EPSON 8-bit MCU S1C88365 SPEC

Model		S1C88365
Supply Voltage		2.2 ~ 5.5V (Max. 2.5MHz)
Core CPU		S1C88 (MODEL3) CMOS 8-bit core CPU
OSC1 Oscillation circuit		Crystal oscillation circuit/external clock 32.768 k/ 38.4k/ 76.8k/ 96k/ 153.6kHz(Typ.)
OSC3 Oscillation circuit		CR oscillation circuit 2.5MHz (Max.)
Instruction set		608 types (Usable for multiplication and division instructions)
Min. Instruction execution time		0.8µsec/ 2.5MHz (2 clock)
Internal ROM capacity		64K byte
Internal RAM capacity		3K bytes/ RAM 4,608 bits/ display memory
Bus line		Address bus: 19 bits (Also usable as a general output port when not used as a bus) Data bus: 8 bits (Also usable as a general I/O port when not used as a bus) $\overline{CE}$ signal: 4 bits $\overline{WR}$ signal: 1 bit (Also usable as a general output port when not used as a bus) $\overline{RD}$ signal: 1 bit
Input port		10 bits (2 bits can be set for event counter external clock input and bus request signal input terminal)
Output port		17 bits (6 bits can be set for buzzer output, LCD control, FOUT, TOUT and bus acknowledge signal output terminal)
I/O port		8 bits (4 bits each can be set for serial interface input/output and analog comparator input)
Serial interface		1 ch (option clock synchronous system or asynchronous system)
Timer		Programmable timer (8 bits): 2ch. (1ch. can be set as an event counter or 2 ch. as a 16 bits programmable timer for 1ch.) Clock timer (8 bits): 1ch. Stopwatch timer (8 bits): 1ch.
Power supply circuit to drive liquid crystals		Built-IN (booster type, 5 potentials)
LCD driver		Dot matrix type 80 SEG x 18 COM (1/5 bias) Expandable external LCD driver
Sound generator		Envelope function, equipped with volume control
Watchdog timer		Built-in
Analog comparator		2ch. built-in (not available if A/D converter is used)
SVD circuit		Can detect up to 16 different voltage levels
Interrupt		External interrupt: Input interrupt 2 systems (3 types) Internal interrupt: Timer interrupt 3 systems (9 types) Serial interface interrupt 1 system (3 types)
Current consumption (Typ.)	SLEEP	300 nA (Typ.)
	HALT	2µA (Typ.)
	Run (32kHz)	14µA (Typ.)
	Run (2.5MHz)	1.5 mA (Typ.)
Package		Chip

* The number of bits cited for output ports and I/O ports does not include those shared with the bus.