MOXA®

MiiNePort E1 Series
Quick Installation Guide

Second Edition, July 2010

1. Overview

The Moxa MiiNePort E1 series products are serial-to-Ethernet embedded modules that come in 4 models: standard operating temperature (MiiNePort E1, MiiNePort E1-H) and wide operating temperature (MiiNePort E1-T, MiiNePort E1-H-T). Moxa provides a starter kit for each MiiNePort E1 series module; each starter kit contains an evaluation board that can be used to evaluate the modules and to develop your own applications. The following table lists the model names of all MiiNePort E1 series modules, along with the model names of the corresponding starter kits.

<u>Available Modules</u>

- MiiNePort E1: Embedded device server for TTL devices, drop-in module, 10/100M with RJ45 connector, 50 bps to 230.4K baudrate, 0 to 55°C operating temperature
- MiiNePort E1-T: Embedded device server for TTL devices, drop-in module, 10/100M with RJ45 connector, 50 bps to 230.4K baudrate, -40°C to 85°C operating temperature
- MiiNePort E1-H: Embedded device server for TTL devices, drop-in module, 10/100M with RJ45 connector, 50 bps to 921.6K baudrate, 0 to 55°C operating temperature
- MiiNePort E1-H-T: Embedded device server for TTL devices, drop-in module, 10/100M with RJ45 connector, 50 bps to 921.6K baudrate, -40°C to 85°C operating temperature

<u>Available Starter Kits</u>

- MiiNePort E1-ST: Starter kit for the MiiNePort E1 Series, module included
- MiiNePort E1-H-ST: Starter kit for the MiiNePort E1-H Series, module included

2. Package Checklist

Each MiiNePort E1 series starter kit package contains the following items:

- 1 MiiNePort E1 series module (MiiNePort E1, MiiNePort E1-H)
- 1 MiiNePort E1 series evaluation board
- 1 MiiNePort E1 Series Documentation and Software CD
- 1 universal power adaptor
- 2 power cords
- 1 null modem serial cable
- 1 cross-over Ethernet cable
- 1 product warranty booklet
- 1 Quick Installation Guide (this guide)

Note: Please notify your sales representative if any of the above items are missing or damaged.

3. Hardware Installation Procedure

Follow these steps to prepare the module and evaluation board for testing and application development.

STEP 1: Plug the MiiNePort E1 module into the sockets on the top of the evaluation board.
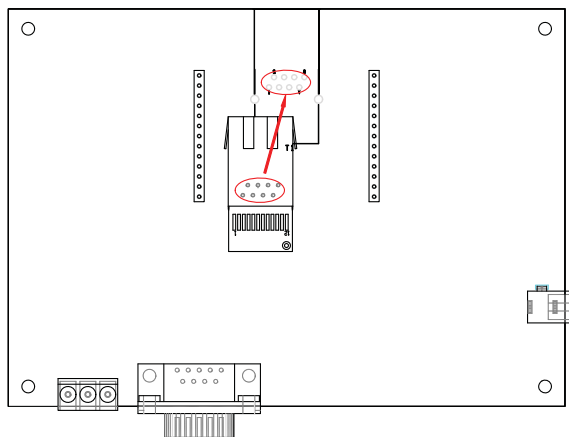
ATTENTION

For detailed information about the pin assignments, wiring, LED indicators, and board layouts, refer to Chapter 1 and 2 of the MiiNePort E1 Series User's Manual.

STEP 2: Connect the 12 to 48 VDC power line with the evaluation board's power jack.

STEP 3: Use an RJ45 Ethernet cable to connect the MiiNePort E1 module to an Ethernet network.

STEP 4: Use the serial data cable to connect the evaluation board to a serial device.

4. Software Utility Installation Procedure

Use the following installation procedure for each MiiNePort E1 model:

<u>Software Installation</u>

1. Start the **NPort Search Utility** setup program to begin the installation. When the **Welcome** window opens, click on **Next**.
2. Click on **Install** to install program files in the default directory.
3. The **Installing** window reports the progress of the installation.
4. Click on **Finish** to complete the installation.

<u>Module Configuration</u>

1. Start the **NPort Search Utility** program.
2. Select **Search** function from the function icons.
3. After the search is finished, all MiiNePort E1 modules that were found will be shown in the window. If you locate more than one module connected to this network, refer to the MAC address on the module(s) to determine the modules you wish to configure.
4. Double click on the MiiNePort E1 module you wish to configure, then your web browser will be activated with the MiiNePort E1's web console.
5. Refer to Chapter 7 of the MiiNePort E1 Series User's Manual for additional configuration instructions.
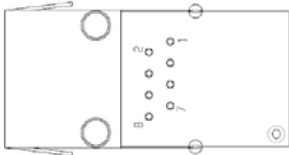
5. Evaluation Board Layout
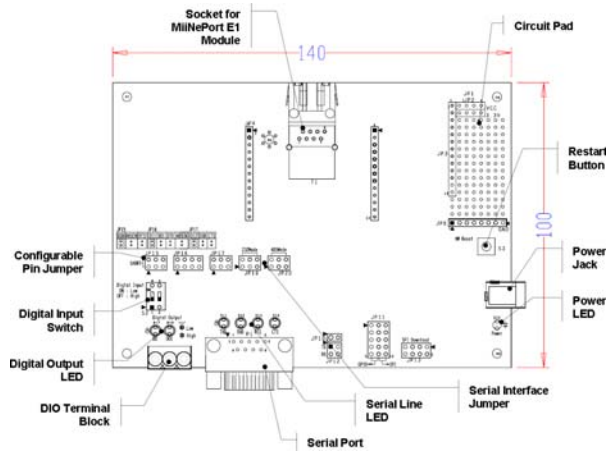
6. Pin Assignment (MiiNePort E1 Series Modules)

**Serial Signal Pins**

| Pin	Function
1	GND
2	VCC
3	Reset
4	Data Out
5	Data In
6	Ready/RTS[a]
7	Reset to Default[b]
8	CTS[c]

a. Pin 6 can be configured as Ready/RTS (Request to Send), Ready/DO, or RS-485 Tx Enabled (the default it Ready/RTS).
b. Pin 7 can be configured as Reset to Default, DIO, DTR, or RS-485 Tx Enabled (the default is Reset to Default).
c. Pin 8 can be configured as CTS (Clear to Send), DI, or DSR (the default is CTS)

Ethernet Port Pins

RJ45
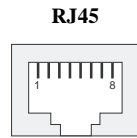
Pin	Signal
1	Tx+
2	Tx-
3	Rx+
6	Rx-

MiiNePort E1-ST Evaluation Board

DB9 Male
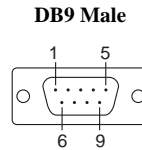
Pin	RS232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS

7. Reference Material

The following detailed user's guides can be found on the Documentation and Software CD that came with your MiiNePort E1 series product.

8. Certification

This product complies with Chinese RoHS (Restriction of Hazardous Substances) regulations for Electronic Information Products.