# 5332/3 6Gbps Dual Drive Carrier Single Slot 3U VPX Board

ELMA
Your Solution Partner



## **Description**

The 5332/3 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 5332/3 features two on-board SATA drives which are connected through the backplane to an offboard SATA controller. Create a high capacity multi-slot storage array using one of Elma's controller cards such as our model 5330/1 controller / carrier card. Supports up to SATA III 6Gb/s interface speeds when used in conjunction with a SATA III controller.

The 5332/3 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
  - o Compliant with OpenVPX™ (VITA 65) profile 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 (5332) and conduction cooled (5333) configurations with optional conformal coating and extended temperature operation
- 5332 Supports 1 drive in 4HP slot with no REDI covers
   5333 requires REDI covers and 5HP slot

### **Benefits**

- Provides a building block for a high speed, high capacity storage array
- Manage your system using software RAID or hardware RAID controllers for maximum data protection and access speed
- Suitable for extreme temperature and shock resistance -40 to +85 Convection 5332
   -40 to +75 Conduction 5333 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

**Dual drives in** 

one 3U VPX slot

- o Signal intelligence data storage
- o 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: 5333512G00STMBNYE-1-DRV

Conduction cooled with one 512GB solid state MLC SATA II drive, REDI side covers, no signal ground isolation, conformal coated,  $\sim$ 45C to  $\sim$ 75C operating temperature at the wedgelocks

#### **Example Order Number: 5333512G00STMBNYE**

Conduction cooled with dual 512GB solid state MLC SATA II drives, REDI side covers, no signal ground isolation, conformal coated, -45C to +75C operating temperature at the wedgelocks







- 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



## 5332/3 6Gbps Dual Drive Carrier Single Slot 3U VPX Board

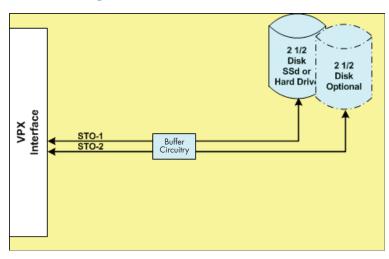




**Storage** 

VITA

## **Block Diagram and Environmentals**



#### **Environmental**

0°C to 5.5°C Standard Operating Temp:

Extended Operating Temp: -40 to +85 Convection 5332

-40 to +75 Conduction 5333

Non-operating: -40 to +95C

Operating Shock (SSD only): 40 Gs half-sine wave (11 ms) Operating Vibration (SSD only): 2 Gs from 15 to 2000 Hz Humidity: 5 to 95%, non-condensing

All configurations of the 5332/3 family are RoHS compliant. Consult Sales for -40 to +80 Conduction option

The 5332/3 are 5HP single slot 3U VPX storage modules supporting dual SATA III 6Gbps drives.

#### Input / Output

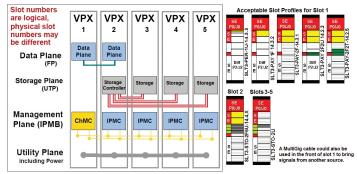
The 5332/3 can be directly attached to a host single board computer or it can be used as part of an extensible multi-slot storage array when used in conjunction with one of Elma's 3U VPX control / carrier cards; the 4 port SATA II controller / carrier model, 5330/1 or our 8 port SATA III controller / carrier.

#### Compatibility

The 5332/3 are directly compatible with 3U VPX systems including single board computers with 1 or 2 external SATA ports, system backplanes

#### **Power Requirements**

Typical Power +3.3 @ 200ma (533x only) Media power not included



Backplanes available for our 3U VPX storage products. Note, the 5332/3 does not support IPMI

## **Order Information**

#### Air or conduction cooled

2 = air cooled (faceplate)

3 = 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**

00 (solid state drive)

## 2.5" Drive Type

533

- RSD= standard duty rotating
- RED= enhanced duty rotating
- RXD= extended duty rotating
- SSS= commercial solid state SLC
- SSM= commercial solid state MIC.
- 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**

#### **Temperature Requirements**

 $S = 0^{\circ}C$  to  $+55^{\circ}C$ 

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.