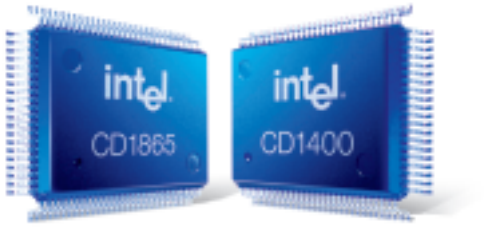
Intel® CD1283 and Intel® CD1284 Parallel Controllers

Product Line Overview

The Intel® Parallel Controllers offer innovative IEEE 1284-compatible parallel I/O data communications solutions for peripheral applications. These devices provide a high-speed, parallel interface for applications as wide-ranging as printers, scanners, copiers, backup systems, industrial control systems, multifunction devices, and set-top boxes. Supporting high speed bi-directional data rates as much as 50 to 100 times faster than the original Centronics*-compatible parallel port add to the flexibility and usability of these products. These capabilities are available while still providing backward compatibility with existing parallel port interfaces.



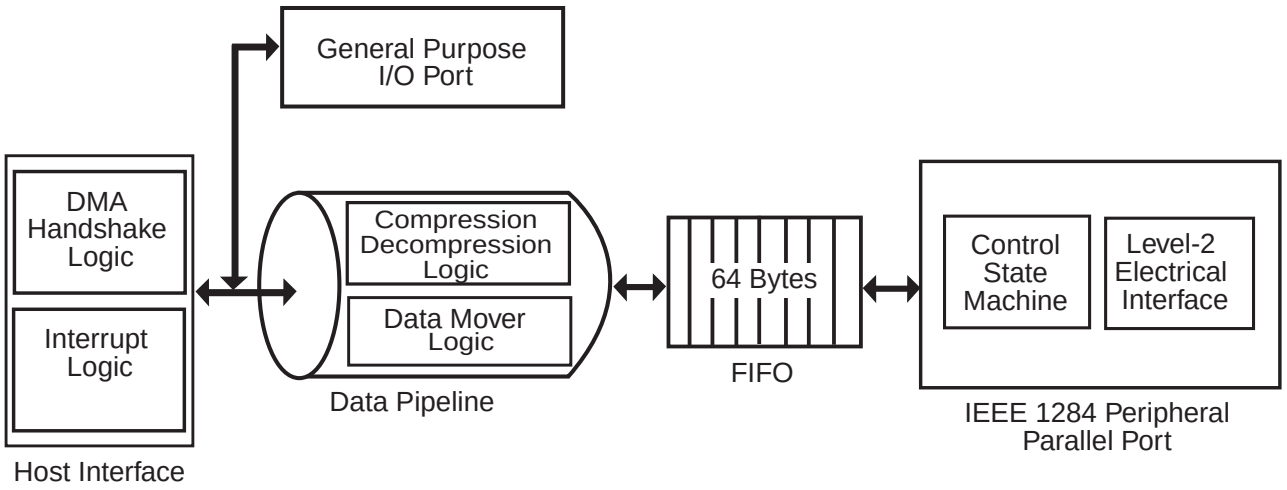
Intel® CD1283 Parallel Controller

Product Highlights

- Hardware implementation of all modes of the IEEE STD 1284 specification
- Automatic mode negotiation support
- Centronics* - compatible operation
- Up to 2 Mbyte/second transfer rate in ECP mode
- 64 byte parallel port FIFO with DMA interface
- Pin-compatible with Intel® CD1284
- Packaged in a 100-pin MQFP
- Reverse Byte mode
- Reverse Nibble mode
- ECP (extended capabilities port) mode with run-length encoding/decoding
- EPP (enhanced parallel port) mode
- Supports peripheral-side operation (host-side operation not supported)
- Data and control input/output pads support IEEE 1284 level-2 interface specifications

Product Overview

The Intel® CD1283 is a multifunction interface controller ideal for printer, scanner, and tape drive applications that implement a high-speed, multiprotocol parallel port. The Intel CD1283 has both PIO (programmed I/O) and DMA (direct memory access) operation, providing flexibility in host interface design and high-speed data transfers between the device and host memory. The parallel port implements all modes of the host memory. The parallel port implements all modes of the IEEE STD 1284 standard signaling method for bi-directional parallel peripheral interface specification including: EPP, ECP, reverse byte, reverse nibble, and compatible. Data transfer rates up to 2 Mbytes/sec. are achievable on the parallel port when at the full-rated clock of 25 MHz. Data throughput is maximized by the 64 byte FIFO, 16-bit data bus, and slave DMA interface.



