LANTRONIX®



Embedded Device Server

- Flexible, well-developed IP protocol stack
- TTL serial interface
- Two serial ports
- Accepts 5 VDC regulated input power
- HTTP, serial, Telnet and SNMP management
- Flash ROM for easy software upgrades
- Custom protocol support available
- 256-bit AES encryption for secure communications

RoHS WEEE COMPLIANT

Build 10/100 Base-T Ethernet Connectivity into Your Products Quickly and Economically

The Lantronix Micro125 is a board-level product for OEM users who want to embed proven mainstream Ethernet connectivity in their products quickly and economically.

Building Ethernet connectivity into a product is no simple task. It requires a significant investment in hardware and software integration – often in areas outside of core competencies. So why build it yourself when there is a better alternative?

The Micro125 embedded device server provides an integrated solution to add proven Ethernet connectivity to an existing design quickly and economically, and with a high level of flexibility.

Device networking starts with a Device Server.™ These amazing products enable most any device with serial capability (TTL) to become a fully functional member of an Ethernet network. Device Servers include all of the elements needed to network-enable your products – a processor, real-time operating system (RTOS), a robust TCP/IP stack, a web server, and a network connection. All the connected product additionally needs is a header, providing connections to a power source and to a TTL serial port.

The Micro125 brings over a decade of device networking experience, rock-solid IP firmware, extensive applications support and advanced encryption standards to industrial and commercial environments.

Measuring only 49 x 40 mm the Micro125 can easily fit into almost any size serial device that would benefit from network connectivity. It includes a serial interface TTL connector and 10/100 Base-T Ethernet RJ45 jack. The Micro125 includes the same IP protocol stack found on the other Lantronix embedded products.

RoHS-compliant, the Micro125 meets Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



Features

Protocols
ARP, UDP, TCP/IP, Telnet, ICMP, SNMP, DHCP, TFTP and HTTP

Networking Interface
RJ45 (10/100Base-T) Ethernet

Serial Interface
TTL level (Asynchronous)

Data Rates
300 bps to 230 Kbps

Serial Line Formats
Characters: 7 or 8 data bits
Stop bits: 1 or 2
Parity: odd, even, none

Modem Controls
DTR, RTS, CTS, DCD

Flow Control
XON/XOFF (Software)
CTS/RTS (Hardware)

Management
HTTP
SNMP
Serial login
Telnet login
Security
Optional 256-bit AES
Password protection

System Software
Flash ROM standard:
downloadable from a TCP/IP host (TFTP)
or over serial port

Diagnostic LEDs
Serial Channel Status
Ethernet Link Status
Diagnostic Information

Compatibility
Ethernet: Version 2.0/IEEE 802.3

Power Requirements
5 VDC +/-5% at ~ 200 mA

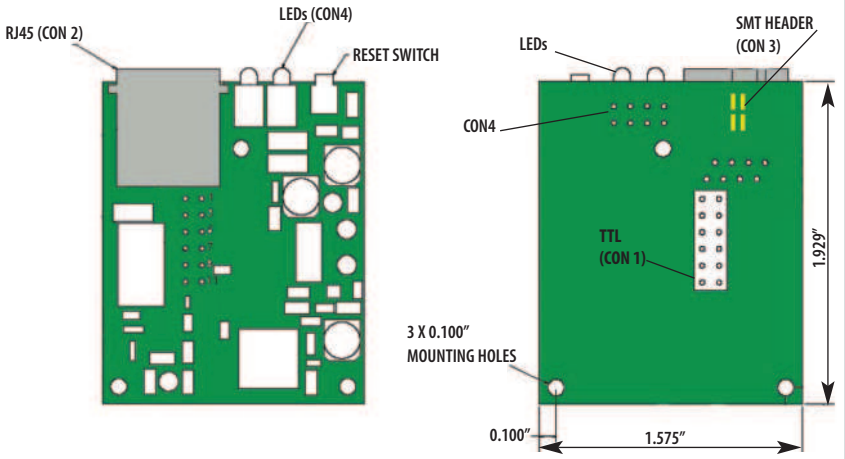
Memory
Flash: 512K
RAM: 256K - zero wait

Environmental
Standard Temperature
0° to 70°C (32° to 158°F)

Storage Temperature
-40° to 85°C (-40° to 185°F)

Physical Dimensions (W x H)
49 x 40 mm (1.929 x 1.575 in)

Board Layout and Pinouts



CON1 (2 x 6 Pins)TTL

Pin	Function
1	+5V
2	GND
3	RXA (Input)
4	TXA (Output)
5	RTSA (Output)
6	DTRA (Output)
7	CTSA (Input)
8	DCDA (Input)
9	R/V/A (Output)
10	RESET
11	RXB (Input)
12	TXB (Output)

CON2 (RJ45)

Pin	Con1
1	TX+
2	TX-
3	RX+
4	NC
5	NC
6	RX-
7	NC
8	NC

CON3 (2 x 2 SMT in place of RJ45)

Pin	Function
1	TX+
2	TX-
3	RX+
4	RX-

CON4 (2 x 4 pins in place of LEDs)

Pin	Function
1	+3.3V
2	+3.3V
3	DIAG (Red)
4	CH1 (Green)
5	+3.3V
6	+3.3V
7	CH2 (Yellow)
8	Link (Green)

Warranty
2-year limited warranty

Ordering Information

Part Number	Description
M000AA003-01R	Micro125, No RJ45 connector, No LEDS, with TTL pin header, RoHS
M000AA0E3-01R	AES Encrypted Micro125, No RJ45 connector, No LEDS, with TTL pin header, RoHS
M011AA003-01R	Micro125 with RJ45 connector, LEDS, with TTL pin header, RoHS
M011AA0E3-01R	AES Encrypted Micro125 with RJ45 connector, LEDS, with TTL pin header, RoHS
M022AA003-01R	Micro125, Pin header for Ethernet, Pin header for LED connection, with TTL pin header, RoHS
M022AA0E3-01R	AES Encrypted Micro125, Pin header for Ethernet, Pin header for LED connection, with TTL pin header, RoHS

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167 Technology Drive | Irvine | CA 92618 | USA | Tel: 949.453.3990 | Fax: 949.450.7249 | **www.lantronix.com**

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