

XMC/PMC-552 Rugged SATA Solid State Drive

- XMC (VITA 42.3) and PMC (IEEE 1386.1) NAND flash storage device
- XMC: x8 PCle
- PMC: 32-bit, 33/66/100/133 MHz PClx, V1.3
- Two drives with total capacity to 256 GBytes
- Sequential read (with RAID 0) over 400 MB/s
- Secure erase
- Hardware and software write protection
- Instant purge
- 128-bit AES data encryption
- Industry standard page management for wear leveling
- Bad block blocking
- Available in air-and conduction-cooled versions
- Low power consumption
- VxWorks[®], Wind River[®] Linux[®] and Windows[®] OS support

The XMC/PMC-552 is a rugged, high-performance, reliable and powerefficient NAND flash solid state drive solution, ideally suited for rugged defense and aerospace applications.

The XMC/PMC-552 is visible as two independent SATA drives providing up to 256 GB of disk space. Available configurations come in 64, 128 or 256 GB. (The actual memory available for applications is 50, 100 or 200 GB respectively).

The sequential read performance operates at an industry-leading rate of 200 MB per second, which can be enhanced to 400 MB per second with RAID 0 software.

Industry standard ECC NAND flash correction is supported, as well as wear levelling. ECC will correct up to eight random singlebit errors per 512-byte sectors. The wear level algorithm spreads program/erase cycles evenly across the media. This avoids premature device failure due to frequent data overwrites.

The XMC/PMC-552 provides sophisticated protection through a number of measures designed to elevate the level of security for the storage of data. This is accomplished by:

- 128-bit AES data encryption using a programmable key
- Instant purge a facility which allows all memory to be erased within 4 seconds
- 3 modes of write protection
- Secure erase of drives



Learn More Sales Info: sales.cwcembedded.com Sales Email: sales@cwcembedded.com





XMC/PMC-552

Figure 1: XMC/PMC-552 Block Diagram

