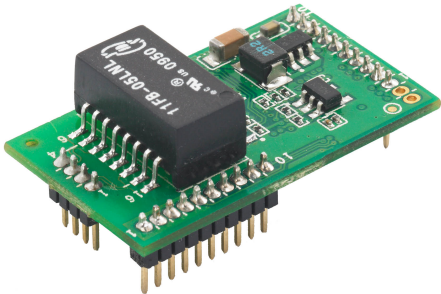


10/100 Mbps embedded serial device servers



- Features and Benefits
- Smallest embedded device server available—only 29 x 17 x 12.6 mm
 - Supports EZPower for 3.3 to 5 VDC system power input
 - Green design with extremely low power consumption
 - Uses Moxa's high-quality and reliable second-generation MiiNe SoC
 - MiiNePort NetEZ technology makes integration incredibly easy
 - Operation versatility with Real COM/TCP/UDP/RFC2217/MCSC



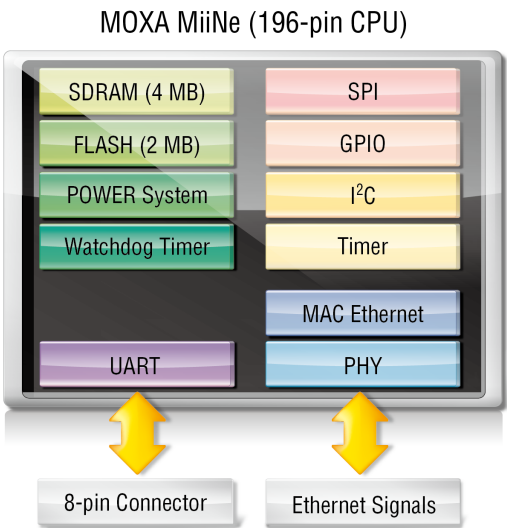
Introduction

Moxa's MiiNePort E2 Series embedded device servers are designed for manufacturers who want to add sophisticated network connectivity to their serial devices with minimal integration effort. The MiiNePort E2 is empowered by the MiiNe, Moxa's second-generation SoC, which supports 10/100 Mbps Ethernet, delivers a serial baudrate of up to 921.6 kbps, offers a versatile selection of ready-to-use operation modes, and requires a minimal amount of power. With Moxa's innovative NetEZ technology, the MiiNePort E2 can convert any device with a standard serial interface to an Ethernet-enabled device. In addition, the MiiNePort E2 is the smallest embedded device server without an RJ45 connector, making it easy to fit into virtually any existing serial device.

Moxa's Second-Generation SoC

The MiiNe was created to provide manufacturers with a competitive embedded serial-to-Ethernet solution. The MiiNePort E2, which uses the MiiNe for its SoC, is one of the world's tiniest embedded device servers and has the lowest power consumption among similar products. The MiiNe's features include:

- Cost-effective serial-to-Ethernet conversions
- Arm core
- Advanced UART technology
- Internal 2 MB Flash and 4 MB SDRAM memory



Specifications

Embedded System	
CPU	32-bit Arm Core
Memory	
Flash	2 MB
SDRAM	4 MB

Input/Output Interface

Configurable DIO Channels (by software)

4

Ethernet Interface

10/100BaseT(X) Ports, Auto MDI/MDI-X

4-pin pin header

Magnetic Isolation Protection

1.5 kV (built-in)

Ethernet Software Features

Configuration Options

Web Console (HTTP), Windows Utility

Management

ARP, BOOTP, Device Search Utility (DSU), DHCP Client, IPv4, SMTP, SNMPv1, TCP/IP, Telnet, TFTP, UDP, ICMP

Windows Real COM Drivers

Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded

Linux Real TTY Drivers

Kernel version: 2.4.x, 2.6.x, 3.x, 4.x

Fixed TTY Drivers

SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X

Android API

Android 3.1.x and later

Serial Interface

No. of Ports

1

Serial Standards

TTL

Operation Modes

Real COM mode, TCP Server mode, TCP Client mode, UDP mode, RFC2217 mode, Ethernet Modem mode, MCSC mode

Baudrate

MiiNePort E2 Series: 50 bps to 230.4 kbps
MiiNePort E2-H Series: 50 bps to 921.6 kbps

Data Bits

5, 6, 7, 8

Stop Bits

1, 1.5, 2

Parity

None, Even, Odd, Space, Mark

Flow Control

None, RTS/CTS, DTR/DSR, XON/XOFF

Serial Signals

TTL

TxD, RxD, RTS, CTS, DTR, DSR, DCD, RST (reset circuit), GND

NetEZ Technology

NetEZ Functions

EZPower, EZPage, SCM (Serial Command Mode), AutoCFG, MCSC (Multi-Channel Serial Communication)

Power Parameters

Input Current

157 mA @ 3.3 VDC

Input Voltage

3.3 to 5 VDC

Physical Characteristics

Dimensions

MiiNePort E2/E2-H Series: 29 x 17 x 12.6 mm (1.14 x 0.67 x 0.50 in)

