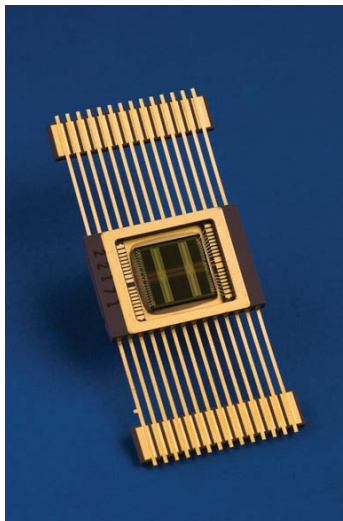
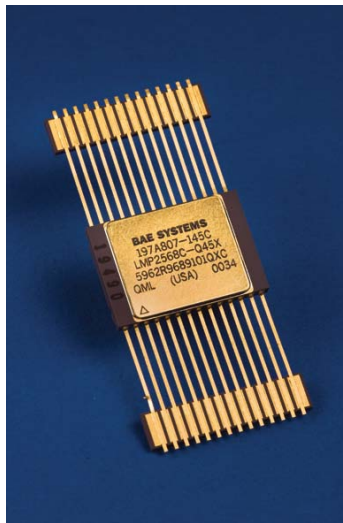


# Programmable read-only memory 32K x 8 radiation-hardened PROM – 5V

The PROM is fabricated with BAE Systems' QML-qualified radiation-hardened technology and is designed for use in systems operating in radiation environments. The radiation hardened oxide-nitride-oxide anti-fuse technology features, 5 V 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 5 V  $\pm$  5% power supply, and is available with either TTL- or CMOS-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 27 nanoseconds. Synchronous operation is also possible using CE as a clock.



## FEATURES AND CAPABILITIES

Read/write cycle times  $\leq$ 45 ns

Operation from -55°C to 125°C

SMD number: 5962R96891

BAE Systems part number: 197A807

Asynchronous operation

CMOS- or TTL-compatible I/O

Single 5V  $\pm$ 5% power supply

Low operating power

28-lead flat pack (0.500" x 0.720")

Radiation levels

–Fabricated with BAE Systems bulk CMOS technology

–Total-dose hardness through  $2 \times 10^5$  rad(Si)

–Neutron hardness through  $1 \times 10^{12}$  N/cm<sup>2</sup>

–SEU-immune (no latches)

–Latchup-free

## SIGNAL DEFINITIONS

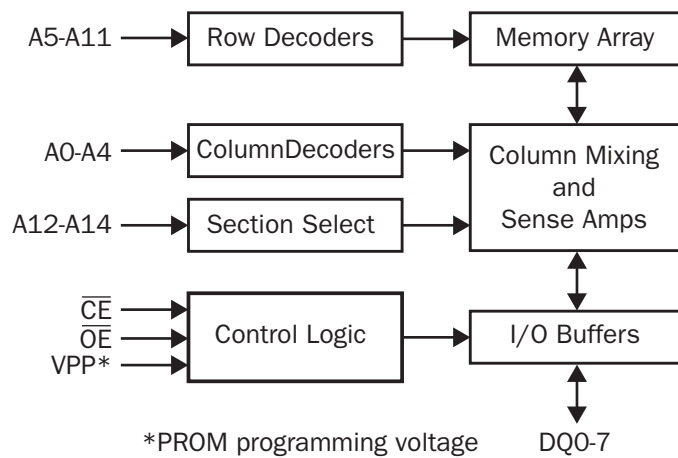
A:0-14 Address input pins that select a particular eight-bit word within the memory array.

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

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

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

## FUNCTIONAL DIAGRAM



## FOR MORE INFORMATION, CONTACT:

BAE Systems  
9300 Wellington Road  
Manassas, VA 20110-4122  
Tel: 1-866-530-8104  
[www.baesystems.com/sse](http://www.baesystems.com/sse)