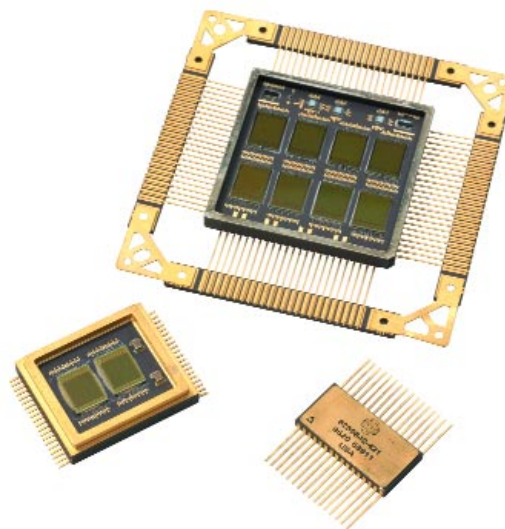


EEPROM Family

- **3 volt and 5 volt versions available**
- **128-Byte Page programming function to speed up erase and write operations**
- **Data polling and a Ready/Busy signal to indicate erase and programming operation status**
- **Integrated hardware, noise and software data protection**



Space Electronics EEPROM family

Space Electronics' 1, 4, and 8 Mb EEPROM line of products includes both 5 volt and 3 volt types, and up to 32-bit wordwidth in the 8 Mb option. The components feature commercial silicon made suitable for space applications through Space Electronics' RAD-PAK® radiation tolerance enhancing packaging technology, making them a cost-effective alternative to specialty components designed specifically for the space market.

The entire family of EEPROMS offers total dose hardness ranging from 50 to 250 krad (Si), depending on the customer-specified orbit in which they will travel. Other features for the EEPROM product line include no Single Event Latchup, a 20-year data retention rate, and low power dissipation.

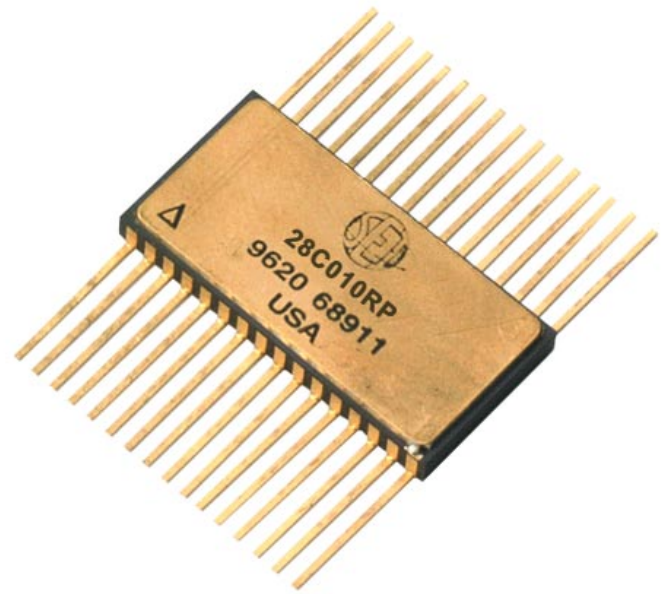
The 1 Mb 128k x 8 bit EEPROMs are packaged in 32-pin flat packs. They offer down to 120ns access times. Both the 3 volt and 5 volt versions are available with packaging and screening up to Class S. The 4 Mb EEPROMs, which use four 1 Mb high-speed 128k x 8-bit CMOS dies to yield a 4 Mb product, are packaged in 40-pin flat packs. The 3 volt version offers 200ns and 250ns maximum access times. The 5 volt version offers 120ns, 150ns, and 200ns maximum access times. Both are available with packaging and screening up to Class K. The 8 Mb EEPROMs, which use eight 1 Mb high-speed CMOS dies to yield an 8 Mb product, are packaged in 96-pin quad flat packs. The 3 volt version offers 200ns and 250ns maximum access times. The 5 volt version offers 150ns, and 200ns maximum access times. Both are available with packaging and screening up to Class K.