Weight

MiiNePort E2/E2-H Series: 5 g (0.01 lb)
MiiNePort E2-ST/E2-H-ST: 77 g (0.17 lb)

Form Factor Type

Drop-in modules

Environmental Limits

Operating Temperature	Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	-40 to 60°C (-40 to 140°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 0.5 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF IEC 61000-4-11 DIPs
Environmental Testing	IEC 60068-2-1 IEC 60068-2-1 IEC 60068-2-3
EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class B
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6

Declaration

Green Product	RoHS, CRoHS, WEEE
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MTBF

Time	5,696,350 hrs
Standards	Telcordia SR332

Warranty

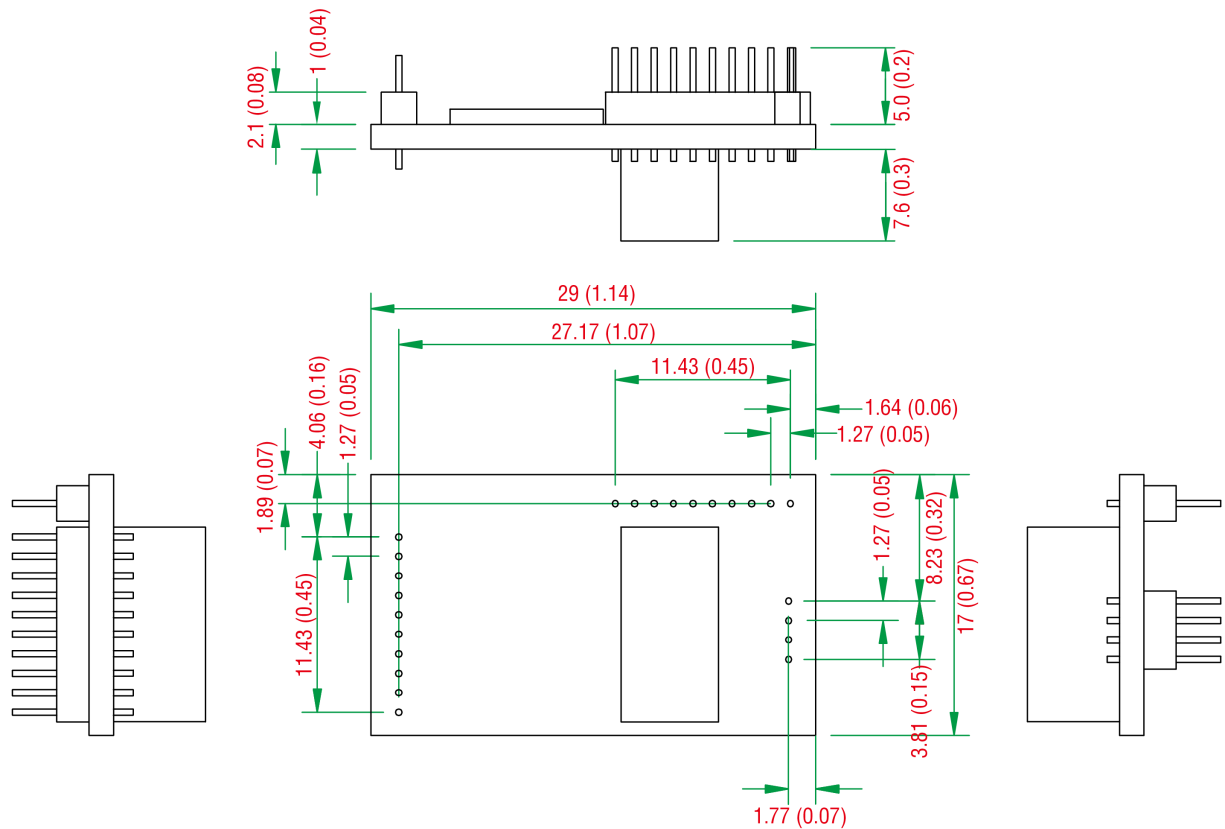
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x MiiNePort E2 Series device server
Cable	1 x Ethernet, crossover cable (-ST models) 1 x null modem serial cable (-ST models)
Power Supply	1 x power adapter, universal (-ST models) 1 x power cord, EU type (-ST models) 1 x power cord, US type (-ST models)
Documentation	1 x document and software CD (-ST models) 1 x quick installation guide (-ST models) 1 x warranty card (-ST models)

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	No. of Serial Ports	Supported Baudrates	Operating Temp.	With MiiNePort E2	With Evaluation Board
MiiNePort E2	1	50 bps to 230.4 kbps	0 to 55°C	✓	–
MiiNePort E2-H	1	50 bps to 921.6 kbps	0 to 55°C	✓	–
MiiNePort E2-T	1	50 bps to 230.4 kbps	-40 to 85°C	✓	–
MiiNePort E2-H-T	1	50 bps to 921.6 kbps	-40 to 85°C	✓	–
MiiNePort E2-ST	1	50 bps to 230.4 kbps	0 to 55°C	✓	✓
MiiNePort E2-H-ST	1	50 bps to 921.6 kbps	0 to 55°C	✓	✓

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