EPSON

S1R72V03

USB2.0 device controller

●0.18um CMOS process technology
●USB2.0 HS/FS modes support

■ Description

The S1R72V03 is a USB device controller LSI that supports the USB2.0-compliant High/Full speed modes. This device also includes IDE master controller for HDD.

■ Features

- High speed CPU I/F
  - ➢ High-speed data transfer is possible between IDE device and system bus.
- Low power consumption
  - ➢ Low power is made possible by our 0.18um process technology and power management.
  - ➢ Reduce 70% of power consumption compare to our 0.35um process Technology.
    Acting time (160mW), stand-by time (below 1.2mW)
    (It is the measured value in our evaluation environment.)
  - ➢ BUS power operation
- Small size package (Ball Grid Array)

■ List of specification

- USB
  - ➢ Supports HS (480Mbps) / FS (12Mbps) transfer modes
  - ➢ Endpoints: Bulk OUT/IN x 1 each, Interrupt IN x 1 each and Endpoint0
  - ➢ Has built-in HS/FS termination
  - ➢ Has a built-in 2.5kB programmable FIFO for Endpoints
- IDE
  - ➢ UATA100
    PIO mode 0 to 4, UDMA mode 0 to 5
- CPU I/F
  - ➢ 16bit/8bit
  - ➢ DMA (2 ch)
- Others
  - ➢ Has built-in Oscillator circuit and feedback resistance (fosc=24MHz crystal oscillator)
  - ➢ Dual supply voltages: 3.3V / 1.5V to 1.8V
  - ➢ PFBGA-100pin (7mm x 7mm, 0.65mm pitch, full grid)
  - ➢ Operative temperature range –40℃ to 85℃