

5330/1 PCIe Storage 3U VPX Controller Plus Dual Drives



**Dual drives in
one 3U VPX slot**

Description

The 5330/1 supports storage volumes surpassing 2TB in a single 3U slot, with capacities keeping pace with current drive technologies. Choose from SLC, MLC, or rotating hard drives to match the endurance and environmental toughness of your system. The 5330/1 supports a 4 port SATA II 3Gbps controller with two on-board and two additional SATA 3G drives off-board allowing it to be implemented as part of a multi-slot storage array using Elma's 5332 and 5333 dual drive storage carriers.

The controller/carrier card allows for storage system expansion so it can scale to meet the ever-increasing needs of your application.

Features

- Largest available capacity in a single 3U VPX slot with dual SATA drives
 - Marvell 88SE6440 PCIe Gen1 x 4 to 4 port SATA II controller
 - Compliant with OpenVPX™ (VITA 65) profiles SLT3-PER-1F-14.3.2 and SLT3-STO-2U-14.5.1
- Solid state SLC, MLC drive or rotating 2.5" drives
- Designed for 5HP slot width and REDI offset faceplate
- 5HP VITA 48 REDI primary and secondary side covers
- Air cooled (5330) and conduction cooled (5331) configurations with optional conformal coating and extended temperature operation
- 5330 Supports 1 drive in 4HP slot with no REDI covers
5331 requires REDI covers and 5HP slot

Benefits


- Provides the building blocks for a high speed, high capacity storage array
- Manage your system using software RAID for maximum data protection and access speed
- Suitable for extreme temperature and shock resistance -40 to +85 Convection 5330
-40 to +75 Conduction 5331 Consult Sales for -40 to +80 Conduction option with solid state drives
- Ideal for signal processing applications demanding high data rates and large storage capacities.
- Addresses high capacity storage needs using the latest capacities in 2.5" drives

Applications and Related Products

- High capacity storage requirements for a wide range of defense applications including ground, shipboard and airborne systems
 - Signal intelligence data storage
 - Engine control systems data
 - Mission data storage
- Commercial and industrial data storage applications requiring high capacities, expandability and RAID protection.
- Rugged applications requiring resistance to a wide range of temperature extremes as well as high shock and vibration resistance.

Example Order Number: 5331256G00STSBNYE

Conduction cooled with a 256GB solid state SLC extended temperature drive, REDI side covers, no signal ground isolation, conformal coated and suitable for extended temperature operation.



- Custom backplanes – need a custom backplane architecture for your system?
- Embedded computing products – Single Board Computers (SBCs), networking switches, storage
- FPGA based configurable I/O
- Rear transition modules (RTMs), extender and load boards

VPX

5330/1 PCIe Storage

3U VPX Controller Plus Dual Drives

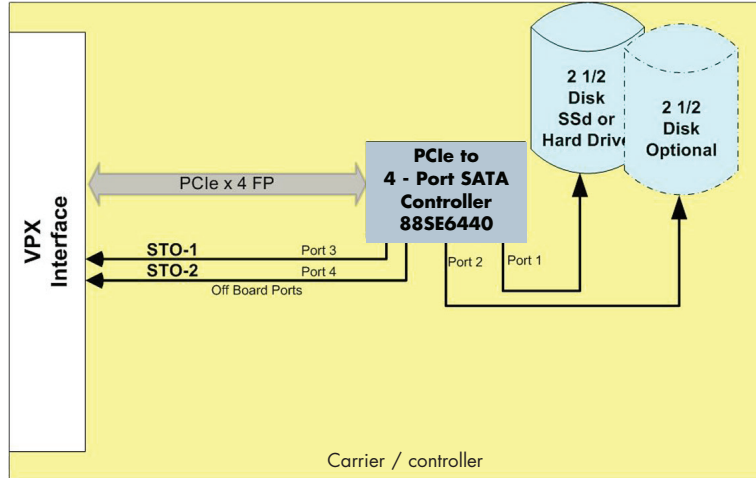


Storage



VITA

Block Diagram and Environmentals



General

The 5330/1 are 5HP single slot 3U VPX storage modules with a PCIe to 4 port SATA II controller and dual fixed drives.

Input / Output

When attached to a host single board computer (SBC), the 5330/1 provides PCIe access for up to 4 SATA drives or SATA access for up to 2 SATA drives directly.

Compatibility

The 5330/1 are directly compatible with 3U VPX system architectures including single board computers and system chassis.

Power Requirements

Typical Power +5V @ 0.6A (533x only)
Media power not included

Media +5 or +3.3 up to 5W per drive

Environmental

Standard Operating Temp:	0°C to 55°C
Extended Operating Temp:	-40 to +85 Convection 5330 -40 to +75 Conduction 5331
Non-operating:	-40 to +95C
Operating Shock:	40 Gs half-sine wave (11ms)
Operating Vibration:	2 Gs from 15 to 2000 Hz
Humidity:	5 to 95%, non-condensing

All configurations of the 5330/1 family are RoHS compliant.
Consult Sales for -40 to +80 Conduction option

Order Information

533



Air or conduction cooled

0 = air cooled (faceplate)
1 = conduction cooled (no faceplate)

2.5" Drive capacity both drives same capacity*

xxxG
xxxT
Example
064G = 64GB drive
500G = 500GB drive
012T = 1.2TB drive

Drive RPM

54
72
00 (solid state drive)

2.5" Drive Type

- RSD= standard duty rotating
- RED= enhanced duty rotating
- RXD= extended duty rotating
- SSS= commercial solid state SLC
- SSM= commercial solid state MLC
- STS=extended temp solid state SLC
- STM=extended temp solid state MLC

REDI Side Covers standard configuration includes primary and secondary covers** as standard

B = primary and secondary side covers for conduction or convection cooled versions, 5HP configuration is standard

Signal ground isolation (Some applications may require signal ground isolation)supplied as standard

Y/N

Conformal Coating

Y / N

Temperature Requirements

S = 0°C to +55°C
E = -40C to see above
O = Other

*Consult Elma for the complete range of available drive capacities.
**Standard configuration includes 5HP with REDI covers and offset faceplate
Standard configuration includes dual drives.
The model description on all quotes must include any other specific drive attributes necessary to fulfilling the application requirement.