![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China
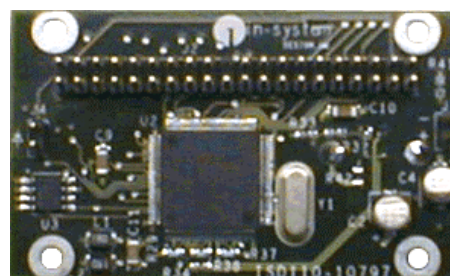
PRODUCT OVERVIEW

The Cypress ISD-300A1 USB to ATA ASIC is the ideal interface for creating a USB based mass storage device. Our full featured reference design provides single chip support for the following interfaces:

- USB to ATA - ATAPI:
  - CD-R/W, CD-R, CD ROM, DVD-RAM, DVD-ROM, DVD-R/W, MO, ZIP, LS120, Tape drives, others…

- USB to ATA - IDE:
  - Hard drives
- USB to Compact Flash

The ISD-300A1 architecture enables the high performance you expect of a USB 2.0 peripheral. The chip supports all PIO Modes and UDMA Modes up through UDMA 66. The result is a solution that is limited only by the speed of the USB bus or the attached drive.
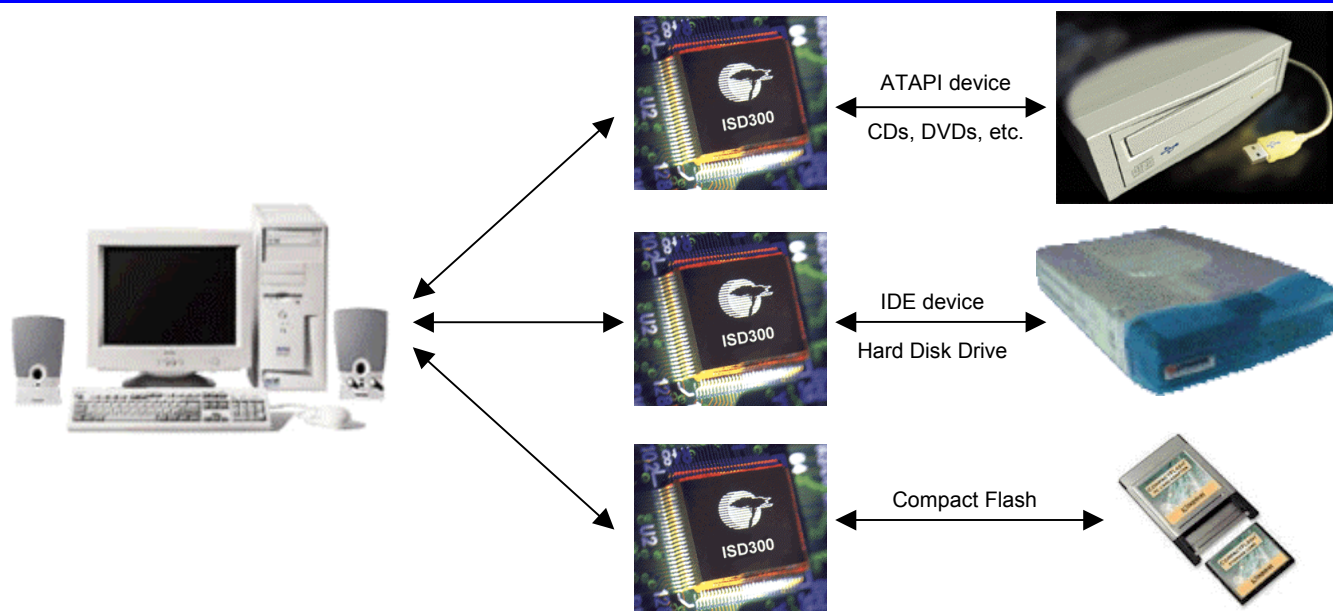
Since it is a fixed function device there's no need to trouble with firmware. The development board in our kit provides an easy platform to get a solution up and running quickly. We also recognize the need to move to manufacturing quickly. As a result we provide complete hardware designs for 4 different board variations: the development board, a cable based bridge, and horizontal and vertical mount modules.

Recognizing the need to minimize driver support, this design is fully compatible with the Mass Storage Class drivers shipped native in major operating systems. Windows 98, lacking a native class driver, is supported with our own custom driver provided in the kit.

FEATURES	BENEFITS
• USB 2.0 specification compliant	• Compatible with industry standards • Backward and forward USB compatibility
• Single chip solution	• Small footprint and low cost
• Fixed function device	• No firmware hassles, fast time to market • Minimal support cost
• Multiple production-ready hardware designs	• Flexibility in choosing a solutions • Improved time to market
• USB 2.0 design implements PIO modes 0 - 4 and UDMA modes 0 - 4 　▪ High Speed sustained transfer rate limited only by USB 2.0 bandwidth	• Highest performance achievable over USB
• Compatible with Windows and Mac OS class drivers • Windows 98 driver included	• Plug N Play with no driver development
• EEPROM configurable	• Can support widest variety of drives
• Tri-state-able outputs lines	• Supports dual interface (USB/1394) designs

For ordering information contact your local sales representative, call toll-free in the US (800)-858-1810, or visit our web site at www.cypress.com

SYSTEM ARCHITECTURE

ATAPI device
CDs, DVDs, etc.
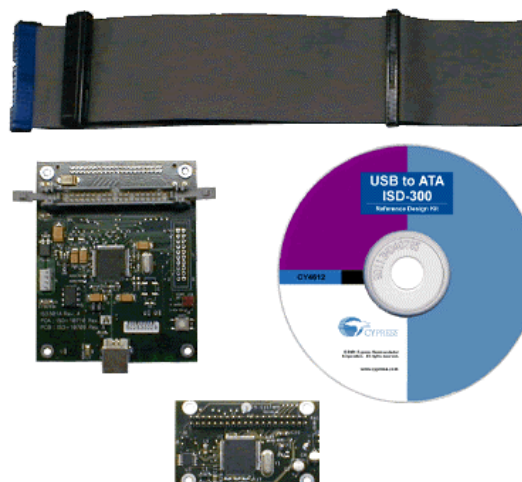
IDE device
Hard Disk Drive

Compact Flash

REFERENCE DESIGN KIT (CY4612)

The USB to ATA Reference Design Kit is a complete resource for developers to utilize in the development of their own product.

CY4612 kit includes:
- ISD301A development board
- ISD310 sample production board
- 80-pin ATA cable
- "Y" power adapter cable
- USB cable
- ISD-300A1 Datasheet
- CD-ROM containing
  - Hardware design databases for 4 different board layouts
    – Schematics
    – Bill of Materials
    – Gerber files
    – Orcad files
  - Windows 98 driver
  - Sample EEPROM programming utility
  - Other technical support documents

ORDER INFORMATION

Contact your Cypress Sales Representative or order from our on-line store

APPLICATION	REFERENCE DESIGN KIT ORDER NUMBER	BASED ON PART…
USB to ATA (High Speed/Full Speed)	CY4612	ISD-300A1

Note: Cypress also has other USB to ATA designs to meet a variety of needs: a programmable High Speed/Full Speed design as well as fixed-function and programmable Full Speed only designs.

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