Assembling Arduino* Expansion Board

Check the list of requirements and follow the steps below to assemble the Intel® Edison module with the Arduino* expansion board.

Note: The expansion board is stored in a static shield bag as it is prone to damage caused by electrostatic discharge (ESD). When not working with the assembled board, or when outside protected areas, make sure to enclose the device back in its static shield bag. When assembling the board, make sure to comply with the ESD handling protection rules.

Requirements

- Intel® Edison module
  Refer to [Intel® Edison Compute Module Datasheet (http://www.intel.com/content/www/us/en/support/boards-and-kits/000005583.html)](http://www.intel.com/content/www/us/en/support/boards-and-kits/000005583.html).
- Arduino expansion board
  Refer to the [Intel® Arduino* Expansion Board Hardware Guide (http://www.intel.com/content/www/us/en/support/boards-and-kits/000005583.html)](http://www.intel.com/content/www/us/en/support/boards-and-kits/000005583.html).
- Two Micro B to Type A USB cables
- Spacer bars and screws included in the packaging, including two screws to fasten the module to the expansion board and four sets of screws and plastic spacers.
- A direct current (DC) power supply. Your power supply should be rated as follows:
  - 7-15 V DC
  - At least 1500 mA
  - The center/inner pin should be the positive pole of the power supply

Note: An external power supply is the preferred way of powering the Intel® Edison board. However, you can power your board over USB if you do not have an external power supply. Powering your board in this fashion may result in unpredictable behavior from your board, especially when using Wi-Fi* or driving motors. For details, see the [Powering your board over USB (/node/8dfcc3e8-b162-429a-b3b6-a1c207b0ee4a#powering_your_board)](/node/8dfcc3e8-b162-429a-b3b6-a1c207b0ee4a#powering_your_board) section.

Assembling your board

Attach your Intel® Edison module to your expansion board:

1. Place the Intel® Edison module within the white outline on your expansion board, lining up the holes on the module with the screws on the expansion board.
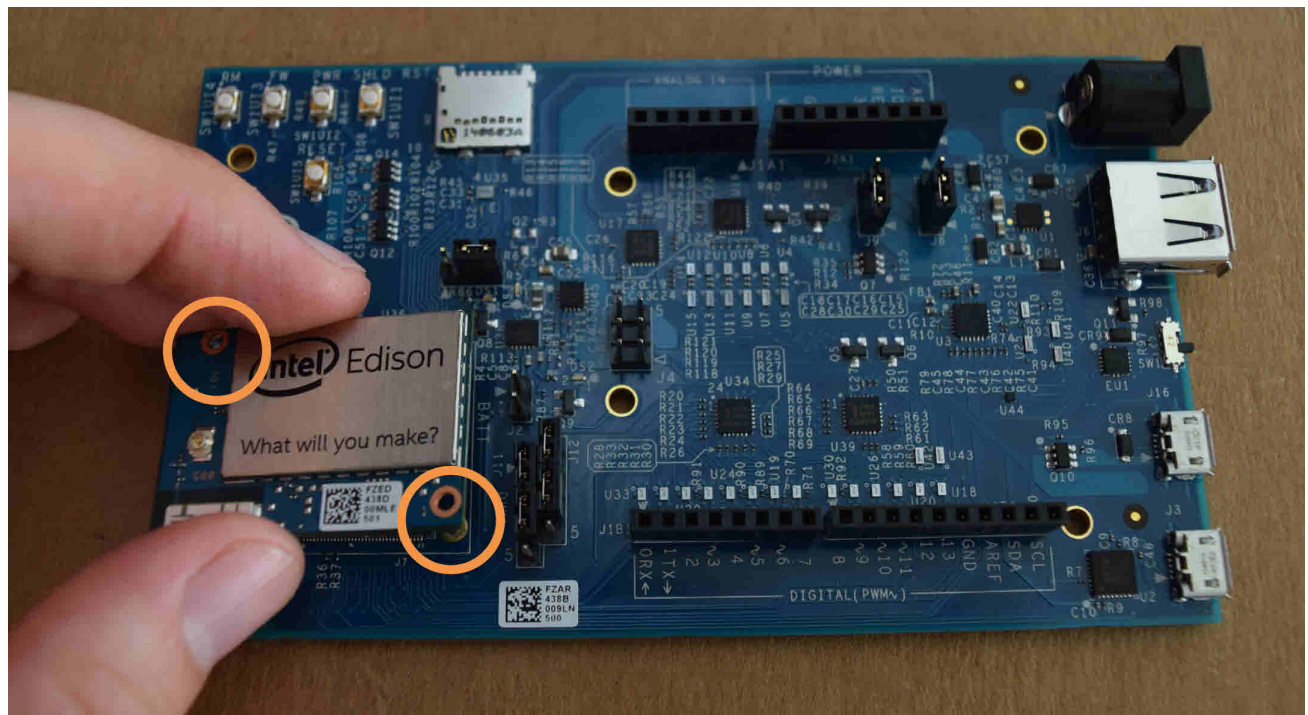
2. Press down on the module just below the words **What will you make?**until you feel a snap.

