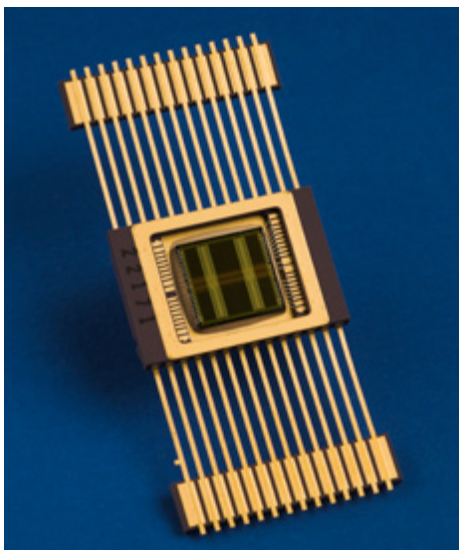
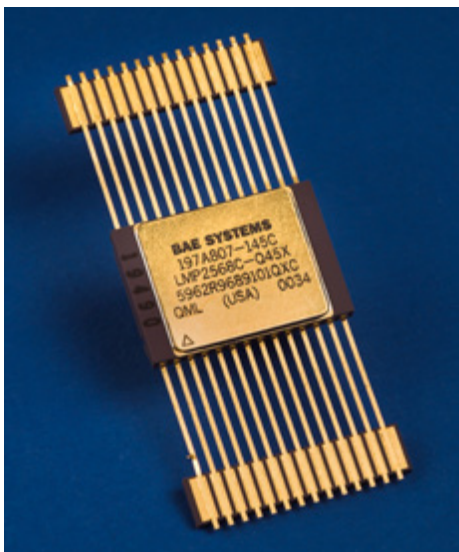


Programmable read-only memory 32K x 8 radiation-hardened PROM — low power 3.3V



The PROM is fabricated with BAE Systems' QML-qualified radiation-hardened technology and is designed for use in systems operating in radiation environments.

Description

The radiation-hardened oxide-nitride-oxide antifuse technology features, 3.3V transistors in the data path, and high-voltage N and PFETs in the programming path circuitry. The PROM operates over the full military temperature range, requires a single 3.3V \pm 5 percent power supply, and is available with TTL-compatible I/O. Power consumption is typically 15 mW/MHz in operation and is less than 10 mW/MHz in the low power-enabled mode. The PROM operation is fully asynchronous, with an associated typical access time of less than 60 nanoseconds. Synchronous operation is also possible using CE as a clock.

Key features

- Read/write cycle times \leq 100 ns
- Operation from -55 degrees Celsius to 125 degrees Celsius
- SMD number: 5962G02502
- BAE Systems part number: 238A790
- Asynchronous operation
- TTL-compatible I/O
- Single 3.3V \pm 5 percent power supply
- Low operating power
- 28-lead flat pack (0.500 inches x 0.720 inches)
- Radiation levels
 - Fabricated with BAE Systems bulk CMOS technology
 - Total-dose hardness through 2×10^5 rad(Si)
 - Neutron-hardness through 1×10^{12} N/cm²
 - SEU immune (no latches)
 - Latchup-free

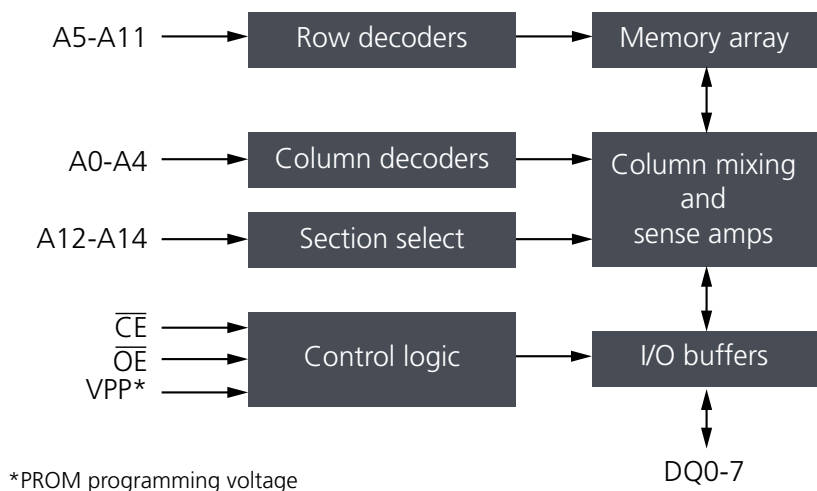
System definitions

A:0-14 Address input pins that select a particular eight-bit word within the memory array.

DQ:0-7 Bi-directional data pins that serve as data outputs during a read operation and as data inputs during a write operation.

OE Negative output enable, when at a high level, holds the data output drivers in a high impedance state. In programming mode, with OE high and CE low, data driver state is in "Data-In" to enable programming.

CE Chip enable, when at a low level with OE at low level, allows normal operation. When at a high level, CE forces the data output drivers in a high impedance state.



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