

MatchPort® NR

Embedded Ethernet Device Server

THE ULTIMATE IN FLEXIBILITY, SECURITY, PERFORMANCE AND AFFORDABILITY IN EMBEDDED NETWORKING

MatchPort® NR enables you to build networking into virtually any electronic device with a serial interface. With this full-featured, turnkey embedded device server module your products can be accessed and controlled over the Internet!

Pin-compatible Wireless/Wired Module Family

MatchPort NR is part of a family of pin and form-factor compatible wireless and wired module solutions. The MatchPort family enables you to “future proof” your designs with a choice of flexible media independent 802.11 b/g or Ethernet networking products. It takes the complexity out of RF design and embedded Ethernet networking, enabling you to focus on your products.

Complete Network Processing Module

MatchPort NR is a dedicated co-processor module that manages network activity, permitting the device’s host microprocessor to function at maximum efficiency.

Powered by a Lantronix DSTni™ x86 class processor SoC with 256 KB of on-chip SRAM, MatchPort NR also includes 2MB of Flash memory for web page storage and firmware.



- + Extremely affordable embedded networking
- + Common platform form factor for a family of wired and wireless modules
- + Build Ethernet or IP networking into your products quickly and easily
- + 256-bit AES end-to-end encryption for secure communications
- + Full TCP/IP stack, web server and Windows deployment software
- + Two serial channels; up to 921 Kbps data rate
- + EMC/EMI-compliant; RoHS compliant
- + Compact: 45mm x 45mm with 40-pin 2 mm header

DeviceLinx®

LANTRONIX®
Think it. Connect it. Control it.

Robust, Feature-Rich Software Suite

Eliminating the need to negotiate the intricacies of Transmission Control Protocol (TCP) or Internet Protocol (IP), MatchPort NR incorporates:

- Robust operating system
- Full featured network protocol stack, including full TCP/IP stack
- Proven, ready-to-use serial-to-ethernet application
- Built-in web server for device communication and configuration via a standard browser
- Windows-based DeviceInstaller™ – making configuring one or more units in a subnet quick and easy

FEATURES

+ Serial Interface

- Two Serial Ports
- Interface: CMOS (Asynchronous) 3.3V-level signals, rate is software selectable (300 bps to 921,000 bps)
- Serial Line Formats: 7 or 8 data bits, 1-2 Stop bits
- Parity: odd, even, none
- Modem Control: DTR, DCD
- Flow Control: XON/XOFF (software), CTS/RTS (hardware), none

+ Network Interface

- 10Base-T/100Base-TX Ethernet connectivity (using RJ45 jack)
- Protocols Supported: ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, BOOTP, Auto IP, HTTP, SMTP, TFTP, RFC 2217 (Telnet)

+ Management

- Internal web server
- SNMP (read only)
- Serial login
- Telnet login
- DeviceInstaller software

+ Security

- 128, 192, 256-bit AES Rijndael encryption

+ Internal Web Server

- Serves web pages
- Storage capacity: 1.2 MB

+ Architecture

- CPU, Memory: Lantronix DSTni-EX x86 CPU, on-chip 256 KB zero wait static SRAM, 2,048 KB Flash, 16 KB Boot ROM, 8 GPIO
- Firmware: Upgradeable via TFTP and serial port

+ Power Consumption

- Average Power Consumption: 194mA at 3.3V CPU @ 48MHz, 100Mbps



+ Environmental

- Operating range: -40° to 85°C (-40° to 185°F)
- Storage range: -40° to 85°C (-40° to 185°F)

+ Packaging

- Dimensions: 44.4 x 44.4 x 10.4 mm (1.75 x 1.75 x .41 in)
- Weight: 14g
- Material: Plastic shell, 260°C tolerant

+ 2-year limited Warranty

+ Included Software

- Windows® 98/NT/2000/XP/Vista based DeviceInstaller configuration software and Com Port Redirector,™ Web-Manager

MATCHPORT NR DEMONSTRATION KIT

The demonstration kit contains the key accessories to evaluate a MatchPort NR product:

+ MatchPort NR demonstration board

+ RS-232 cable, DB9F, null modem

+ Cat5e UTP RJ45M/M Ethernet cable

+ 3.3V power supply

+ Antenna (Included for use with wireless modules – not for MatchPort NR use) Note: MatchPort NR sample must be purchased separately.

Type	Name	Group	IP Address	Hardware Address
EDS16FR			172.18.23.115	00:20:4A:6E:31:4C
EDS16PS			172.18.17.199	00:20:4A:6E:68:70
EDS32PR			172.18.11.27	00:20:4A:6E:10:73
EDS32PR			172.18.17.200	00:80:A3:66:27:03
EDS4100			172.18.32.20	00:20:4A:6E:66:66
EDS4100			172.18.30.15	00:20:4A:6E:66:66
EDS2100	EPS_66F05A		172.18.17.80	00:80:A3:66:FC:64
ETS18FR	ETS_2393F2		172.18.18.130	00:80:A3:23:93:F2
IntelBox I/O 2100			172.18.11.192	00:20:4A:6E:19:2E
IntelBox I/O 2100			172.18.17.30	00:20:4A:6E:41:94
MatchPort b/g			172.18.11.183	00:20:4A:6E:25:13
MatchPort b/g			172.18.32.17	00:20:4A:6E:25:13
MPS100	MPS_1F01C4		172.18.25.80	00:80:A3:1F:01:C4
MSS100	MSS_212F68		172.18.11.22	00:80:A3:21:2F:68
MSS100	MARTY		172.18.23.198	00:80:A3:66:CE:38
MSS100	MSS_6128F7		172.18.31.133	00:80:A3:61:28:F7
SCS1800	SCS_570AF5		172.18.17.225	00:80:A3:57:0A:F5
SCS1500	SCS_570AFF		172.18.32.16	00:80:A3:57:0A:F5
SCS200	SCS_5600BA		172.18.19.40	00:80:A3:56:00:BA

The included DeviceInstaller software makes configuration quick and easy!

ORDERING INFORMATION

+ Part Number

MP5002000-01

MP500200S-01

MP10010NMK-01

+ Description

MatchPort NR AES bulk pack
Minimum order quantity 50 units

MatchPort NR AES sample case

- One MatchPort NR enclosed
- Free Secure Com Port Redirector™ evaluation license

Order quantities of up to 10

MatchPort NR Demonstration Kit

LANTRONIX®

CORPORATE HEADQUARTERS

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