> *Caution:* Unless you make sure your board is seated properly, it may not work or turn on at all. When you turn the attached module and expansion board on their side, both pieces should fit evenly and sit in parallel with each other.
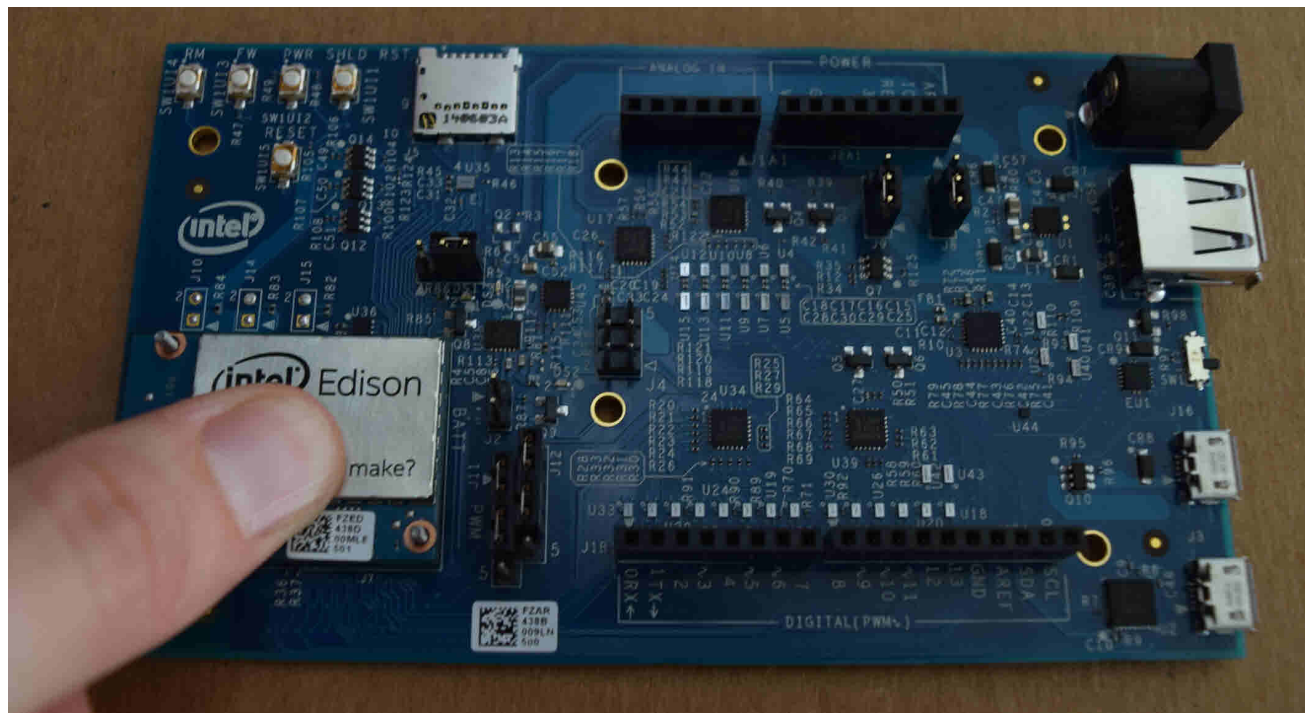

