Dual Speed USB Peripheral Controller *SL811S/T*

Product Information

The SL811S is a low-cost, dual-speed, 8-bit USB interface controller chip that supports both I/O or DMA data transfers. Using either DMA or I/O, the SL811S can interface to any embedded microcontroller. The data is transferred to and from the host PC using a double buffer "ping-pong" operation in on-chip memory, at either the minimum USB transfer rate of 1.5 Mbps or the maximum of up to 12 Mbps. The SL811S incorporates a USB serial interface with USB transceivers, all in one 28-pin PLCC or 48-pin LPQFP package (SL811ST). The SL811S is supported by a comprehensive Developer's Kit, including mini-port driver that allows customers to have a working USB peripheral in only 2 - 3 weeks. The SL811S is the lowest cost, dual-speed USB device available today and is an optimal solution for the following application areas:

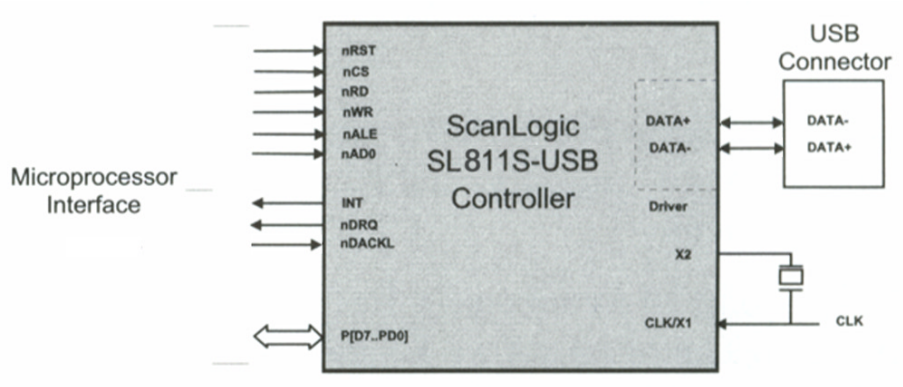
Peripherals
- Scanners
- Digital Cameras (video & still)
- MP3 Players
- Note Pads (PDAs, hand-helds)
- Embedded Systems
- External Storage Devices
- Data Acquisition
- External Modems
- Multi-function Units
- Printers

Communications
- Computer Telephony
- Video Conferencing
- Cable modems
- DBS/DSS Satellite
- ISDN/T1

Human Interface Devices:
- Gamepads
- Joysticks
- Keyboards
- Mice

Unique Features of the SL811S

- Supports all USB 1.1 protocol modes including bulk, isochronous, control, and interrupt modes.
- Allows sustained data transfers to/from peripherals at the maximum USB rate of up to 12 Mbps in support of high speed devices, or 1.5Mbps for Low speed devices
- 3.3/5v tolerance for I/O interface logic
- Internal RAM - 256 X 8 on-chip memory array provides a double buffering "Ping-Pong" operation scheme. Incoming/ Outgoing data is buffered and sent or received to/from the USB port
- Data Port - 8 bit, Programmable Bi-Directional fast parallel data port (I/O or DMA)



ScanLogic is a member of the USB Implementers forum.

We make the USB chips that make peripherals work better!™

SL811S/T Dual Speed USB Peripheral Controller

Features:

USB Specification Compliance

- USB Specification 1.1 compliant

CPU Interface

- Standard Microprocessor Interface
- Supports DMA Transfers
- 8 bit Bi-directional Parallel Interface
- 256 x 8 "On-Chip" memory array
- Four USB endpoints
- On-Chip USB transceiver
- Supports power suspend mode
- 3.3V or 3.3/5V CMOS Technology
- Generic WDM Mini Port driver for WIN98/2000 and CE 3.0, firmware and system USB demo source examples are available.

General

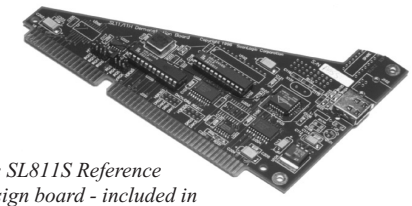
- 3.3 or 3.3/5V, 0.8 micron CMOS Technology
- 28-Pin PLCC or 48-Pin LPQFP packages

ScanLogic Developer's Kits

ScanLogic provides complete development tools for all of its products. Customers can have a working USB product in just 2 - 3 weeks!

SL811S Developers Kit includes:

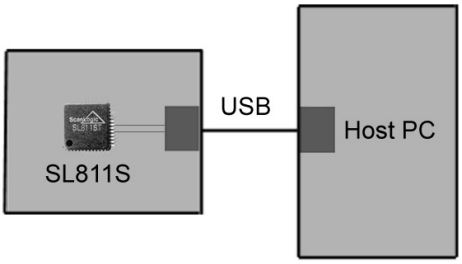
- WIN98/2000 & CE 3.0 WDM generic USB device Miniport driver (object code).
- Firmware source code examples
- Demo source code examples
- Application notes
- SL811S reference design board
- Sample chips
- Free email support



The SL811S Reference Design board - included in the SL811S DVK tool kit.

SL811ST
(48 LPQFP)
7 mm x 7 mm

SL811S
(28 Pin PLCC)
11.43 mm x 11.43 mm



ScanLogic Corporation

Scanlogic was established in 1995 to develop, manufacture and license innovative and cost effective solutions for manufacturers of peripheral devices. ScanLogic's products combine Universal Serial Bus (USB) controllers; video compressors, signal processors; memory controllers; high speed CPU/RISC processors; software drivers under WIN98/2000, CE 3.0 and iMac; and development kits to provide high performance integrated chip solutions and ease of integration for OEM manufacturers.

ScanLogic is the first company in the world to introduce a series of unique USB controller chips that feature both Host and Slave functions in the same chip. These dual Host/Slave controller chips are an ideal solution for peripherals that are either standalone or connected to a PC - *or both!* For more information on either the Host Series or our other USB chip solutions, visit our web site at http://www.scanlogic.com.

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