



Embedded Device Server

- ▶ Flexible, well-developed IP protocol stack
- ▶ Ethernet RJ45 (10/100Base-T) connector on the board
- ▶ 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

Build Ethernet Connectivity into Your Products Quickly and Economically

The Lantronix Micro100 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 Micro100 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 Micro100 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 1.6" x 1.9," the Micro100 can easily fit into almost any size serial device that would benefit from network connectivity. Serial interfacing is accomplished via a TTL connector, and for Ethernet access, an RJ45 (10/100Base-T) is available.

The Micro100 supports the same IP protocol stack found on the other Lantronix embedded products.





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 ~200mA

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 (H x W)

40.0 mm x 49.0 mm (1.574 x 1.929 in)

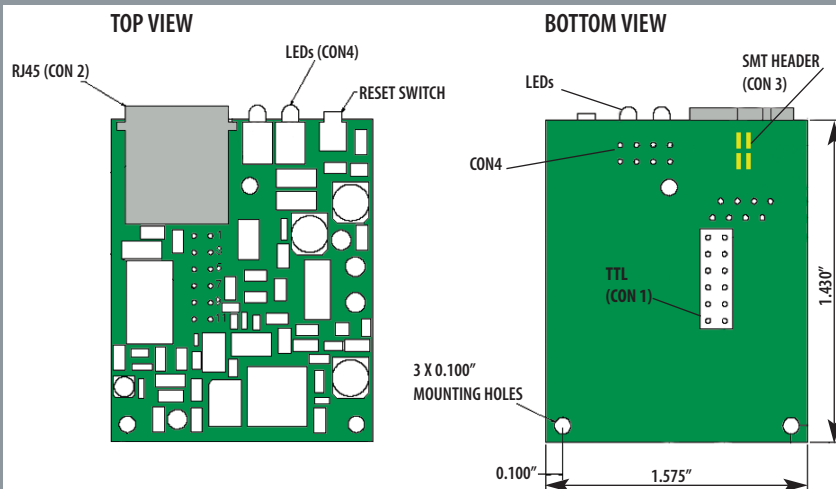
LANTRONIX®

15353 Barranca Parkway | Irvine | CA 92618 | USA | Tel: 800.526.8764 | Fax: 949.450.7249 | www.lantronix.com

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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
M000AA002-01	Micro100 No RJ45 connector, no LEDs, with TTL pin header
M011AA002-01	Micro100 with RJ45 connector, LEDs, with TTL pin header
M022AA002-01	Micro100 Pin header for Ethernet, pin header for LED connection, with TTL pin header

M000AA0E2-01	Micro100 No RJ45 connector, no LEDs, with TTL pin header with encryption
M011AA0E2-01	Micro100 with RJ45 connector, LEDs, with TTL pin header with encryption
M022AA0E2-01	Micro100 Pin header for Ethernet, pin header for LED connection, with TTL pin header with encryption