

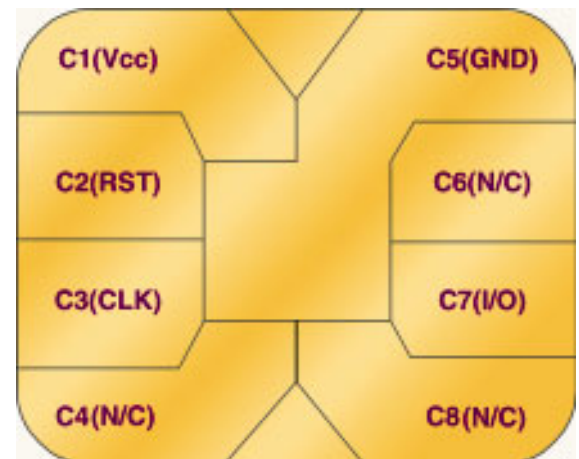


**Integrated Silicon Solution, Inc.**

## **IS23SC4402/04/08/16/32**

### **Features**

- 8051 based MCU manufactured with CMOS technology
- Enhanced 16-bit arithmetic and 3 times faster than conventional 8051
- Single 2.7V to 5V power supply with Vpp generated internally
- Additional instructions optimized for chip card applications
- Three 16-bit timers
- Programmable Watchdog Timer
- Two 16-bit Data Pointers
- Five interrupt sources with three levels of priority
- On-chip oscillator and clock circuitry
- Clock frequency: 1 to 5 MHz at 5V; 1 to 4 MHz at 3V
- 256 bytes internal RAM
- 16K/32K bytes user ROM for application program
- 2K/4K/8K/16K/32K bytes EEPROM for application program and data
- Minimum of 1 Million write/erase cycles; 100 years data retention for EEPROM
- OS program storage and execution in EEPROM area enables customized user applications



### **Security**

- Low/High voltages sensors
- Low/High frequency sensors and filter
- Internal power-on-reset
- 16 bytes security PROM Hardware Protected
- Unique Chip ID for each device
- Memory Address scrambling
- Fast erase of internal RAM triggered by security sensors
- Encryption of data busses and memories with using one key
- True FIPS140-2 compiled Random Number Generator for advanced authentication algorithm
- Proprietary block cipher based on a Digital Chaotic Function

### **Description**

IS23SC44 series 8-bit MCU chips are based on ISSI's advanced CMOS technology. The FIPS140-2 compiled random number generator provides a cost-effective solution for advanced authentication. The crypto engine gives customers more security to protect the COS (Chip Operating System) and applications data. User friendly development tools (emulator) is available to shorten the product time to market for customers.



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## To Order

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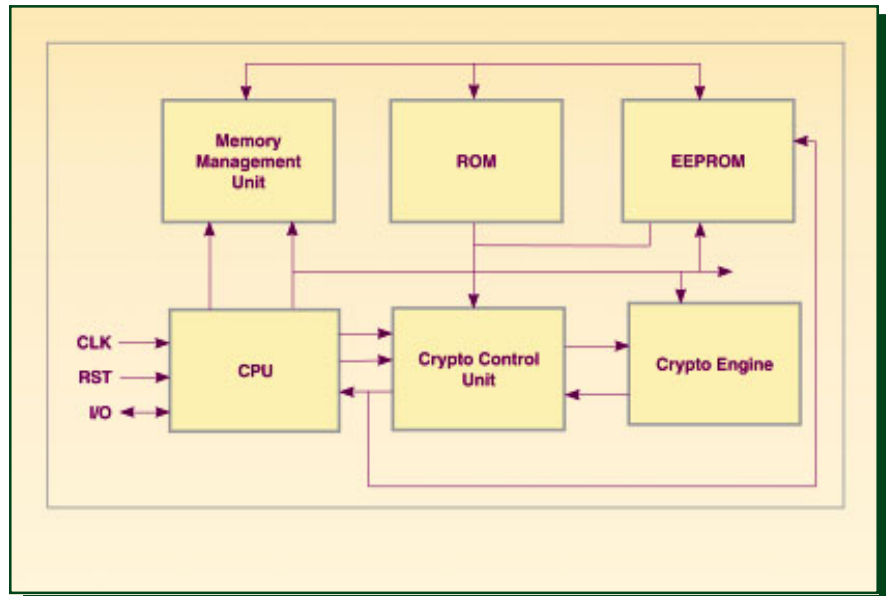
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ISO contact	Pad	Description
C1	Vcc	5V power supply
C2	RST	Reset
C3	CLK	Serial clock
C4	N/C	No connect
C5	GND	Ground
C6	N/C	No connect
C7	I/O	Serial data I/O
C8	N/C	No connect



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