# MOXA®

# MiiNePort E2 Series **Quick Installation Guide**

First Edition, July 2010

# 1. Overview

The Moxa MiiNePort E2 series serial-to-Ethernet embedded modules come in 4 models: standard operating temperature (MiiNePort E2, MiiNePort E2-H) and wide operating temperature (MiiNePort E2-T, MiiNePort E2-H-T). Moxa provides a starter kit for each MiiNePort E2 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 E2 series modules, along with the model names of the corresponding starter kits.

### **Available Modules**

- MiiNePort E2: Embedded device server for TTL devices, drop-in module, 10/100M without RJ45 connector, 50 bps to 230.4 Kbps baudrate, 0 to 55°C operating temperature
- MiiNePort E2-H: Embedded device server for TTL devices, drop-in module, 10/100M without RJ45 connector, 50 bps to 921.6 Kbps baudrate, 0 to 55°C operating temperature
- MiiNePort E2-T: Embedded device server for TTL devices, drop-in module, 10/100M without RJ45 connector, 50 bps to 230.4 Kbps baudrate, -40 to 85°C operating temperature
- MiiNePort E2-H-T: Embedded device server for TTL devices, drop-in module, 10/100M without RJ45 connector, 50 bps to 921.6 Kbps baudrate, -40 to 85°C operating temperature

#### **Available Starter Kits**

- MiiNePort E2-ST: Starter kit for the MiiNePort E2 Series, module included
- MiiNePort E2-H-ST: Starter kit for the MiiNePort E2-H Series. module included

# 2. Package Checklist

Each MiiNePort E2 series starter kit package contains the following items:

- 1 MiiNePort E2 series module (MiiNePort E2 or MiiNePort E2-H)
- 1 MiiNePort E2 series evaluation board
- 1 MiiNePort E2 Series Documentation and Software CD
- 1 universal power adaptor
- 2 power cords
- 1 null modem serial cable
- 1 cross-over Ethernet cable
- · Product Warranty Card
- 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 E2 module into the sockets on the top of the evaluation board.



For detailed information about the pin assignments, wiring, and board layouts, refer to Chapters 1 and 2 of the

- MiiNePort E2 Series User's Manual.
- **STEP 2:** Connect the 12 to 48 VDC power line to the evaluation board's power jack.
- STEP 3: Switch on the power switch.
- **STEP 4:** Use an RJ45 Ethernet cable to connect the evaluation board to an Ethernet network
- STEP 5: Use the serial data cable to connect the evaluation board to a serial device.

# 4. Software Utility Installation Procedure

Use the following procedure to install the MiiNePort E2:

#### Software Installation

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

#### **Module Configuration**

- 1. Start the NPort Search Utility program.
- 2. Select the Search function from the function icons.
- 3. After the search is finished, all MiiNePort E2 modules that were found will be shown in the search 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 E2 module you wish to configure; vour web browser will be activated with the MiiNePort E2's web console.
- 5. Refer to Chapter 7 of the MiiNePort E2 Series User's Manual for additional configuration instructions.

#### 5. Evaluation Board Layout



Number	Description
1	MiiNePort E2 Module Location
2	Ethernet RJ45 Connector
3	Serial Interface Jumper
4	Power Switch
5	Power Jack
6	Power & Ready LED
7	DB9 Male Connector
8	Serial Port Status LED
9	Digital IO Terminal Block
10	Digital Output LED
11	Digital Input/Output Mode
12	Digital Input Switch
13	Circuit Pad

# 6. Module Pin Assignment

#### Bottom of the MiiNePort E2 Series Module



JP1						
Function						
Fransmit Data+						
Fransmit Data-						
Receive Data+						
Receive Data-						
JP2						
Function						
0M LED						
Ethernet 10M LED						
rial Data						
erial Data						
r Detect						
able						
Send						
nal Ready						
Data Set Ready						
end						
JP3						
Function						
ble Input/Output						
ble Input/Output						
ble Input/Output ble Input/Output						
ble Input/Output ble Input/Output ble Input/Output						
ble Input/Output ble Input/Output ble Input/Output						
ble Input/Output ble Input/Output ble Input/Output						
ble Input/Output ble Input/Output ble Input/Output actory Default						
ble Input/Output ble Input/Output ble Input/Output actory Default und						
ble Input/Output ble Input/Output ble Input/Output actory Default und teady LED						

#### **Evaluation Board Ethernet Port**

RJ45	Pin	Signal
	1	Tx+
	2	Tx-
1 8	3	Rx+
	6	Rx-

#### **Evaluation Board Serial Port**

DB9 Male	Pin	RS232	RS485-2W
1 5	1	DCD	
	2	RxD	
	3	TxD	D+
6 9	4	DTR	D -
	5	GND	GND
	6	DSR	
	7	RTS	
	8	CTS	
	9		

# 7. Reference Material

A detailed user's guides can be found on the Documentation and Software CD that came with your MiiNePort E2 series product.

# 8. Certification

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



© 2010 Moxa Inc. All rights reserved. Reproduction without permission is prohibited.