

S5U1C17705T1100 (SVT17705)

EPSON
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Software eValuation Tool for S1C17705



- STN LCD panel (display size: 64 segments x 64 common B/W)
- Infrared LED/detecting unit
- Key input circuit (two keys available)
- Reset switch
- Extended interface connectors (P, UART, SPI and I2C ports)
- Various built-in sensors (temperature/humidity/luminance)
- ICD board connector

■ DESCRIPTION

The S5U1C17705T1100 (hereafter referred to as SVT17705) is a software evaluation board for the S1C17705 MCU made by Seiko Epson.

The SVT17705 consists of a CPU board and an ICD board connected for software debugging, eliminating the need to connect a separate ICD debugging tool.

It also incorporates serial expansion ports to let users connect their own expansion boards.

■ FEATURES

● CPU board

| | |
|----------------------------|---|
| CPU | S1C17705 |
| Input power voltage | +3.3 V DC (supplied through the ICD interface or by a CR2032 button cell) |
| CPU input clock | OSC1: 32.768 kHz OSC3: 8 MHz |
| On-board functions/devices | - STN LCD panel (display size: 64 segments x 64 common B/W) - Reset switch - Expansion interface connectors (P, UART, I2C, SPI) - ICD board connector - Various built-in sensors (temperature/humidity/luminance) - Key input (2 keys) - Rotary encoder - Infrared emitter/photo-receiver module |

● ICD board

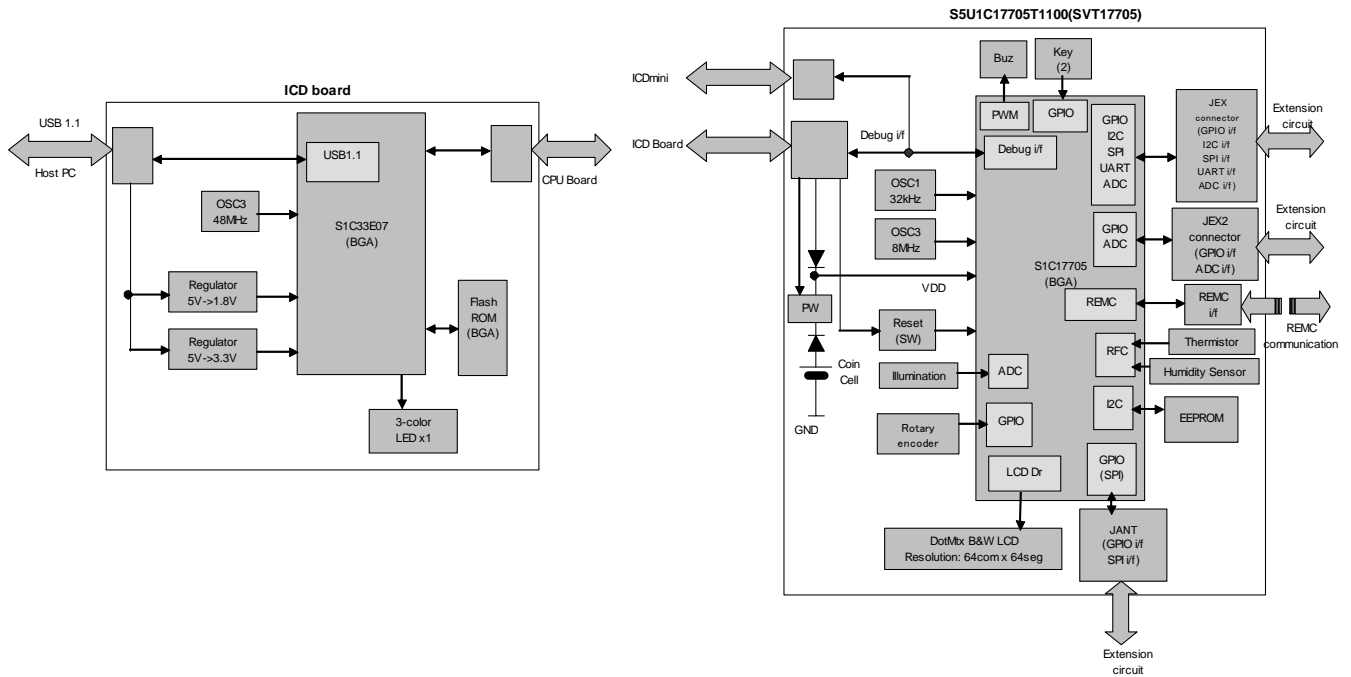
| | |
|----------------------------|---|
| CPU interface | USB 1.1 |
| Power voltage | USB bus power (On-board regulator output voltage: +3.3 V) |
| On-board functions/devices | - Status indicator LED - Reset switch - CPU board connector |