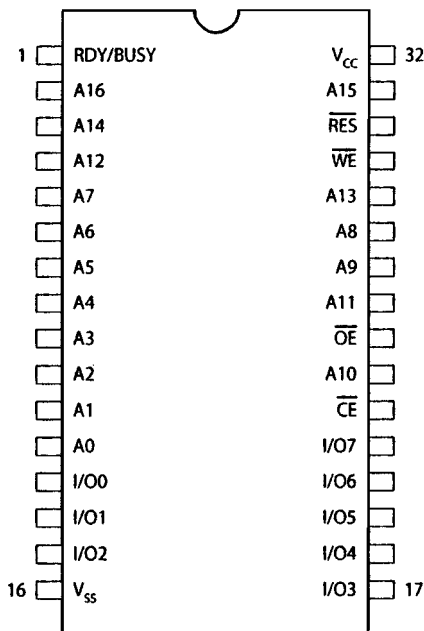
1 MEGABIT EEPROM MCM 128K x 8-BIT

Features

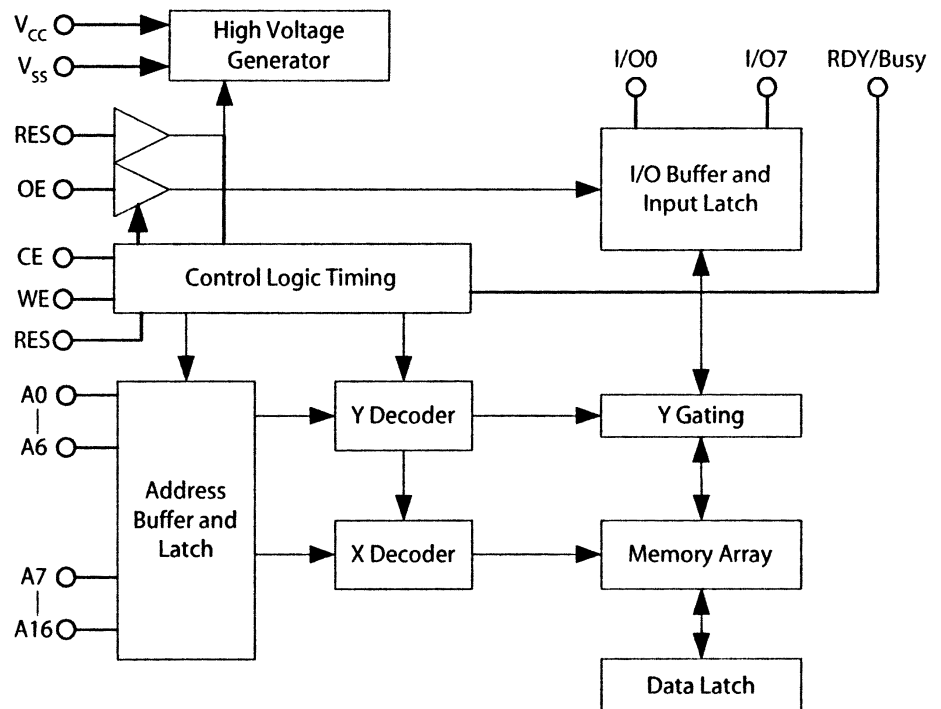
- 3 volt or 5 volt with 128k x 8-bit EEPROM
- Total dose hardness: 50-250 krad (Si) dependent upon orbit
- Single event effects:
 - No Latchup > 120 MeV/mg/cm²
 - SEU > 90 MeV/mg/cm² (Read Mode)
- Package:
 - 32-pin RAD-PAK flat pack/DIP package
 - JEDEC-approved byte-wide pinout
- High Endurance:
 - 10,000 erase/write (Page Mode)
 - 20 year data retention
- High speed:
 - 120, 150, 175, and 200ns maximum access times available



EEPROM Diagram



Block Diagram

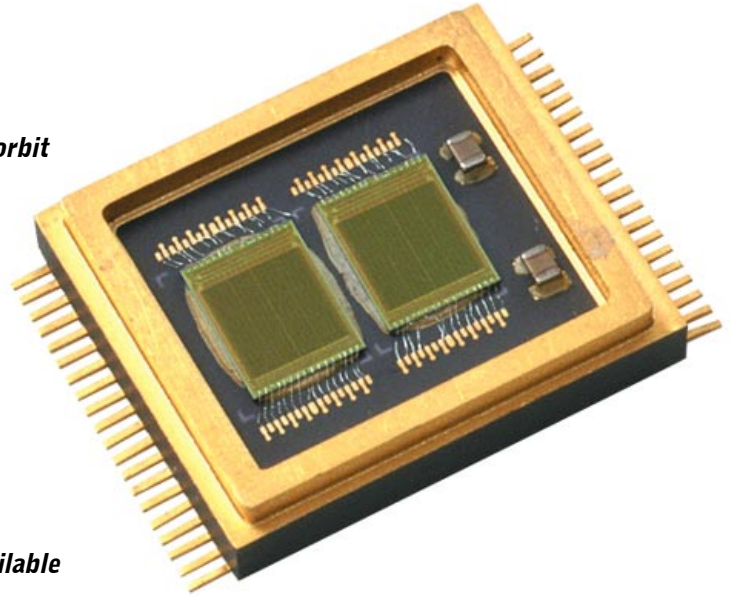


Space Electronics' 28C010RP is an electrically erasable and programmable ROM organized as 131072 x 8 bit. It achieves high speed, low power consumption and high reliability by employing advanced CMOS process and circuit technology. In addition, it has a 128-byte page programming function to make write operations faster, and a data protection circuit for power on and off, with software data protection to prevent accidental writes.

