

EPSON 4-bit MCU S1C6016 SPEC

Configuration

Model	S1C60N16	S1C60A16	S1C60L16
Supply Voltage	3.0V	3.0V	1.5V
Oscillation circuit	OSC1 only(single clock)	OSC1 and OSC3 (Twin clock)	OSC1 only (single clock)
LCD power	Supports 3.0V LCD panels		

Features

Model	S1C60N16	S1C60L16	S1C60A16
OSC1 oscillation circuit	Crystal oscillation circuit 32.768KHz		
OSC3 oscillation	--	--	CR or ceramic oscillation circuit 1MHz(Typ.)
Instruction	108 types		
Instruction execution time (differs depending on instruction)	153usec, 214usec, 366usec (CLK=32.768KHz)		
	--		5usec, 7usec, 12usec (CLK=1MHz)
ROM capacity	4,096 words x12 bits		
RAM capacity	256 words x 4bits		
Input port	5 pin (pull-down resistor can be added by mask option)		
Output port	8 pin (BZ,/BZ and FOUT output and SIOF output are available by mask option)		
I/O port	8 pin (pull-down resistor is added during input data read out) (3 bits can be confabulated as serial I/O ports by mask option)		
LCD driver	38segments x 4,3 or 2 commons (selected by mask option; 1/4,1/3 or 1/2 duty (voltage regulator and booster circuit build-in)		
Time base counter	Two type (timer and stop and stopwatch		
Watchdog timer	Build-in (can be disabled by mask option		
Event counter	Two 8-bit inputs (dial input evaluation or independent)		
Sounder generator	Programmable in 8 sounds (8 frequencies) Digital envelope built-in (can be disable by mask option)		
Analog comparator	Inverted input x 1,non-inverted by mask option		

SVD		2.2V	1.2V	2.2V
External interrupt		Input interrupt: 2 systems		
Internal interrupt		Time base interrupt counter interrupt: 2 systems Serial interface interrupt: 1 system		
Supply Voltage		3.0V(2.2V~3.6V)	1.5V(1.2V~1.8V)	3.0V(2.2V~3.6V)
Current consumption (Typ. value	32KHz halt	0.7uA	0.7uA	1.5uA(Normal operation mode)
	32KHz exc	1.4uA	1.4uA	2.4uA(normal operation mode)
	1MH(ceramic executed	--	--	50uA(Normal operation mode)
	1MHz(CR executed)	--	--	85uA
Form with shipped		QFP5-100pin, QFP15-100 pin or Dice		