

CLXSA008KB4

Smart Card

DESCRIPTION

The CardLogix CLXSA008KB4 Smart Card incorporates a "smart" memory organized 1024 x 8 bit. These cards have been developed for advanced, low power applications such as secure record storage and provide the systems designer with flexibility through the use of many new user-programmable features.

These cards feature programmable write protection for each byte.

Reading of the whole memory array is always possible. The memory can be written and erased byte by byte. Input data and the contents of the addressed byte are compared so that only bits are written that were not written before. Erasing is only possible byte-wise, even if only one bit is to be erased, but bits may be written individually. Each byte can be write/erase protected individually by setting a protect bit (EEPROM → ROM). The protect bit is only one time programmable and can not be erased. When the operating voltage is applied, the chip goes into power-on reset (POR) state. POR is terminated by reset (RST). Reset is started by RST changing from "0" to "1" and finished by clock (CLK) going from "0" to "1". This reset operation aborts any currently active command. After POR, a read operation must be performed before any change of data is possible.

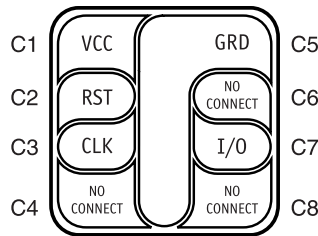
In addition to the above functions this card has Programmable Security Code (PSC) verification logic. All the memory, except for the PSC, can always be read. The memory can be written or erased only after PSC verification and the error counter can always be reset. After eight successive incorrect entries the error counter will block any subsequent attempt at PSC verification and hence any possibility to write and erase.

The CLXSA008KB4 is available in the standard CR-80, ISO 7816 plastic card.

FEATURES

- Voltage operating range: 4.5V to 5.25V
 - Peak write current 3 ma at 5.25V
 - Maximum read current 150 ma at 5.25V
 - Standby current 2 mA typical
- Industry standard: serial interface in accordance to ISO standard 7816 (synchronous transmission)
- Byte-wise addressing
- Irreversible byte-wise write protection Power on Reset mode circuitry
- Endurance:
 - 10,000, E/W cycles guaranteed
- Electrostatic discharge protection > 4,000V
- Data retention > 20 years

Typical Module



Card Contacts



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