EPSON

CMOS 4-BITS SINGLE CHIP MICROCOMPUTER

S1C6F666

Preliminary

-4bit S1C63000 core CPU
-Built-in R/F converter
-Built-in LCD driver
-High-speed instruction cycle (2-6CPI)
-Flash EEPROM type

■DESCRIPTION

S1C6F666 is a CMOS 4bits microcomputer composed of a CMOS 4bits Core CPU, Flash EEPROM (16kwords x13bits), RAM (5kwords x 4bits), LCD driver (64 x6/5/4/3), R/F converter for measurement and counters for several purposes. And the S1C6F666 can be operated with high speed and are compatible with the S1C63666/658/656/654. S1C6F666 can therefore be used as an MTP (Multi-Time Programming) for program development.

■FEATURE

OSC1 oscillation:	32.768kHZ(X'tal)>>>Low power type
OSC3 oscillation:	4MHz(max.)(Ceramics)
	Or 1.1MHz(max.)(Built in C external R)
ROM (Flash):	Instruction ROM 16,384words x13bit.
	Data ROM 4,096 words x4bit.
	Program cycles: 100 times
RAM:	Data RAM 5,120words x4bit
	LCD RAM 128words x 4bit
Input-port:	8bit(built in pull-down mask option)
Output-port:	8bit(2bits for special output)
I/O-port:	8bit(4bits is changed serial I/O by software), (built in pull-down same as I-port)
LCD driver:	64segment*8,6,5,4,3 common
Timer:	Stopwatch (1/1000S, 1/100s, 1/10S, 1/1S interrupt, external direct start and stop)
Program Timer:	8bit x2ch or 16bit x1ch (changed by software)
Sound-generator	Digital envelope and 1-shot output
Watchdog timer	built-in
Serial interface	8bit clock synchronous system
RF converter	2 ch, 20bit counters. 20bit counter (changed AC type by software)
Multiplication and Division:	8bit calculation unit
	Multiplication 8bit *8bit
	Division 16bit/8bit
Analog comparator:	1ch
Stepping motor driver:	2ch (4mA)
SVD	8 value by software.1.85-2.90V
External interrupt	Input-Port 2ch
Internal interrupt:	Timer 5ch.
	Stopwatch 2ch.
	Program Timer 4ch.
	SIO 1ch
	R/F converter 2ch
	Motor driver 2ch
Power Supply:	2.7V-3.6V
Operating Temp.	Temp. -20C +70C
Current consumption:	HALT (32KHz,LCD ON, low power mode) TBD uA
	EXCUTION (32KHz,LCD ON, low power mode) TBD uA
	EXCUTION (4MHz,LCD ON) TBD mA
PAKAGE:	Die form or QFP20-144pin