

S1C17 Family Products overview

| Products | Display | | Clock frequency | | | Supply current | | | Supply voltage [V] | Memory | | | | | Bus | | I/O | | | | | Timer | | | | | SIO | | | | | A/D converter | DMA | Multiplier/MAC | Divider | USB | Form of delivery | | Remarks | |
|-----------------|---|--------------------------|------------------------|-----------------------|---------------------------------|-------------------------|-----------------|----------------------|--------------------|---|-----------------|------------|------------------|-------------------|--------------------|--------------------|------------|----------|---------------------------------|-------------|--------------|------------------|-----------|----------------|-----------------|-----------------|-----------------|-----|-------------------------|------------------------|------------------|---------------|-----|----------------|---------|-------|--|--|--------------------|------|
| | LCD Controller | | High-speed [Hz] (Max.) | Low-speed [Hz] (Typ.) | Built-in oscillator (Hz) (Typ.) | Sleep [A] (Typ.) | Halt [A] (Typ.) | Operating [A] (Typ.) | | Flash ROM [Byte] | Mask ROM [Byte] | RAM [Byte] | VRAM [Byte] | Backup RAM [Byte] | Address bus | Data bus | Input port | I/O port | Support of multiple voltages *6 | 8-bit timer | 16-bit timer | 16-bit PWM timer | Stopwatch | Watchdog timer | Clock | Real-time clock | UART (rDA1.0) | SPI | I ² C master | I ² C slave | I ² S | | | | | | Remote controller transmission and reception | Package | | Chip |
| | with built-in VRAM [bpp] | with external VRAM [bpp] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1C17500 series | [High-performance] The 16-bit Microcontrollers allowing the 32-bit level sophisticated processing to perform. Suitable for a wide range of whiteware products and other home appliances due to the utilization of various types of built-in interfaces such as USB, UART, SPI, I ² C, I ² S, A/D converter, and remote controller transmission circuits, as well as the improved user interface using music, audio, touch switches, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1C17501 | - | - | 48M | 32.768k | - | 1.5 μ _{*4} | 20m (48MHz) | 40m (48MHz) | 3.0 to 3.6 | 96K ^{*9} 128K ^{*9} | - | 4K | - | 2K | 23 | 8/16 _{*3} | 8 | 83 | - | 6 | 2 | 1 | - | 1 | - | ○ _{*2} | 1 | 2 | 1 | - | 2 | ○ | 8 | - | ○ | - | FS2.0 | TQFP14-100 ^{*7} TQFP15-128 ^{*7} | - | |
| S1C17800 series | [High-performance] The 16-bit Microcontrollers allowing the 32-bit level sophisticated processing to perform. The device having the LCDC can display the 1-bpp maximum VGA monochrome images. Also suitable for controlling the operation panels of whiteware products and other various types of products due to the utilization of a wide array of built-in interfaces such as USB, various types of serial interfaces, and A/D converter, as well as the improved user interface using display, music, touch panel, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1C17801 | 1 (120 X 120) | 4 (QVGA) 1 (VGA) | 48M | 32.768k | - | 1.5 μ _{*4} | 20m (48MHz) | 40m (48MHz) | 3.0 to 3.6 | 128K ^{*9} | - | 4K | 2K _{*1} | 23 | 8/16 | 8 | 83 | - | 6 | 2 | 1 | - | 1 | - | ○ _{*2} | 1 | 2 | 1 | - | 1 | ○ | 8 | - | ○ | - | FS2.0 | TQFP15-128 PFBGA7U-144 | - | I/F of LCD-DR only | |
| S1C17803 | 1 (QVGA) | 4 (QVGA) 1 (VGA) | 33M | 32.768k | - | 1.3 μ _{*4} | 15m (33MHz) | 19m (33MHz) | 2.7 to 5.5 | 128K ^{*9} | - | 16K | 16 | 23 | 8/16 _{*3} | 4 | 95 | ○ | 4 | 1 | 2 | - | 1 | - | ○ _{*2} | 1 | 2 ^{*5} | 1 | 1 | 1 | ○ | 4 | 4 | ○ | ○ | - | TQFP14-100 TQFP15-128 | - | I/F of LCD-DR only | |

- *1: Also used as the RAM
- *2: Real-time clock (The battery backed up operation is supported.)
- *3: The TQFP14-100 has the 8-bit fixed data bus.
- *4: Unmounted OSC1.
- *5: Universal serial interface (Any of UART, SPI and I²C functions can be selected.)
- *6: Coexistence of 5V and 3V (and other) different interface voltages is supported.
- *7: TQFP14-100(Flash96KB), TQFP15-128(Flash128KB)
- *8: Built-in a remote controller transmission and reception circuit
- *9: This product uses SuperFlash[®] technology licensed from Silicon Storage Technology, Inc.