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Rad Hard Microelectronics **Honeywell**

SHORT-FORM PRODUCT CATALOG

A comprehensive range of radiation hardened integrated circuit solutions

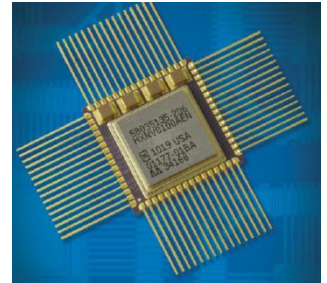
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### RadHard MRAMs from Honeywell



#### HXNV0100 1 Mbit (QML-V Qualified)

The 64K x 16 radiation hardened low power non-volatile Magneto-Resistive Random Access Memory (MRAM) is a high performance 65,536 word x 16-bit Magneto-Resistive RAM with industry-standard functionality.

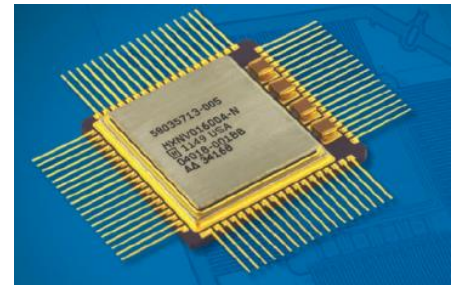


The MRAM is designed for very high reliability. Redundant write control lines, error correction coding and low-voltage write protection ensure the correct operation of the memory and protection from inadvertent writes. Integrated Power Up and Power Down circuitry controls the condition of the device during power transitions. It is fabricated with Honeywell's radiation hardened Silicon On Insulator (SOI) technology, and is designed for use in low-voltage systems operating in radiation environments. The MRAM operates over a temperature range of -40°C to +105°C and is operated with  $3.3 \pm 0.3V$  and  $1.8 \pm 0.15V$  power supplies.



#### HXNV01600 16 Mbit (QML-V Qualified)

The Honeywell 16 Megabit radiation hardened low power non-volatile Magneto-Resistive Random Access Memory (MRAM) offers high performance and is designed for space and military applications. The part can be configured as either a 2,097,152 word x 8-bit or a 1,048,576 word x 16 bit MRAM through an external pin setting.



The high reliability MRAM is designed for severe space environments and features excellent endurance, integrated Error Correction Coding (ECC) and low-voltage write protection. These features ensure the correct operation of the memory and protection from inadvertent writes. Fabricated with Honeywell's radiation hardened Silicon On Insulator (SOI) technology, the MRAM is designed for use in low-voltage systems operating in radiation environments over a temperature range of -40°C to +125°C with a  $3.3 \pm 0.3V$  power supply.

#### 64 Mbit MRAM MCM (EM available now)

Leverage Honeywell's experience with MCM technology – 64Mb MRAM in production. To create a larger memory configuration for FPGA boot applications, packaged parts on a board or die in an MCM (Multiple Chip Module), can be daisy chained together. Successful demonstration of Honeywell MRAM boot device for Xilinx V5 FPGA.

