

## Multi-drive Mass Storage Module



### APPLICATIONS

The DS MS1/0xx VME Mass Storage Module supports up to three 2.5 inch SATA300 mass storage drives or a CD/DVD RW and single 2.5 inch drive. Additionally there is support for a CompactFlash™ drive. The DS MS1/0xx is designed to work with a one or more of Concurrent Technologies VME or VXS single board computers simultaneously. The board is capable of operating in

temperatures ranging from -40°C to +85°C where it is suitable for a range of applications within the defense, industrial control, telecoms, telemetry, scientific and aerospace markets. Ruggedized versions are planned. In harsh environments solid-state Flash drives or ruggedized rotating drives are required and the CD/DVD RW drive is not supported.



### HIGHLIGHTS

- VME Mass Storage Module:
  - operates with one or more of Concurrent Technologies VME or VXS single board computers (SBCs) simultaneously
  - interfaces to the SBC's SATA and USB ports
- Various configurations available:
  - one, two or three 2.5 inch SATA300 drives
  - or one 2.5 inch SATA300 drive and a CD/DVD RW
- Supports a CompactFlash site (Type-I) in any configuration
- Two USB port connections from the SBC are up to provided directly to the front panel
- Extended temperature options also available:
  - -25°C to +70°C (E-Series)
  - -40°C to +85°C (K-Series, includes humidity sealant)
  - specialized drives required
- Ruggedized versions planned:
  - -40°C to +75°C (RA-Series)
  - -40°C to +85°C (RC-Series)
  - conformally coated
  - specialized drives required
- In harsh environments the CD/DVD RW drive configuration is not supported

## Mass Storage Module

- DS MS1/0xx Mass Storage Module:-
  - operates with one or more of Concurrent Technologies VME or VXS single board computers (SBCs) simultaneously
  - interfaces to the SBC's SATA and USB ports
  - SATA150 or SATA300 supported
  - USB 1.1 and USB 2.0 supported
- various configurations available:
  - one, two or three 2.5 inch SATA300 drives
  - or one 2.5 inch SATA300 drive and a SATA CD/DVD RW
- supports a CompactFlash site (Type-I) in any configuration

## Compatible VME/VXS SBCs

- VME or VXS Single Board Computer (SBC):-
  - commercial versions
  - some versions ruggedized
- VX 511/06x, Intel® Core™ 2 Duo processor
- VX 407/04x, Intel® Core™ 2 Duo processor
- VP 417/03x, Intel® Core™ 2 Duo processor
- VP 426/23x, dual Intel® Xeon® processors
- VP A45/01x, Intel® Atom processor

## SATA and USB Cable Interfaces

- one or more SBC SATA/USB cable connections can be made from the SBC to the DS MS1/0xx Mass Storage Module
- 3 x SBC SATA drive interfaces:-
  - 1 x SBC SATA interface connects to either a SATA drive or the SATA CD/DVD RW
  - 2 x SBC SATA interfaces connect to two SATA drives
- 4 x SBC USB ports:-
  - 1 x SBC USB port connects to the EIDE CompactFlash™ site
  - 1 x SBC USB port connects to either a SATA drive or the SATA CD/DVD RW (N-Series only)
  - 2 x SBC USB port connections available directly to the front panel from the SBC
- the CB MSS/305 cable interface kit provides:-
  - SATA and USB interface cables
  - rear transition module for the DS MS1/0xx

