

HMS38T2564

32bit CPU, 64Kbyte EEPROM, 256Kbyte ROM, 8Kbyte RAM

Features

- CPU
 - ARM SC100 32 bit pipelined RISC processor
 - ARM 32 bit / Thumb 16 bit instruction set

- Integrated On-Chip Memory
 - 256Kbyte ROM
 - 64Kbyte EEPROM
 - 8Kbyte SRAM

- EEPROM Operation
 - High reliable CMOS EEPROM technology
 - Page mode for erase or programming up to 1~64 bytes
 - Protected one time programmable block (64 bytes)
 - 300,000 write/erase endurance cycles
 - 10 years data retention (min.)

- Peripherals
 - UART supporting ISO standard protocols T=0 and T=1
 - Two 16 bit timers
 - True random number generator
 - CRC module
 - Interrupt controller for I/O interface and peripherals

- Security
 - Hardware memory management and protection unit
 - ROM code not visible due to implantation
 - High/Low voltage detector
 - High/Low frequency detector
 - Metal shield detector
 - Glitch sensor
 - Hardware encryption of memories

- **Crypto Engine**
 - DES/TDES in hardware
- **Reset**
 - Power-on reset and external reset (RST)
- **Low Power Sleep Mode, Power Saving Idle Mode**
- **PAD Configuration according to ISO/IEC 7816 and Package**
 - VCC, GND, CLK, RST and I/O
 - 8 pin COB (conforms to ISO standard 7816)
- **Operating Characteristics**
 - Operating voltage : 2.7V ~ 5.5V
 - Operating frequency : 1MHz ~ 5MHz
 - Operating temperature : -25 °C ~ 85 °C

Block Diagram