Graphic of Intel® CD1283

Intel® CD1284 Parallel Controller

Product Highlights

Parallel Port

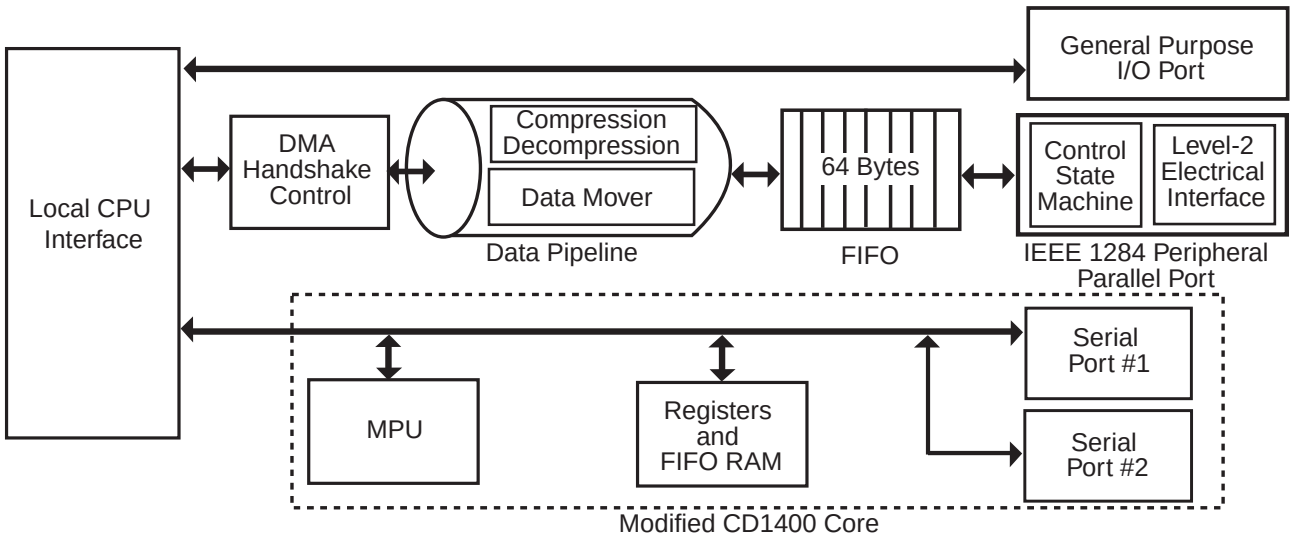
- Hardware implementation of all modes of the IEEE STD 1284 specification
- Automatic mode negotiation support
- Centronics* - compatible operation
- Up to 2 Mbyte/sec. transfer rate in ECP mode
- 64 byte parallel port FIFO with DMA interface
- Data and control input/output pads support IEEE 1284 level-2 interface specifications
- Reverse Byte mode
- Reverse Nibble mode
- EPP (enhanced parallel port) mode
- ECP (extended capabilities port) mode with run-length encoding/decoding
- Supports peripheral-side operation (host-side operation not supported)

Two Serial UARTS

- Twelve-byte FIFOs for each transmitter and receiver
- Bit rates up to 115.2 Kbps
- Packaged in a 100-pin MQFP

Product Overview

The Intel® CD1284 is a multifunction interface controller ideal for peripheral applications that require a high-speed, multiprotocol parallel port plus two asynchronous serial ports. The Intel CD1284 has both PIO (programmed I/O) and DMA (direct memory access) operation, providing flexibility in host interface design and high-speed data transfers between the device and host memory. The parallel port implements all modes of the IEEE STD 1284 standard signaling method for bi-directional parallel peripheral interface specification including: EPP, ECP, reverse byte, reverse nibble, and compatible. Data transfer rates up to 2 Mbytes/sec. are achievable on the parallel port when at the full-rated clock of 25 MHz. Data throughput is maximized by the 64-byte FIFO, 16-bit data bus, and slave DMA interface. The two serial universal asynchronous receiver transmitter ports provide additional flexibility with twelve-byte FIFOs for each transmitter and receiver and bit rates 115.2 kbps, all packaged in a 100-pin MQFP.



Graphic of Intel® CD1284

Ordering Information

Contact an authorized Intel distributor for complete ordering details.

Product	Order Code
Intel® CD1283 Parallel Controller	SCD128310QCE
Intel® CD1284 Parallel Controller	SCD128410QCE
Intel® CDK1284 Evaluation Kit	CDK1284EAT02A

Literature Information

Intel® PC Card (PCMCIA) Controllers Product Brief	279023-002
Intel® CD1400 and Intel® CD1865 Serial Controllers Product Brief	279022-002
Intel® CD1283 and Intel® CD1284 Parallel Controllers Product Brief	279034-002
Intel® WAN Controllers Product Brief	273527-001
Interconnect Devices Product Selection and Application Guide	279037-002
Interconnect Devices Basis to Intel Conversion Chart	279036-002
Intel® Interconnect Devices Family Brochure	273544-001

Intel Access

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