# mercury systems<sub>m</sub>

# High Density Secure Memory 1GB (4x128Mx16) NOR Flash Module

Model FV4128M16X-XSBX

- Advanced miniaturization technology
- -55°C to +125°C operating temperature
- Manufactured in a DMEA-trusted US facility



ADVANCED\*

Mercury Systems' advanced design and packaging techniques miniaturize <u>NOR Flash</u> memory in a compact, highly ruggedized package. This device is ideally suited for military and commercial aerospace applications requiring high-speed NOR Flash memory optimized for size, weight, and power.

#### **Product Features**

- 3V read/program/erase (2.7V 3.6V)
- Military and Industrial temperature ranges
- Single supply (V<sub>CC</sub>) for read/program/erase (2.7V to 3.6V)
- x16 data bus
- Asynchronous 32-byte Page read per chip select
- 512-byte Programming Buffer per chip select
  - Programming in Page multiples, up to a maximum of 512 bytes
- Sector Erase
  - Uniform 128-kbyte sectors
- Suspend and Resume commands for Program and Erase operations
- Status Register, Data Polling, and Ready/Busy pin methods to determine device status
- Separate 1024-byte One Time Program (OTP) array with two lockable regions per chip select

- Common Flash Interface (CFI) parameter table
- Advanced Sector Protection (ASP)
- Automatic Error Checking and Correction (ECC) Internal hardware ECC with single but error correction

## **Benefits**

- Military-grade performance without sacrificing the benefits of Flash memory
- Eutectic solder balls for superior board-level reliability
- 70% component reduction
- 100% burn-in and electrical test for the highest quality assurance
- Manufactured in a DMEA-trusted facility
- Available component End of Life management for long-term supply continuity

#### Plastic Ball Grid Array (PBGA) Package

- 14mm x 17mm x 2.9mm PBGA, 107 lead, 1 mm pitch
- Area: 238mm<sup>2</sup>
- Moisture Sensitivity Level (MSL): 3
- \* This product is under development, is not qualified or characterized and is subject to change or cancellation without notice.

Mercury Systems is a leading commercial provider of secure sensor and safety-critical processing subsystems. Optimized for customer and mission success, Mercury's solutions power a wide variety of critical defense and intelligence programs.













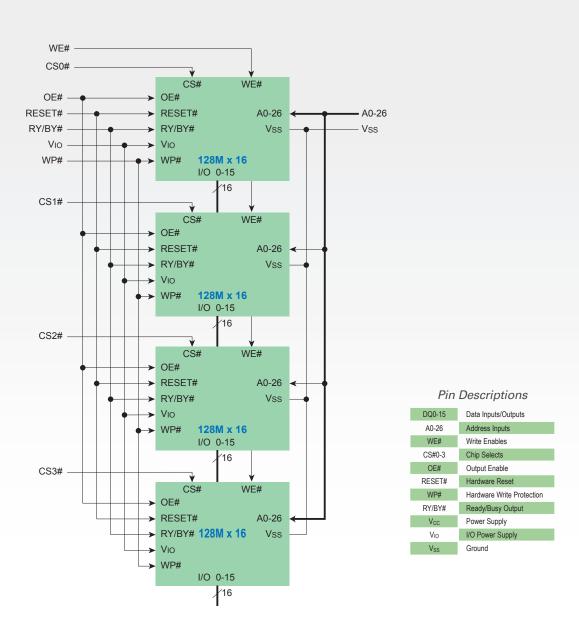
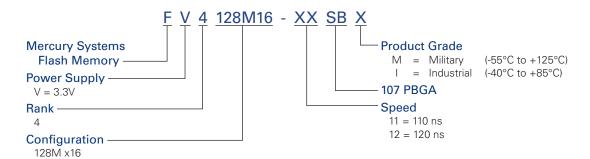


Figure 1 - Block Diagram



Example Part Number: FV4128M16-10SBM

Figure 2 - Part Numbering Matrix

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5048.01E ds 0419 FV4128M16X-XSBX 1GB (4x128Mx16) NOR Flash Module



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