Thank you for purchasing a TechNexion EDM series pre-assembled evaluation kit based on NXP i.MX6 applications processor. This installation guide will be helpful in the installation, wiring and inspection of your TechNexion evaluation kit. Before using the product, please read this guide to ensure correct use. You should thoroughly understand all safety precautions before proceeding with the installation, wiring, and operation. Place this instruction sheet in a safe location for future reference.

1 Safety Precautions

- Keep the device dry. Precipitation, humidity, and all types of liquids or moisture can contain minerals that will corrode electronic circuits. If your device does get wet, allow it to dry completely.
- Do not use or store the device in dusty or dirty areas. Its parts and electronic components can be damaged.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
- Do not attempt to open the device. This product needs to be installed by qualified personnel.
- Do not drop, knock, or shake the device. Rough handling can break internal circuit boards and fine mechanics.
- Do not paint the device. Paint can clog the parts and prevent proper operation.
- Do not open the device while power is on. Otherwise electrical shock may result.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
- Be sure the ventilation holes are not obstructed during operation. Otherwise malfunction may result due to bad ventilation or overheating.

These suggestions apply equally to your device, battery, charger, or any enhancement. If any device is not working properly, take it to the nearest authorized service facility for service.

2 Dimensions

Unit: mm

3 Installation Instructions

This installation guide will help you to assemble your development kit using step-by-step instructions to make sure all parts (development board and Wi-Fi antenna) are working.

Tips: Do not power your board during the installation process.
Please follow the steps below to properly install the Wi-Fi antenna.

Step 1: Prepare development board and Wi-Fi antenna.
Step 2: Locate the round Wi-Fi antenna connector on the development board.
Step 3: Screw the base of the Wi-Fi antenna into the antenna connector.

This product is available with two non-galvanic isolated serial ports: a full function RS-232/422/485 (RS-XXX) and a 4-wire RS-232 (IOIO). The RS-XXX port is set as RS-232 during manufacturing. The ports have the following pinout:

### RS-XXX:

<table>
<thead>
<tr>
<th>Port Pin #</th>
<th>Signal</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SERIAL1_DCD</td>
<td>bymxc1</td>
</tr>
<tr>
<td>2</td>
<td>SERIAL1_RXD</td>
<td>bymxc1</td>
</tr>
<tr>
<td>3</td>
<td>SERIAL1_TXD</td>
<td>bymxc1</td>
</tr>
<tr>
<td>4</td>
<td>SERIAL1_DTR</td>
<td>bymxc1</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>6</td>
<td>SERIAL1_DSR</td>
<td>bymxc1</td>
</tr>
<tr>
<td>7</td>
<td>SERIAL1_RTS</td>
<td>bymxc1</td>
</tr>
<tr>
<td>8</td>
<td>SERIAL1_CTS</td>
<td>bymxc1</td>
</tr>
<tr>
<td>9</td>
<td>SERIAL1_RI</td>
<td>bymxc1</td>
</tr>
</tbody>
</table>

### IOIO:

<table>
<thead>
<tr>
<th>Port Pin #</th>
<th>Signal</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SERIAL2_RXD</td>
<td>bymxc0</td>
</tr>
<tr>
<td>3</td>
<td>SERIAL2_TXD</td>
<td>bymxc0</td>
</tr>
<tr>
<td>4</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>6</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>SERIAL2_RTS</td>
<td>bymxc0</td>
</tr>
<tr>
<td>8</td>
<td>SERIAL2_CTS</td>
<td>bymxcor</td>
</tr>
<tr>
<td>9</td>
<td>NC</td>
<td></td>
</tr>
</tbody>
</table>

Header on EDM1-FAIRY-IMX6: DB9 (9-pin) standard D-Sub male connector. Cable receptacle: DB9 (9-pin) standard D-Sub female connector.

The unit is preloaded with software that can download and install a selection of OS images over hardwired network. Simply connect a display to the unit through the HDMI connector and a network through the Ethernet LAN RJ45 connector and power it up, then follow the steps on the screen to load the software. Local proxies will interfere with this process. For more information, go to our Knowledge Base at: https://www.technexion.com/support/knowledge-base/