EPSON 4-bit MCU S1C6S3N2 SPEC

Model		S1C6S3N2	S1C6S3L2	S1C6S3B2	S1C6S3A2
Supply Voltage Range		1.8~3.6V	0.9~1.8V	0.9~3.6V	1.8~3.6V
External LCD Power Supply		Supports 3.0V LCD panels	Supports 3.0V LCD panels	Not supported	Supports 3.0 / 4.5V LCD panels
Oscillation Circuits		OSC1 only (Single Clock)			OSC1 and OSC3 (Twin Clock)
OSC1 oscillation circuit		Crystal oscillation circuit 32.768 kHz (Typ.)			
OSC3 oscillation circuit		No setting			CR or ceramic oscillation circuit *1 1.0 MHz (Typ.)
Instruction sets		100 types			
Instruction execution time (depending on instruction) (CLK: CPU operation frequency)		153µsec, 214µsec, 366µsec (CLK= 32.768 kHz)			
		———			5µsec, 7µsec, 12µsec (CLK=1 MHz)
ROM capacity		20,48 words, 12 bits per word			
Data RAM capacity		144 words, 4bits per word			
Input port		5 bits (pull-down resistor can be added through mask option)			
Output port		8 bits (BZ, $\overline{BZ}$, FOUT outputs are available through mask option)			
I/O port		8 bits (pull-down resistor is added during input data read -out)			
LCD driver		Either 38 segments x 4 or 3 or 2 common *1 V-3V 1/4 or 1/3 or 1/2 duty (regulated voltage circuit and booster voltage circuit built-in)			
Timer base counter		Two types (timer and stopwatch)			
Watch dog timer		Built-in (can be disable through mask option)			
Event counter		One 8-bit inputs			
Analog comparator		Inverted input x 1, non-inverted input x 1			
Supply Voltage detection (SVD)		2.4V	1.2V	1.2V	2.4V
External interrupt		Input port interrupt; dual system			
Internal interrupt		Time base counter interrupt; dual system			
Supply voltage *2		3.0V (1.8~3.6V)	1.5V (0.9~1.8V)	1.5V (0.9~3.6V)	3.0V (1.8~3.6V)
Consumed Current (Typ. Value)	CLK = 32.768kHz (when halted)	0.65µA	0.65µA	0.65µA	1.5µA
	CLK = 32.768kHz (when executed)	2.0µA	2.0µA	2.0µA	4.0µA
	CLK = 1.0 MHz (when executed)	—	—	—	150µA
Form when shipped		80-pin QFP (plastic) or chip			

*1: Selected by mask option

*2: The supply voltage range of the S1C6S3N2 and S1C6S3A2 is 2.2V to 3.6V when an LCD panel is used.

In this manual, BLD and SVD (supply voltage detection) have the same meaning.