

S1C63 Family Products overview

Products	Display	Clock frequency		Supply current				Supply voltage [V]	Memory		I/O			Timer				SIO		A/D converter	R/F converter	Buzzer	SVD *1	DTMF output	DP output	Interrupts		Form of delivery	
	LCD Driver seg×com	High-speed [Hz] (Max.)	Low-speed [Hz] (Max.)	Sleep [μA] (Typ.)	Halt [μA] (Typ.)	32kHz Operating [μA] (Typ.)	4MHz Operating [μA] (Typ.)		ROM [×13-bit]	RAM [×4-bit]	Input port	Output port	I/O port	Programmable 8-bit	Stopwatch	Watchdog timer	Clock	Asynchronous	Clock synchronous							External	Internal	Package	Chip
S1C63000 series		The microcontroller of this Family integrates ROM, RAM, LCD driver, and various timer functions. It is characterized by a wide range of operating voltages and low levels of power consumption, and is suitable for watches and clocks for which you want to extend battery life, as well as portable devices with temperature measurement functions.																											
S1C63003	22 (Max) × 3/4/5/ *2	500k	32.768k	0.1	0.5	2.3	220	1.1 to 1.7 1.8 to 5.5	4,096	256	-	-	16 *3	1	○	○	○	-	-	-	2	○	-	-	-	4	11	QFP12-48	○
						2.0	60																						
S1C63004	36 (Max) × 3/4/5/6/7/8 *4	4M (3V) 1M (1.5V)	32.768k	0.1	0.5	2.3	220	1.1 to 1.7 1.8 to 5.5	4,096	512	-	-	20 *5	3 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	23	QFP14-80 TQFP14-100	○
		2.3				220																							
S1C63008	50 (Max) × 3/4/5/6/7/8 *8	4M (3V) 1M (1.5V)	32.768k	0.1	0.5	2.3	220	1.1 to 1.7 1.8 to 5.5	8,192	1,024	-	-	24 *9	3 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	23	QFP15-100 TQFP14-100	○
		2.3				220																							
S1C63016	56 (Max) × 3/4/5/6/7/8 *8	4M (3V) 1M (1.5V)	32.768k	0.1	0.5	2.3	220	1.1 to 1.7 1.8 to 5.5	16,384	2,048	-	-	24 *9	4 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	25	QFP15-100 TQFP14-100	○
		2.3				220																							
S1C6F016	56 (Max) × 3/4/5/6/7/8 *8	4M	32.768k	0.7	2.0	9.0	950	1.8 to 3.6 *10	16,384 (Flash) *11	2,048	-	-	24 *9	4 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	25	QFP15-100	○
S1C63100 series		A microcontroller being equipped with ROM, RAM, serial interface, A/D converter, various timer functions, etc. It features built-in A/D converter, wide operating voltage range and low power consumption and is suitable for portable equipment.																											
S1C63158	-	- 4M	32.768k	-	1.0	3.0	900	0.9 to 3.6	8,192	512	9	12	20	2 *6	-	○	○	-	1	4 *12	-	○	○	-	-	3	8	QFP12-48 QFP13-64 PFBGA5U-60	○
		2.2 to 3.6																											
S1C63400 series		A microcontroller being equipped with ROM, RAM, dot-matrix LCD driver, various timer functions, etc. It features wide operating voltage range and low power consumption and is suitable for portable equipment such as data banks which require dot-matrix indications.																											
S1C63408	60 × 8/9/16/17	- 4M	32.768k	-	1.3	3.0	550	1.3 to 3.6	8,192	1,024	4	4	4	2 *6	○	○	○	1 *13	-	-	-	○	-	-	4	11	QFP15-128	○	
		1.8 to 3.6																											
S1C63500 series		A microcontroller being equipped with ROM, RAM, dot-matrix LCD driver, DTMF/DP generator, FSK demodulator, various timer functions, etc. It features wide operating voltage rane and low power consumption and is suitable for communication-equipment and portable-equipment such as data banks and Caller-ID which require dot-matrix indications.																											
S1C63567	60 × 8/16/17	3.58M	32.768k	-	1.5	10	600	2.2 to 5.5	16,384	5,120	8	12	16	2 *6	○	○	○	1 *13	-	-	○	○	○	○	2	12	QFP20-144	○	
S1C63600 series		The microcontroller of this series integrates ROM, RAM, multiplication and division circuits, LCD driver, R/F converter, and a variety of timer functions. Since this series features a wide range of operating voltage and low power consumption, it is best fit for portable equipment with temperature measuring facility that requires battery-powered operation.																											
S1C63654	32 × 3/4/5/6	- 4M	32.768k	-	0.65	2.5	800	1.8 to 3.6	4,096	512	8	4	8	2 *6	○	○	○	-	1	-	2	○	○	-	-	2	15	QFP15-100	○
		2.4 to 3.6																											
S1C63656	38 × 3/4	- 4M	32.768k	-	0.6	2.5	800	1.1 to 3.6 *14	6,144	1,024	8	4	8	2 *6	○	○	○	-	1	-	2	○	○	-	-	2	18	QFP20-144	○
		2.4 to 3.6																											
S1C63658	56 × 4/5/8	- 4M	32.768k	-	0.65	2.5	800	1.8 to 3.6	8,192	1,024	8	8	8	3 *6	○	○	○	-	1	-	2	○	○	-	-	2	16	QFP20-144	○
		2.4 to 3.6																											
S1C63666	64 × 4/5/8	- 4M	32.768k	-	0.65	2.5	800	1.5 to 3.6	16,384	5,120	8	8	8	3 *6	○	○	○	-	1	-	2	○	○	-	-	2	14	QFP20-144	○
		2.4 to 3.6																											
S1C63616	56 × 16 48 × 24 40 × 32	4M	32.768k	0.08	0.6	2.5	320	1.6 to 5.5	16,384	2,048	-	-	16	8 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	32	TQFP15-128	○
S1C63632	64 × 16 56 × 24 48 × 32	4M	32.768k	0.08	0.6	2.5	320	1.6 to 5.5	31,744	8,192	-	-	24	8 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	32	QFP20-144 VFBGA10H-144	○
S1C6F632	64 × 16 56 × 24 48 × 32	4M	32.768k	0.7	2.0	9.0	960	1.8 to 3.6 *10	31,744 (Flash) *11	8,192	-	-	24	8 *6	○	○	○	-	1 *7	-	2	○	○	-	-	8	32	QFP20-144 VFBGA7H-144	○
S1C63700 series		A microcontroller being equipped with ROM, RAM, LCD driver, various timer functions, etc. It has the feature of super low power consumption, and it is suitable for a portable equipment such as watches that want to extend the battery life.																											
S1C63709	64 × 4/5/8	- 4M	32.768k	-	0.15	3.5	1,000	1.0 to 3.6	12,288	2048	13	-	18	3 *6	○	○	○	-	1	-	-	○	○	-	-	2	18	QFP20-144	○
		2.1 to 3.6																											

