

# CLXSA032KA9

## Smart Card

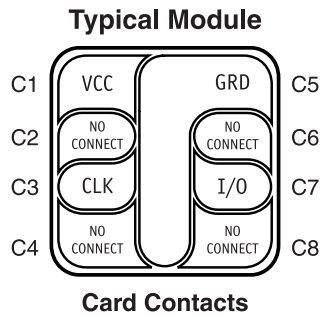
### DESCRIPTION

The CardLogix CLXSA032KA9 Smart Card incorporates a 32,768 bit Serial Electrically Erasable PROM in a 4096 by 8 architecture. This card is for advanced, low power applications such as small record storage and loyalty applications where low cost is a driving factor.

The CLXSA032KA9 offers a straight memory array that features ultra-high-endurance EEPROM for data that changes frequently. The entire array is rated at 1,000,000 ERASE/WRITE (E/W) cycles guaranteed. The CLXSA032KA9 advanced CMOS technology makes this device ideal for low-power non-volatile code and data applications.

Program development is supported through the Smart Toolz™ development kit and the Cardplex™ API, and CardAppz™ application software.

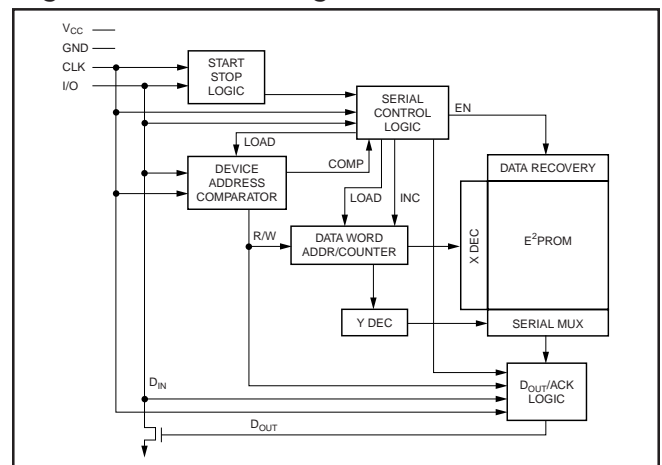
The CLXSA032KA9 is available in the ISO 7816 standard, and CR80 package.



### FEATURES

- Voltage operating range: 2.5V to 5.5V
  - Peak write current 3  $\mu$ a at 5.5V
  - Maximum read current 150  $\mu$ a at 5.5V
  - Standby current 1  $\mu$ a typical
- Industry standard two wire bus protocol
  - I<sup>2</sup>C™ compatible
- 32-byte page, or byte write modes available
- 1 ms typical write cycle time, byte or page
- Includes 100 KHz (2.7V) and 400 KHz (5.0V) Compatibility
- Filtered inputs for noise suppression
- Power on/off data protection circuitry
- Endurance: 1,000,000 E/W cycles guaranteed
- Electrostatic discharge protection > 4,000V
- Data retention > 100 years

Figure 1. Block Diagram



16 Hughes, Suite 100 • Irvine, California 92618 • Ph:(949) 380-1312 • Fax:(949) 380-1428

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