

C511/C513-Family Your Solution for a Low Cost/ Low Power Design



The C511, C511A, C513 and C513A are low cost members of the Siemens C500 family of 8-bit microcontrollers which is compatible to the 80C51/C52 standard architecture. A wide range of tools such as HLL-compilers, debuggers and emulators are available.

Among other segments the low power design makes the C511/C513 family ideal for telecom applications as well as automotive or industrial solutions.

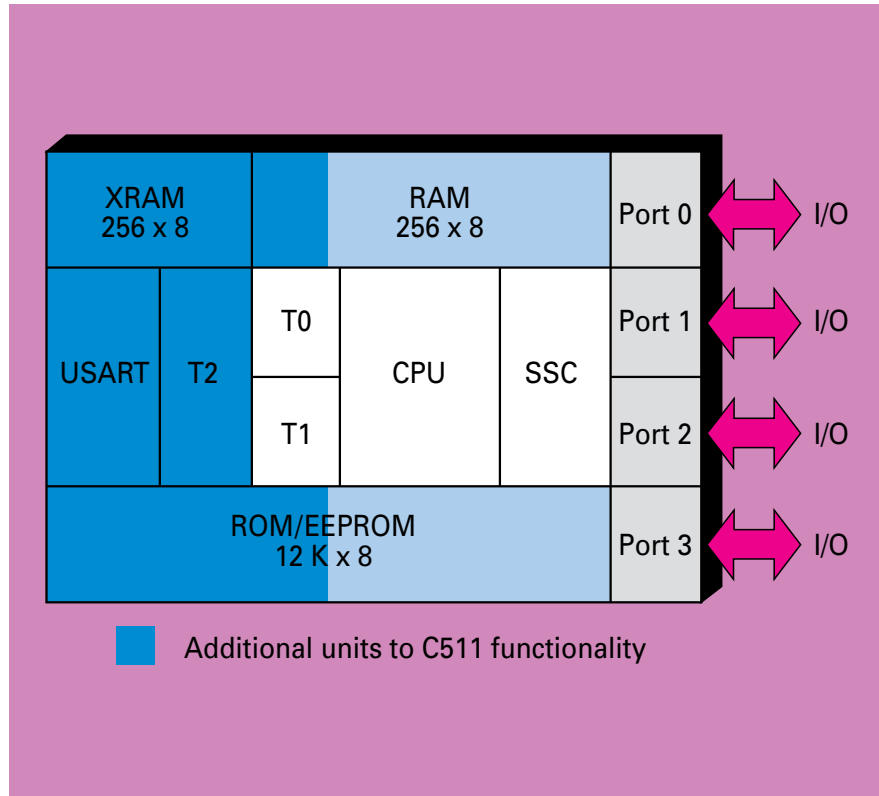
The C511/C513 family at a glance:

| Device | ROM | EEPROM | RAM | XRAM | Timer | SIO |
|---------|--------|--------|------|------|-----------|------------|
| C511-R | 2,5 KB | – | 256B | – | T0, T1 | SSC |
| C511A-R | 4 KB | – | 256B | – | T0, T1 | SSC |
| C513-1R | 8 KB | – | 256B | – | T0, T1,T2 | SSC, USART |
| C513A-R | 12 KB | – | 256B | 256B | T0, T1,T2 | SSC, USART |
| C513A-H | – | 12KB | 256B | 256B | T0, T1,T2 | SSC, USART |

Features

- Fully software/toolset compatible to standard 80C51/80C52 microcontrollers
- Up to 12 MHz operating frequency
- Up to 12K*8 ROM/EEPROM
- Up to 256*8 RAM
- 256*8 extended RAM (XRAM, C513A only)
- Four 8-bit ports
- Up to three 16-bit Timers/Counters (Timer 2 with Up/Down and 16-bit autoreload feature)
- Synchronous Serial Channel (SSC) – SPI compatible
- Optional USART
- Up to seven interrupt sources, two priority levels
- Power saving modes
- P-LCC-44 package (C52/C501 pin-compatible)
- Temperature ranges:
Standard (0 °C to +70 °C)
Extended (-40 °C to +85 °C)

C511/C513-Family Block Diagram



C511/C513-Family Pin Configuration

