Features

- **PCI**
  - Fully compliant with PCI Local Bus Specification, Revision 2.3
  - Compatible for MiniPCI application requirements
  - Fully customizable PCI Configuration Space
  - Compatible with 3.3V and 5V PCI signaling
  - Supports PCI Power Management
- **Serial Port**
  - Four 16C 450 / 550 / Extended 550 compatible UARTs
  - Supports RS232, RS485 & RS422 modes
  - Bi-directional Speeds from 50 bps to 16 Mbps / Port
  - Full Serial modem control
  - Supports Hardware, Software flow control
  - 5, 6, 7, 8, 9-bit Serial format support
  - Even, Odd, None, Space & Mark parity supported
  - Custom BAUD rate support with external clock / by programming internal PLL
  - On Chip deep 256 Byte FIFOs in Transmit & Receive paths of each Serial Port
  - Supports remote wakeup and power management features
  - Serial Port transceiver shutdown support
  - Supports Slow IrDA on all Serial Ports
- **IEEE1284 Parallel Port**
  - Multi-mode IEEE1284 compliant controller (SPP, PS2, EPP, ECP)
  - Faster data rates up to 1.5Mbytes/sec for parallel port
- **ISA**
  - ISA style I/O interface for extending UARTs & Parallel Ports
  - 8 bit data bus @ 8MHz
- **Miscellaneous**
  - On-Chip Dual Voltage Regulator (5V to 3.3V & 1.8V)
  - Two-Wire I^2C Interface for EEPROM
  - EEPROM read / write through PCI
  - Four bi-directional multi-function GPIO lines
  - On chip oscillator
  - Package : 128-Pin LQFP, RoHS
  - Operating Temperature : -40 to +85 oC

Product Brief

Product Description

MCS9865 is a PCI based Peripheral Controller. It supports dual-channel high performance Serial Ports, dual enhanced IEEE 1284 compliant parallel ports and an ISA style interface. MCS9865 is ideally suited for Desktop PC and Notebook applications, such as PCI / Mini-PCI add-in Cards for high-speed Serial / Parallel Port expansion.

The PCI interface of MCS9865 is fully Compliant with PCI Local Bus Specification, Revision 2.3. It supports five functions through single device.

On-Chip Serial Ports of MCS9865 support extended 16C550 UART mode and support serial speeds up to 16Mbps. MCS9865 has 256 byte deep Transmit and Receive FIFO for each UART. Deep FIFOs enable high serial speeds / throughputs and reduce CPU Utilization. Each Serial Port is compatible with industry standard 16C550 devices including Standard COM Port of Industrial PC, ASIX family of UARTs like MCS9901/ MCS9835 / MCS9845 / MCS9820 / MCS7840 / MCS7820 / MCS7720 / MCS7703.

The Parallel Port interface is an IEEE 1284 compliant SPP / PS2 / EPP / ECP Parallel Port that fully supports Centronics interface.

ASIX Electronics Corporation
4F, No.8, Hsin Ann Rd.,
Hsinchu Science Park,
Hsinchu, Taiwan 30078

Released Date: 5/9/2008
TEL: +886-3-579-9500
FAX: +886-3-579-9558
http://www.asix.com.tw/

Target Applications

- Serial Attached Devices
- Serial Networking / Monitoring Equipment
- Data Acquisition System
- POS Terminal & Industrial PC
- Parallel / Printer Port based applications
- Add-On I/O Cards – Serial / Parallel
- Embedded systems – For I/O expansion

Block Diagram