## Software Support

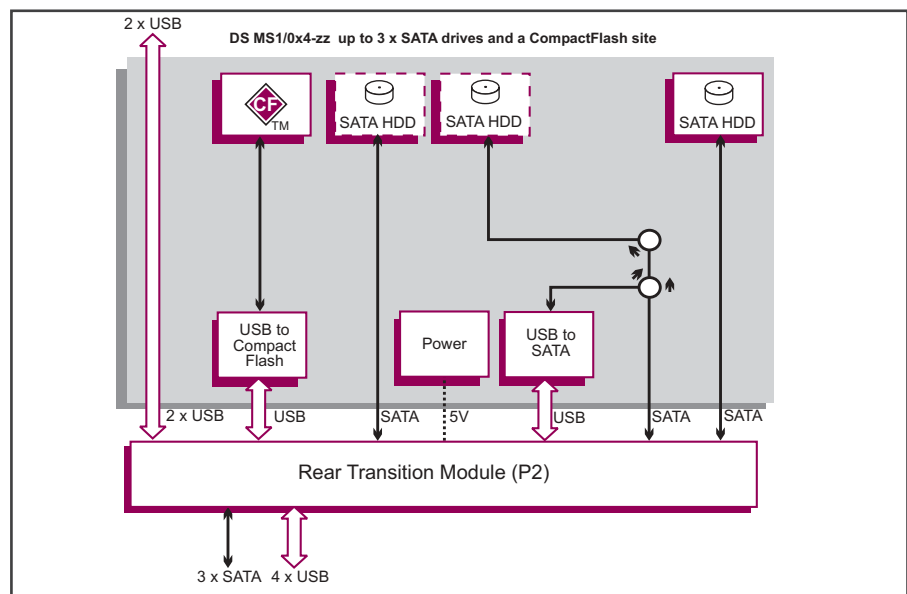
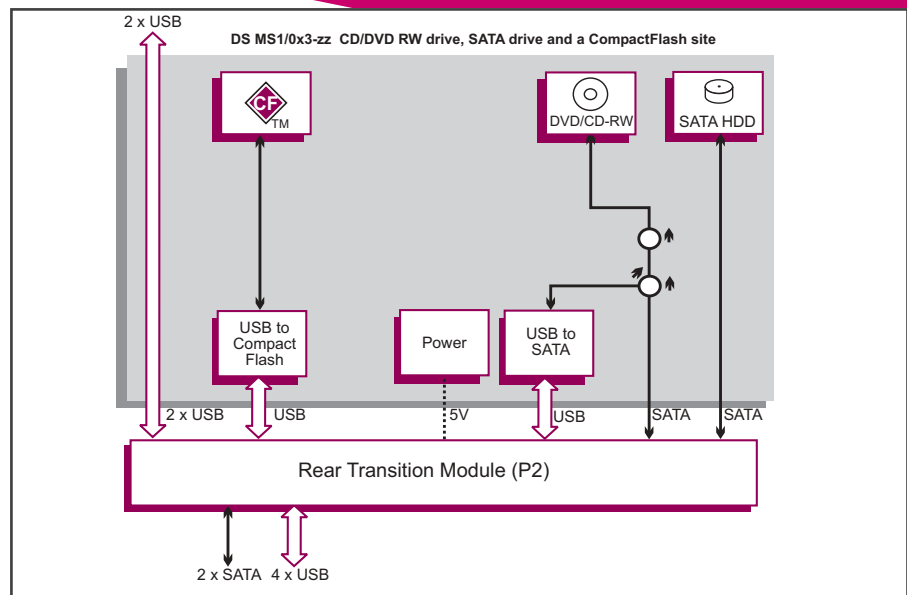
- supported operating systems depend on the VME or VXS single board computer used

## Safety

- PCB (PWB) manufactured with flammability rating of 94V-0

## Environmental Specification

- in harsh environments specialized solid-state Flash drives or ruggedized rotating drives are required:-
  - CD/DVD RW drive is not supported
- operating temperatures:-
  - 0°C to +55°C (N-Series)
  - -25°C to +70°C (E-Series)
  - -40°C to +85°C (K-Series)
- 5% to 95% Relative Humidity, non condensing (operating or storage):-
  - K-Series includes humidity sealant
- ruggedized air-cooled and conduction-cooled versions planned:-
  - -40°C to +75°C (RA-Series)
  - -40°C to +85°C (RC-Series)



## Electrical Specification

- requires 5V supply, typical current 0.1A plus:-
  - maximum 1.1A per disk @5V
  - maximum 1.5A CD/DVD RW @5V
- 3.3V, +12V and -12V supplies are not required

## Mechanical Specification

- 6U form-factor
- single slot, front panel width 0.8 inch (20.3mm)
- utilizes 160-way connectors for P1 and P2
  - compatible with 96-way connectors



## ORDERING INFORMATION

Order Number	Product Description (Hardware)	Replace the order number suffix with selections from the following: Where x = type of front panel handles	Where zz = drive size/type
DS MS1/0x3-zz	CD/DVD RW, SATA drive and a CompactFlash site	0 - VME handles 1 - VME64 handles	zz - contact local sales office
DS MS1/0x4-zz	up to 3 x SATA drives and a CompactFlash site		
CB MSS/305-x0	Cable Interface Kit: P2 rear transition module including 3 x SATA cables and 4 x USB cables		

For extended temperature and ruggedized versions please contact your local sales office