*1: SVD is an abbreviation for Supply Voltage Detector. Supply Voltage Detector.

*2: Total 12 segment terminals share the function with I/O ports and R/F converter terminals (to be selected by mask option).

*3: Total 4 I/O ports share the function with sgment terminals (to be selected by mask option), and 4 share with R/F converter terminals (to be selected by software).

*4: Total 16 segment terminals share the function with I/O ports and R/F converter terminals (to be selected by mask option).

*5: Total 8 I/O ports share the function with sgment terminals (to be selected by mask option), and 4 share with R/F converter terminals (to be selected by software).

*6: Two 8 bits serve as a 16-bit timer.

*7: Connectable to SPI

*8: A total of 20 segment terminals share the function with I/O ports and R/F converter terminals (to be selected by mask option).

*9: Total 12 I/O ports share the function with sgment terminals (to be selected by mask option), and 4 share with R/F converter terminals (to be selected by software).

*10: During programming in flash memory : 2.7V to 3.6V.

*11: This product use SuperFlash® technology licensed from Silicon Storage Technology, Inc.

*12: 8 bits successive-approximation type and serves as general-purpose I/O.

*13: Either the asynchronous system or clock synchronous system can be selected by software.

*14: When the OSC1 single clock is used, and LCD contrast is not adjusted. (1.8V to 3.6V for other specifications)