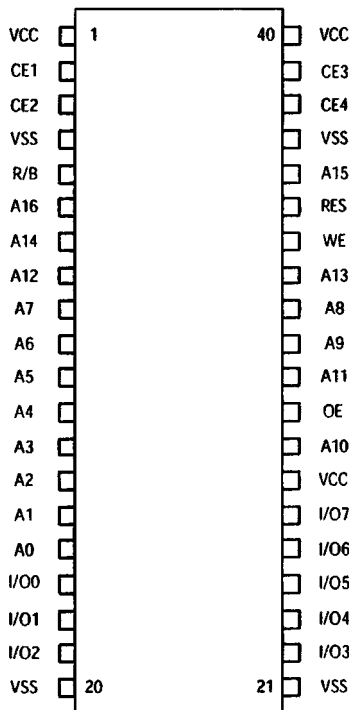
4 MEGABIT EEPROM MCM 512K x 8-BIT

Features

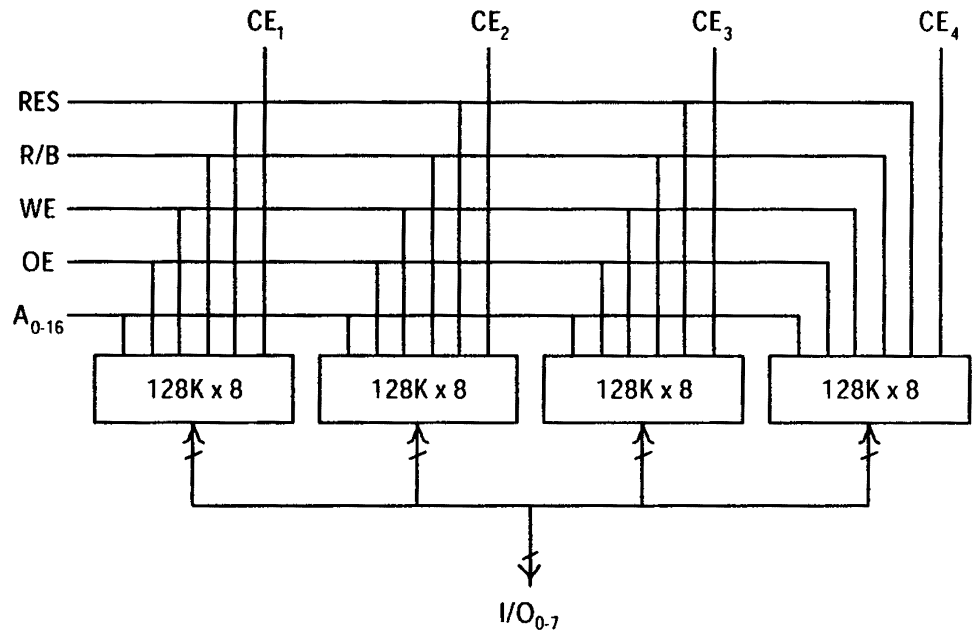
- 3 volt or 5 volt with four 128k x 8-bit EEPROMs
- Total dose hardness: 50-250 krad (Si) dependent upon orbit
- Single event effects:
 - No Latchup > 120 MeV/mg/cm²
 - SEU > 90 MeV/mg/cm² (Read Mode)
- Package:
 - 40-pin RAD-PAK flat pack
- High Endurance:
 - 10,000 erase/write (Page Mode)
 - 20 year data retention
- High speed:
 - 120, 150, 175, and 200ns maximum access times available