■ SAMPLE PROGRAMS ON USERS' SITE

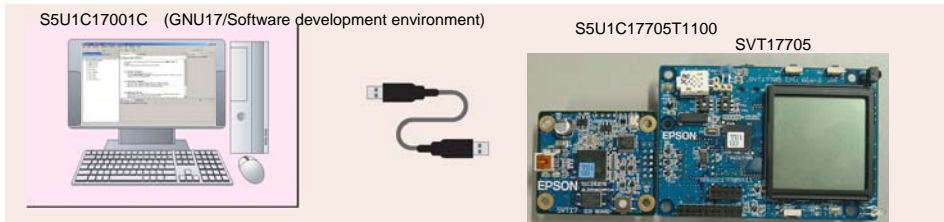
| | |
|--|---------------------------------|
| Oscillator | SPI Master Mode |
| I/O Ports | SPI Slave Mode |
| 16-bit Timer | I ² C Communications |
| 8-bit Timer | REMC Transmission |
| PWM & Capture Timer | REMC Reception |
| 8-bit OSC1 Timer | LCD Driver |
| Clock Timer | Supply Voltage Detector |
| Stopwatch Timer | Watchdog Timer |
| UART | Sleep/Halt |
| Command Example of measuring power consumption | |

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■ BLOCK DIAGRAM



■ CONNECTION DIAGRAM



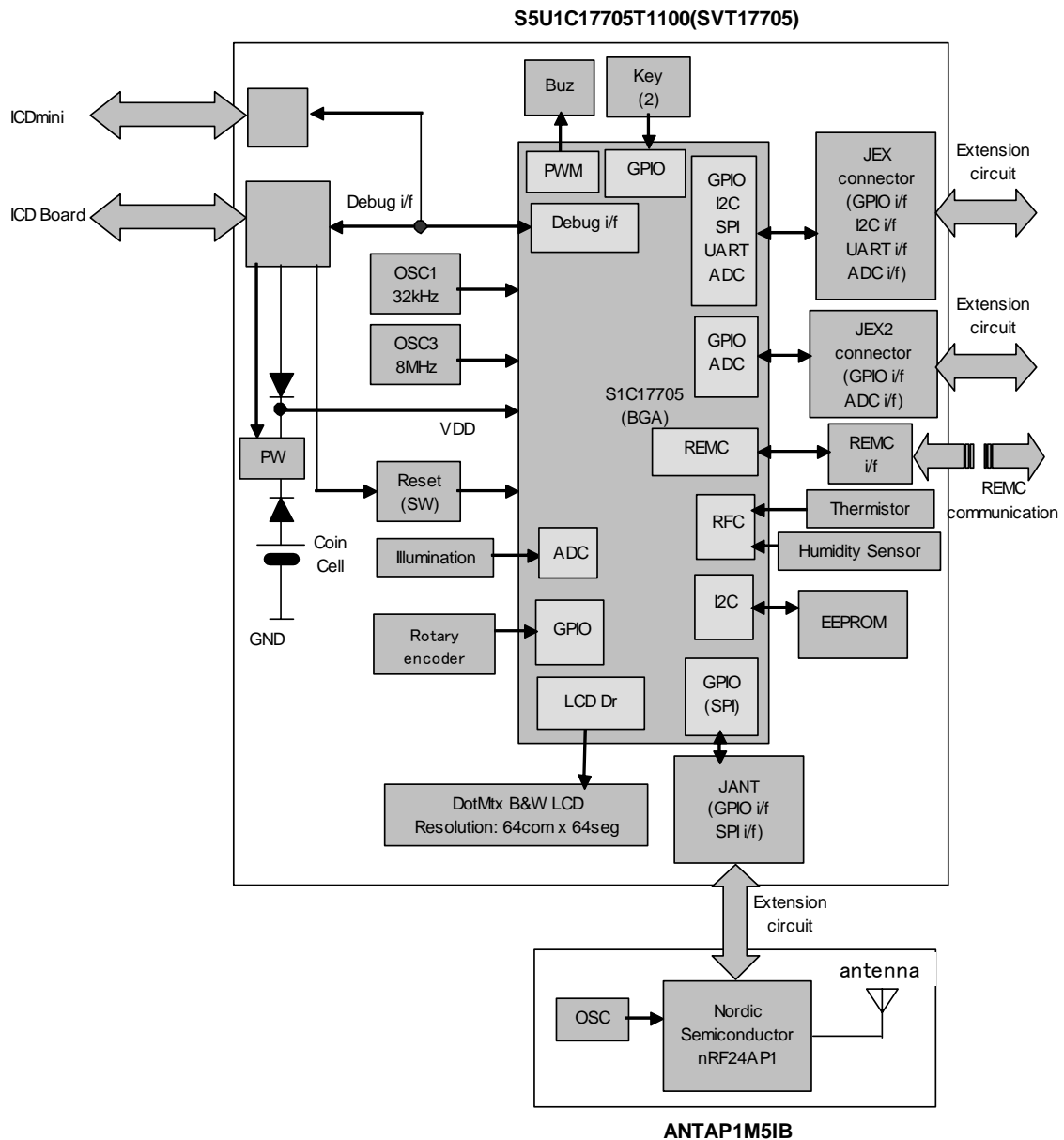
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CONNECTION TO THE ANT MODULE

