What is the PicoPort?

The PicoPort is a BTL®-listed miniature serial communications engine-on-module for OEM applications. With features such as dual serial ports, USB-based configuration, analog and digital I/O ports, and a full complement of built-in communication protocol drivers all compressed into a device smaller than a US postage stamp, the PicoPort allows OEM device manufacturers to effortlessly network-enable their equipment, or expand their existing supported networks.

FEATURES
- 0.85” x 0.85” dimensions
- 18-pin (2x9) DIP header with 2.00mm spacing
- On-board full-speed USB 2.0 support
- On-board dual-color status LED (software configurable)
- 9X shared GPIO channels (for digital inputs & outputs, pulse counters)
- 3X shared pulse output channels (for PWM, frequency, analog outputs)
- 4X shared 10-bit analog input channels
- Dual serial ports with RS-485 line enable signals, supporting baud rates up to 115.2kbaud
- Ultra-low latency port-to-port passthrough
- Host SPI interface
- Efficient 3.3V technology
- RoHS compliant
- Built-in drivers for a variety of popular industrial and building-automation protocols, such as BACnet MS/TP (client & server), JCI Metasys N2 (master & slave), Modbus RTU (master, slave & sniffer), Siemens FLN (master & slave) etc.
- PLC-style logical, arithmetic, trigonometric and filtering database manipulation operations allow the construction of complex autonomous data conditioning functions
- Windows-based configuration studio for OEMs
- Simple, customizable network parameter utility for end-users
- Development kit supporting a variety of communication interfaces and a breadboard area for prototyping
- USB virtual COM port support
- Free lifetime hardware and software technical support
- Free access to all firmware updates and newly-developed drivers as they become available
- OEM products can be BTL® listed with no testing required

put your equipment to work for you and your customers
EFFORTLESSLY ENABLE ANY DEVICE TO COMMUNICATE ON AUTOMATION NETWORKS

Intelligent Devices

The PicoPort can also be used in traditional sensor and I/O devices (such as pressure, humidity, temperature and contact sensors and actuators) that do not include a host CPU. The PicoPort’s physical I/O (analog and digital inputs and outputs, pulse counters) provide direct network access to the host device’s internal circuitry. The incorporation of advanced features, such as configurable scaling and PLC-style database logic, simplify the device manufacturer’s integration effort.

Features Overview

Small Size, Huge Features
At only 0.85” (21.59mm) square, the PicoPort is smaller than a US postage stamp. Even at this compressed size, all network drivers are built-in, thereby allowing dynamic end-user selection to meet the application at hand.

A Plethora of Ports
The 18-pin (2x9) connector supports a variety of configurable interfaces, ensuring the ability to connect to equipment circuit elements with ease.

No Excuses for Delayed Development
A development kit is available which allows engineers to get a jump start on integration with their equipment. The development board supports a variety of selectable communication interfaces, as well as a breadboard area for convenient hardware prototyping.

sensor and I/O Devices

The PicoPort can be used in "intelligent" devices (such as drives, PLCs, and HMIs) that include a host CPU. Any supported protocol (standard or custom) can be used by the PicoPort to read/write data from the host CPU and make it accessible to the outside world. Physical I/O (analog and digital inputs and outputs) are simultaneously available for connection to provide network access to the device’s internal circuitry.

automatic network access in each and every device
Specialists in building automation systems, factory automation, and custom networking solutions