# MCU PROJECT BOARD QUICKSTART GUIDE

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## **GETTING STARTED**

The following steps will configure the MCU Project Board for use with any Axiom Manufacturing MCU Development Module. The following procedure is similar for all modules. Only the voltage selection in Step 4 of the Hardware section is different. Refer to the MCU Project Board User Guide and specific MCU Development User Guide for further details.

#### UNPACK

- 1. Open the shipping carton and remove the contents. Verify all Packing List items have been received.
- 2. Inspect both the MCU Project Board and the MCU Development Module for any damage, which may have occurred during shipping. If damage is found, contact the manufacturer at <a href="mailto:support@axman.com">support@axman.com</a> for assistance.

### HARDWARE SETUP

- 1. To begin, place the MCU Project Board on a flat sturdy surface. Ensure sufficient space is available around the project board to safely construct and test prototyped circuits.
- 2. Configure the PWR\_SEL and option header, JP1. Install a jumper as shown below.



3. Configure the VDD\_SEL option header, JP2. Install a jumper as shown below.



**CAUTION:** This option jumper selects the operating voltage level for the MCU Development Module. Select the proper operation voltage for the attached MCU Module.

4. Configure the MCU\_MOD\_PWR option header, JP3. Install jumpers as shown below.

MCU\_MOD\_PWR VDD GND

**CAUTION:** Install jumpers only as shown otherwise damage to the on-board voltage regulators will result.

5. Install the MCU Module in the MCU\_PORT connector on the project board. Align pin 1 of the MCU Module with pin 1 of the MCU\_PORT connector on the project board.

6. Configure the MCU Module PWR\_SEL option header. Install jumpers as shown.



7. Configure the MCU Module USER option header. Install jumpers as shown below.



- 8. The remaining option-selection jumper settings should be left in default position.
- 9. Connect the Serial cable to an available COM port on the HOST PC. Connect the other end of the Serial cable to the COM port on the MCU Development Module.
- 10. Plug the transformer into a standard, 120VAC, wall outlet. Connect the transformer power cable to the VIN jack on the MCU Project Board.

**CAUTION:** Do not connect power to the MCU Development Module while the module is connected to the MCU Project Board.

- 11. Verify the +3.3V LED and +5V LED on the MCU Project Board are lit.
- 12. Verify the PWR LED on the MCU Module is lit.
- 13. The MCU Project Board is now ready for use.
- 14. If the LED's in the steps above are not lit, make sure the jumper options are set as described above. Also, see the Troubleshooting Tips section in the MCU Project Board User Guide.

#### SOFTWARE SETUP

The following steps will help the user install AxIDE on the HOST PC in single-user configuration.

- 1. Insert the Development CD into the CD drive.
- 2. The Setup Menu should appear automatically. If not, open Windows Explorer and execute the file <D:>\setup.exe; where <D:> is the drive letter of the CD drive.
- 3. Click on the AxIDE for Windows button to begin the installation process. Follow the onscreen instructions to install the program in the default location. AxIDE will start after installation completes.

- 4. If the program does not start automatically, select the AxIDE program from the Start | Programs | AxIDE menu.
- 5. After installation completes, the user is encouraged to browse the CD. Click the EXIT button when finished.
- 6. In the AxIDE program window, select the CHECK mark on the COMMAND LINE or select FILE | OPTIONS from the MENU BAR. Configure AxIDE as follows:
  - 6.1. Port: Select the PC COM port used.
  - 6.2. Baud Rate: 9600
  - 6.3. Parity: None
  - 6.4. Data Bits: 8
  - 6.5. Stop Bits: 1
  - 6.6. Handshaking: All settings off
- 7. Press the RESET button on the MCU module
- 8. The MCU Project Board and the MCU module are now ready for use.