ANT is the leading ultra-low power wireless solution available and when combined with the S1C17 MCU, it enables rapid development of state of the art products. The connection of SVT17705 to the Ant module is outlined below.

BLOCK DIAGRAM OF SVT17705 CONNECTED TO THE ANT MODULE

ANTAP1M5IB is a board contained in the ANT development kit and ANT DK3 of the Dynastream Innovations Inc.

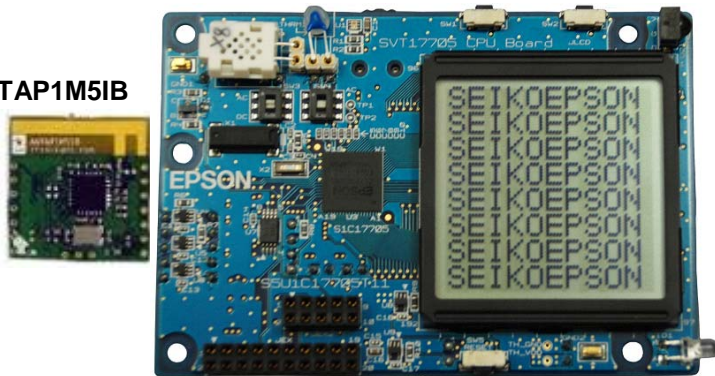


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■ PHOTOGRAPHS OF BOARDS

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ANTAP1M5IB



■ APPLICATION NOTE USING THE ANT MODULE

Application note is planned. A variety of application examples of data transfer using the Ant module will be introduced, such as for luminance, temperature, and humidity measurements.

■ FEATURES OF ANT MODULE

Protocol for wireless telecommunications in 2.4GHz band. The size is small and low power consumption is a feature compared with another protocol.

■ FOR INQUIRIES ON ANT MODULE

Nordic Semiconductor: <http://www.nordicsemi.no/> (Japan)

Nu Horizons Electronics: <http://www.nuhorizons.com/> (Global, Europe full coverage, North & South America, Asia Pacific)

Rutronik: <http://www.rutronik.com/index.php?id=33%20for%20locations> (Europe full coverage)

Maaqtechnic Datwyler Electronics: <http://www.maaqtechnic.ch/1050.asp> (Netherlands, Switzerland)

Celere Electronic Components: <http://www.clere.com/contact.html> (UK coverage)

RF Design: <http://www.rfdesign.co.za/> (South Africa)

*Dynastream Innovations: <http://www.dynastream.com/home/> (About ANT)

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Document code: 411709500

First issue Mar, 2009