

Features**● PCI Express**

- Single-lane (X1) PCI Express End-point Controller with integrated PHY
- Compliant with PCI Express Base Specification, Revision 1.1
- Compliant with PCI Express card specifications
- Supports two PCI Express functions
- Supports auto completion of configuration requests
- Supports built in flow control
- Supports Message TLP (Error) generation
- Supports integrated time out handling of Non-posted request
- Supports both legacy and MSI Interrupt
- Supports PCIe Power Management

● Serial Port

- Two 16C450 / 550 / Extended 550 / 650 / Enhanced Mode compatible UARTs
- Supports RS232, RS422 & RS485 modes
- Bi-directional speeds from 50 bps to 16 Mbps per port
- Full Serial Modem Control
- Supports Hardware, Software Flow Control
- Supports 5, 6, 7, 8 bit Serial format
- Supports Even, Odd, None, Space and Mark parity
- Supports Custom baud rate by programming

Product Brief

internal PLL or external clock

- Supports On Chip 256 Byte depth FIFOs in Transmit, Receive path of each Serial Port
- Supports remote wakeup and power management features
- Serial Port transceiver shutdown support
- Supports Slow IrDA mode (up to 115200bps) on all Serial Ports
- **Cascade:** MCS9922 supports a 13-Pin proprietary interface to connect to other ASIX devices for IO expansion. Through this interface, MCS9922 can be used as Cascade Secondary device and can be connected to Cascade Primary capable ASIX Devices like MCS9900. Eg. MCS9922 can be connected to MCS9900, for following product configurations.
 - PCIe to 6 Serial Ports
 - PCIe to 4 Serial Ports and 1 Parallel Port
- **General Device Features**
 - I²C interface for EEPROM
 - EEPROM read / write through PCIe Interface
 - 8 bi-directional multi-function GPIO lines
 - On chip oscillator
 - Power supply : 1.2V, 3.3V
 - Package : 128-Pin LQFP, RoHS
 - Operating Temperature : 0 to +70°C

Product Description

MCS9922 is a single lane multifunction PCI express to I/O controller. It supports two serial ports and eight GPIO's. MCS9922 also provides an option for peripheral expansion through proprietary Cascade interface. The generic cascade interface allows interconnecting with similar chips like MCS9900 to expand the peripheral ports.

The serial ports are compatible with RS232, RS422 & RS485 standards and supports throughput from 50bps to 16Mbps. All the GPIO pins are programmable and can be used as Input or Output. An I²C interface is provided to configure MCS9922 device options through an external EEPROM.

Target Applications

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

Block Diagram