EEPROM Diagram



Block Diagram

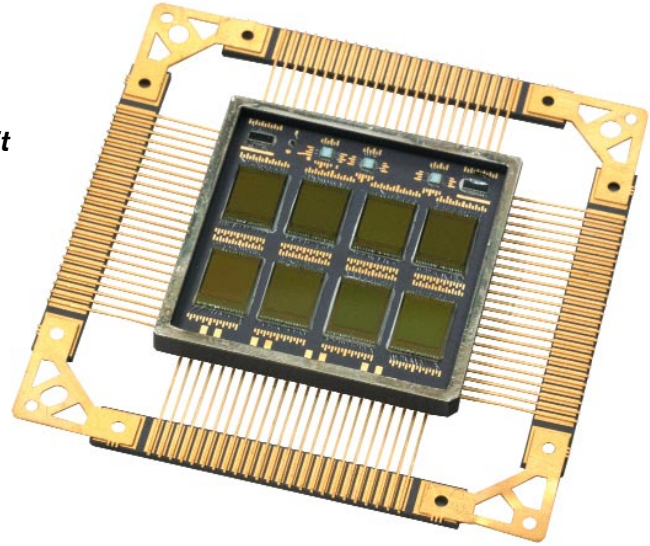


Space Electronics' 79C0408RP is an electrically erasable and programmable ROM organized as 131072 x 8 bit. It achieves high speed, low power consumption and high reliability by employing advanced CMOS process and circuit technology. In addition, it has a 128-byte page programming function to make write operations faster, and a data protection circuit for power on and off, with software data protection to prevent accidental writes.

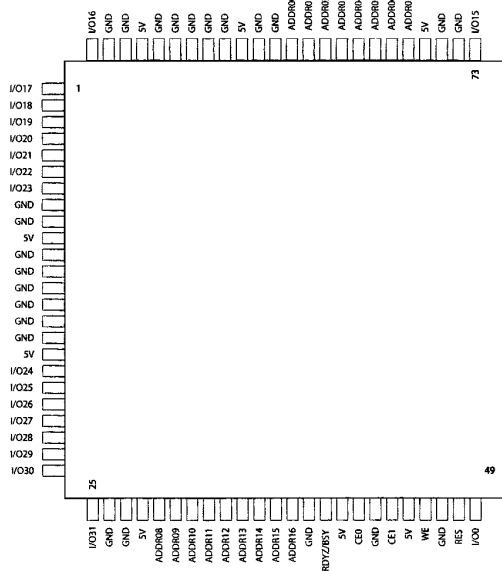
8 MEGABIT EEPROM MCM 256K x 32-BIT

Features

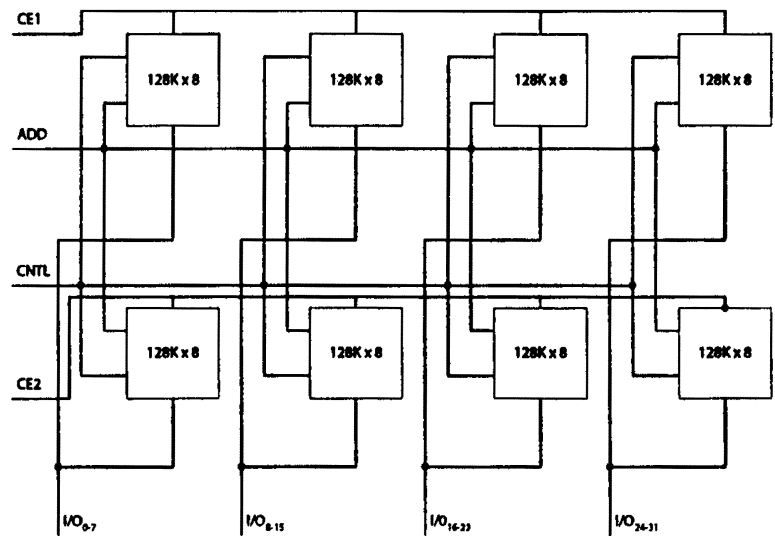
- 3 volt or 5 volt with eight 128k x 8-bit EEPROMs
- Total dose hardness: >100 krad (Si) dependent upon orbit
- Single event effects:
 - No Latchup > 120 MeV/mg/cm²
 - SEU > 90 MeV/mg/cm² (Read Mode)
- Package:
 - 96-pin RAD-PAK quad flat pack
- High Endurance:
 - 10,000 erase/write (Page Mode)
 - 20 year data retention
- High speed:
 - 200 and 250ns maximum access times



EEPROM Diagram



Block Diagram



Space Electronics' 79C0832RP is an electrically erasable and programmable ROM organized as 131072 x 8 bit. It achieves high speed, low power consumption and high reliability by employing advanced CMOS process and circuit technology. In addition, it has a 128-byte page programming function to make write operations faster, and a data protection circuit for power on and off, with software data protection to prevent accidental writes.

Space Electronics, Inc.

A Maxwell Technologies Company
4031 Sorrento Valley Blvd, San Diego, CA 92103
tel: 858-452-4167
fax: 858-452-5499
e-mail: sales@spaceelectronics.com

