

# CLXSA002KA2 Smart Card

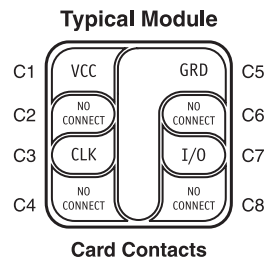
## DESCRIPTION

The CardLogix CLXSA002KA2 Smart Card incorporates a 2048 bit Serial Electrically Erasable I<sup>2</sup>C PROM in a 256 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 CLXSA002KA2 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 CLXSA002KA2 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, Winplex™ API, and CardAppz™ application software.

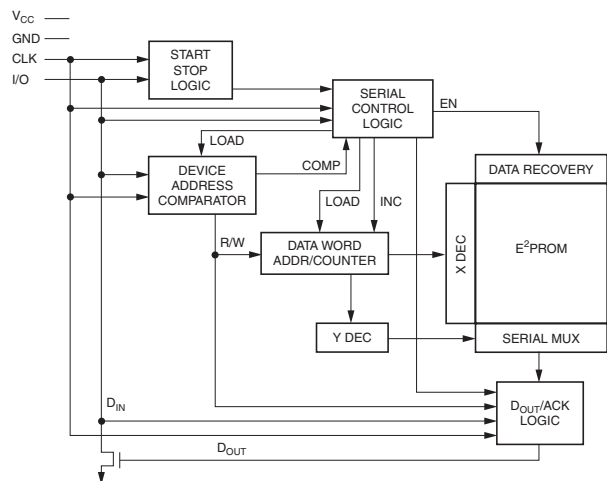
The CLXSA002KA2 is available in the ISO 7810, CR-80, SIM/SAM, and Keychain form factors.



## FEATURES

- Voltage operating range: 2.5 V to 5.5 V
  - Peak write current 3 mA at 5.0 V
  - Maximum read current 1 mA at 5.0 V
  - Standby current 10 µA typical
- Industry standard two wire bus protocol
  - I<sup>2</sup>C™ compatible
- 8-byte page or 8-byte write mode available
- 5 ms max write cycle time
- Includes 100 kHz (2.7 V) and 400 kHz (5.0 V) Compatibility
- Filtered inputs for noise suppression
- Power on/off data protection circuitry
- Endurance: 1,000,000 E/W cycles guaranteed
- Electrostatic discharge protection > 4,000 V
- Data retention > 100 years

## BLOCK DIAGRAM



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

©2006 CardLogix, Inc. All information is preliminary and CardLogix retains the right to change and/or withdraw any portion without notice. This document and its contents are covered under U.S. copyright and register laws. All rights reserved. 7400016 - 20060711