# SIEMENS

## 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 HLLcompilers, debuggers and emulators are available.

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

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-L	-	-	256B	256B	T0, T1,T2	SSC, USART
С513А-Н	-	12KB	256B	256B	T0, T1,T2	SSC, USART

#### The C511/C513 family at a glance:

#### 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





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