption	500 mA (max.)
Sequential Data Read	85 MB/sec
Sequential Data Write	40 MB/sec
Operating Temperature	0°C to 70°C (Normal) -40°C to 85°C (Wide Range)
Shock & Vibration	Meet MIL-STD-810G
Data Retention	10 years with power off
Wear Leveling	Global Wear Leveling
Flash Memory Type	SLC NAND Type
ECC	8/15-bit BCH Error Collection Coding
MTTF	2,000,000 hours
Dimension	WxLxH : 30.0mm x 51.0mm x 8.3mm (max.)



Copyright © 2010, CoreSolid-Storage Corporation. All rights reserved.