

Samsung S3CC9P9

CPU

- CalmRISC™16-bit CPU core

Memory Allocation

- 160K bytes of ROM(144K bytes User area)
- 32K bytes of EEPROM
- 6K bytes of static RAM

EEPROM Write Operations

- 1.5 ms fast erase/write time
- 1 to 128 bytes EEPROM erase/write operations
- 500,000 erase/write cycles (typical)
- 50 years data retention (typical)

Data Security

- 128 bytes write protected security area
- 128 bytes of non erasable EEPROM
- Reset operations are selective if abnormal voltage/frequency/temperature/light exposure/ decapsulation are detected.
- Highly protected design

SuperMAPII Crypto-coprocessor

- Modulo exponential accelerator
- SHA-1 accelerator

Triple DES accelerator

- Built in hardware 3-DES

Interrupts

- 2 interrupt sources (FIQ, IRQ)

Serial I/O Interface

- UART for T=0, T=1(include CRC)

Timers

- 16 bit Timer, Watchdog timer

Memory Protection Unit

- 8sets Base/Limit region registers
- 4M bytes configurable with 128bytes resolution

Random Number Generator

- 16-bit random number generator
- Start and stop control

Internal variable clock

- 5Mhz \pm 10%(average)

Reset

- Power-on reset and external reset

Operating Characteristics

- Power range: 2.7 - 5.5 V
- Operating frequency: 1 to 5MHz(External Clock)
- Operating temperature: - 25 °C to + 85 °C