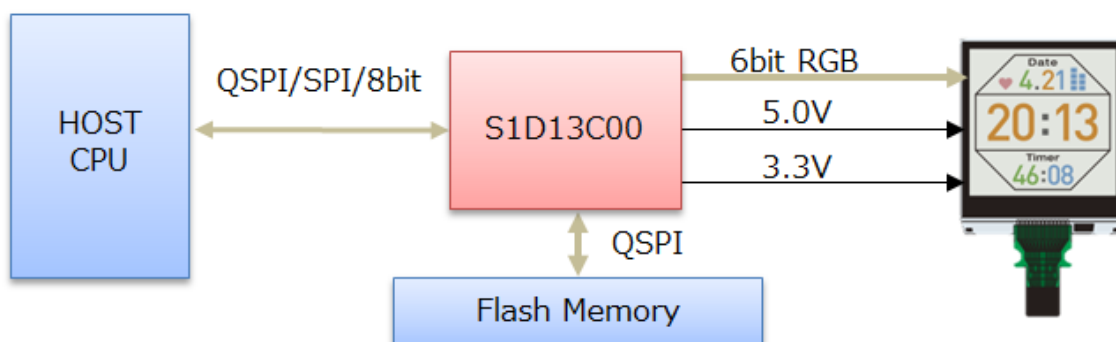


■ Product specifications

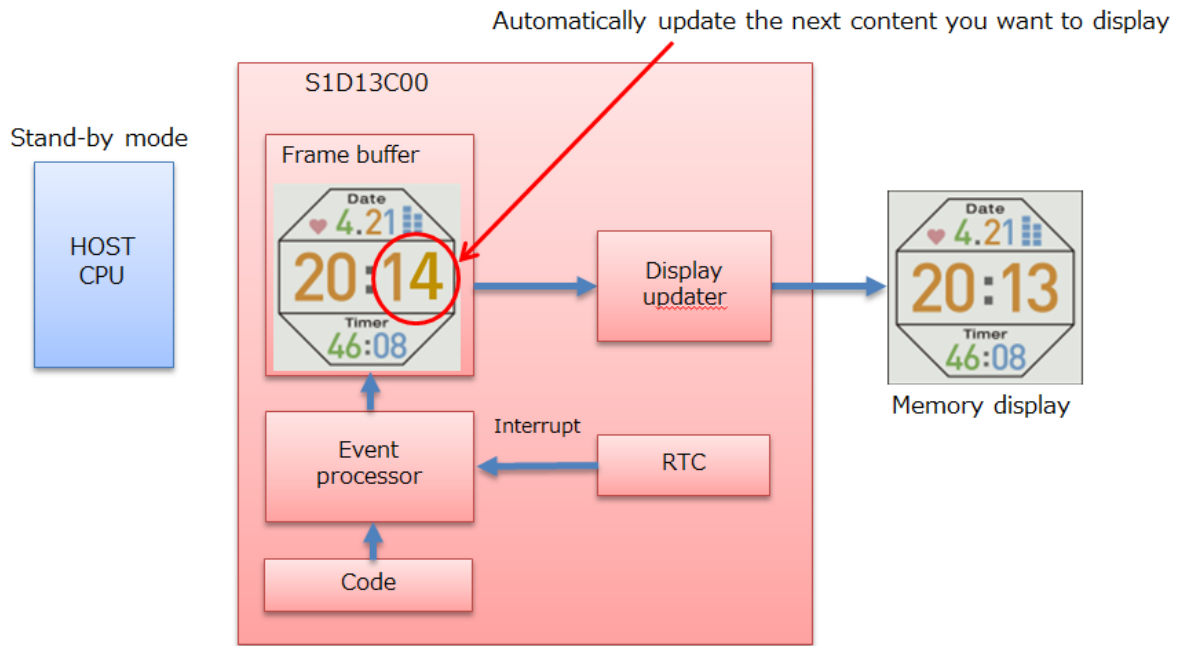
Product number	S1D13C00
Host interfaces	Indirect 8-bit and serial (QSPI and SPI)
RAM	96 Kbyte
Operating voltage	Guaranteed operating range: 1.8 V - 5.5 V
Power consumption ¹	All stop mode: 0.4 μ A (typical)
Panel interfaces	6-bit color display SPI (3-bit color and 1-bit black-and-white) 1/2/4/8 bpp grayscale (8-bit parallel or 3-/4-wire serial interfaces)
Graphics accelerator	0°, 90°, and 270° image rotation Drawing functions (line, rectangle, ellipses) Image conversion. Bitmap copying (with scaling and rotation or horizontal and vertical shearing), alpha-blending Source image/bitmap for copying functions can be from memory-mapped external QSPI serial Flash memory device
Voltage booster supplies for memory LCD	V _{MDL} : 2.3 V to 3.6 V output (software selectable) V _{MDH} : 4.3 V to 5.0 V output (software selectable)
Serial interfaces	SPI: 1 channel / I ² C: 1 channel QSPI: 1 channel
I/O ports	10 max.
Infrared remote controller	1 channel (can be used to generate EL lamp driving waveforms)
RTC	1 channel
DMAC	4 channels
Sound generator	Selectable from among 3 sound output mode options
Packages	WCSP-64 (size: 3.48 mm x 3.48 mm. Balls: 64. Ball pitch: 0.4 mm) TQFP13-64 (size: 10 mm x 10 mm. Pins: 13-64. Pin pitch: 0.5 mm)

¹ At typical environmental values, RTCA = On, 25 degrees Celsius

■ System architecture and event processor usage examples



System architecture



Example of an automatically updated display using the event processor