3. Use the two hex nuts (included in the package) to secure the module to the expansion board.
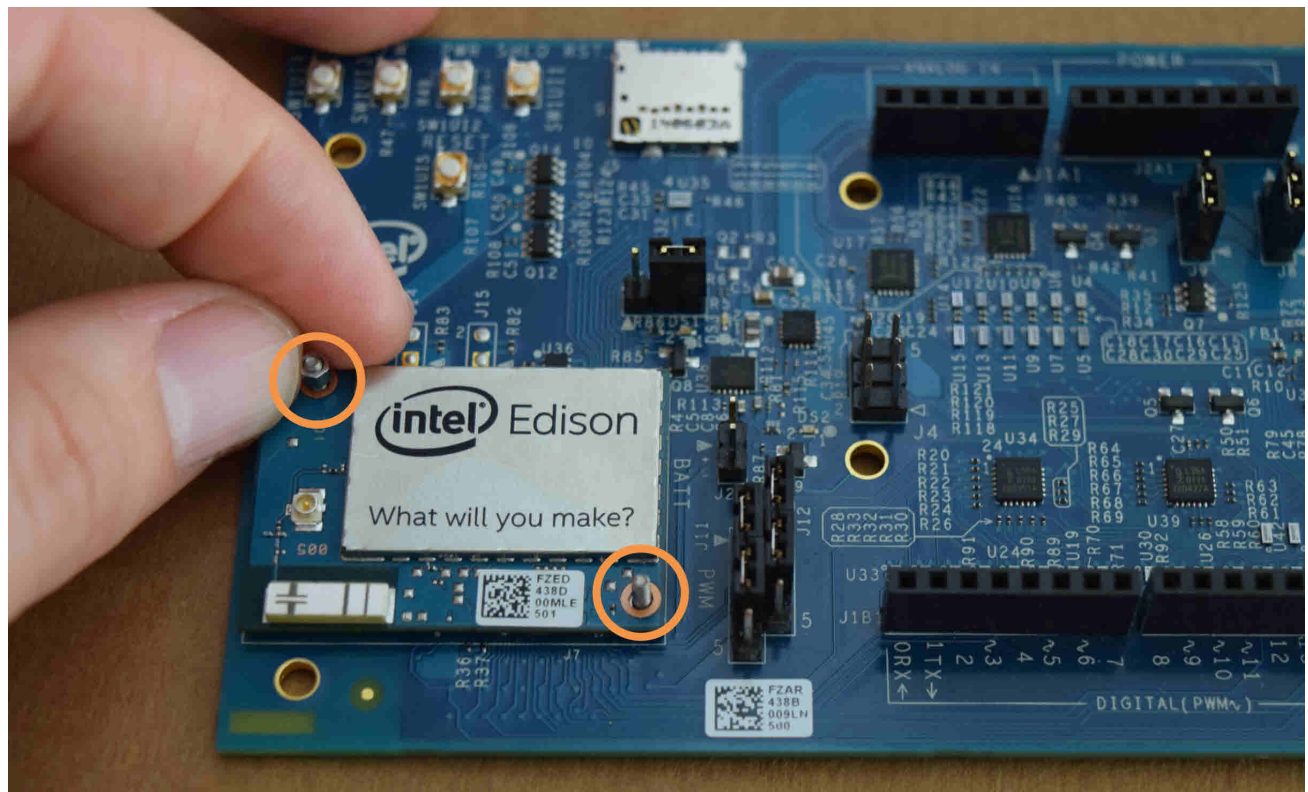
4. Insert a screw in one of the four corner holes on the expansion board. Twist and tighten one of the white plastic spacers onto the screw. The spacer should be on the bottom of the expansion board, acting as one of four legs to keep the board off the horizontal surface of your work table.
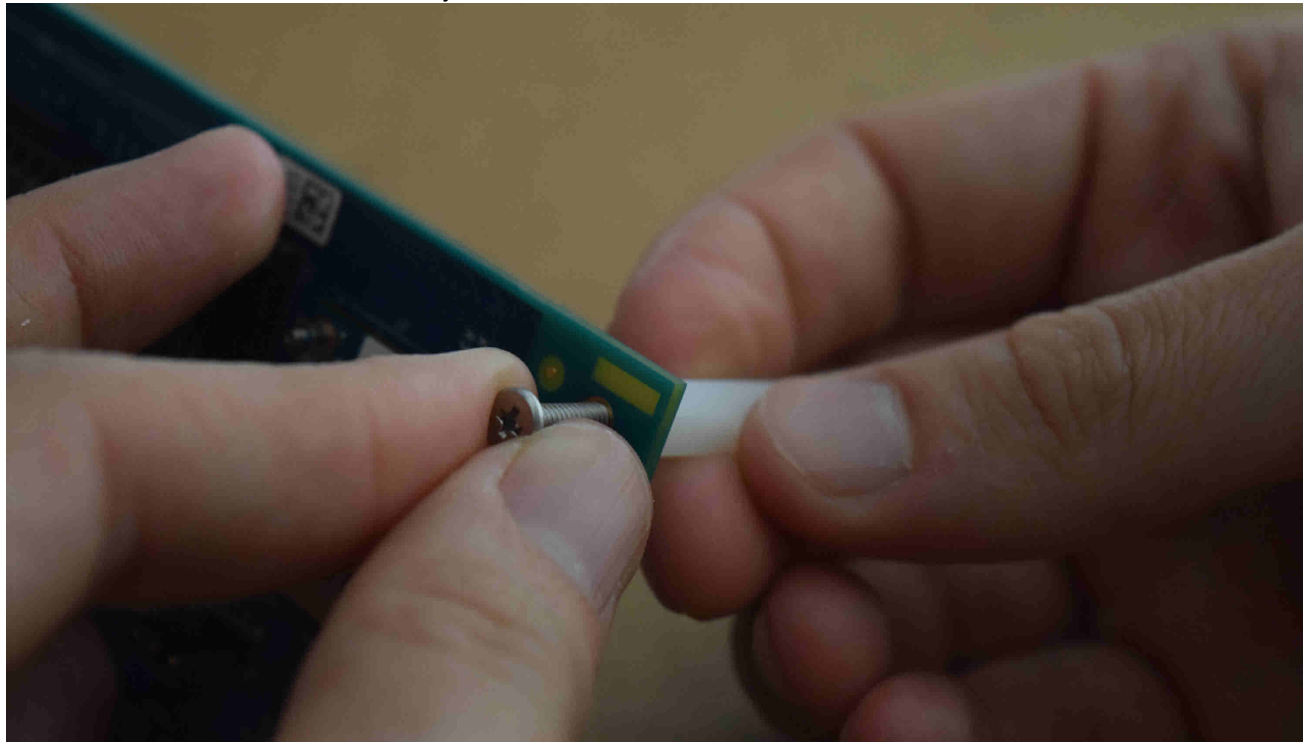
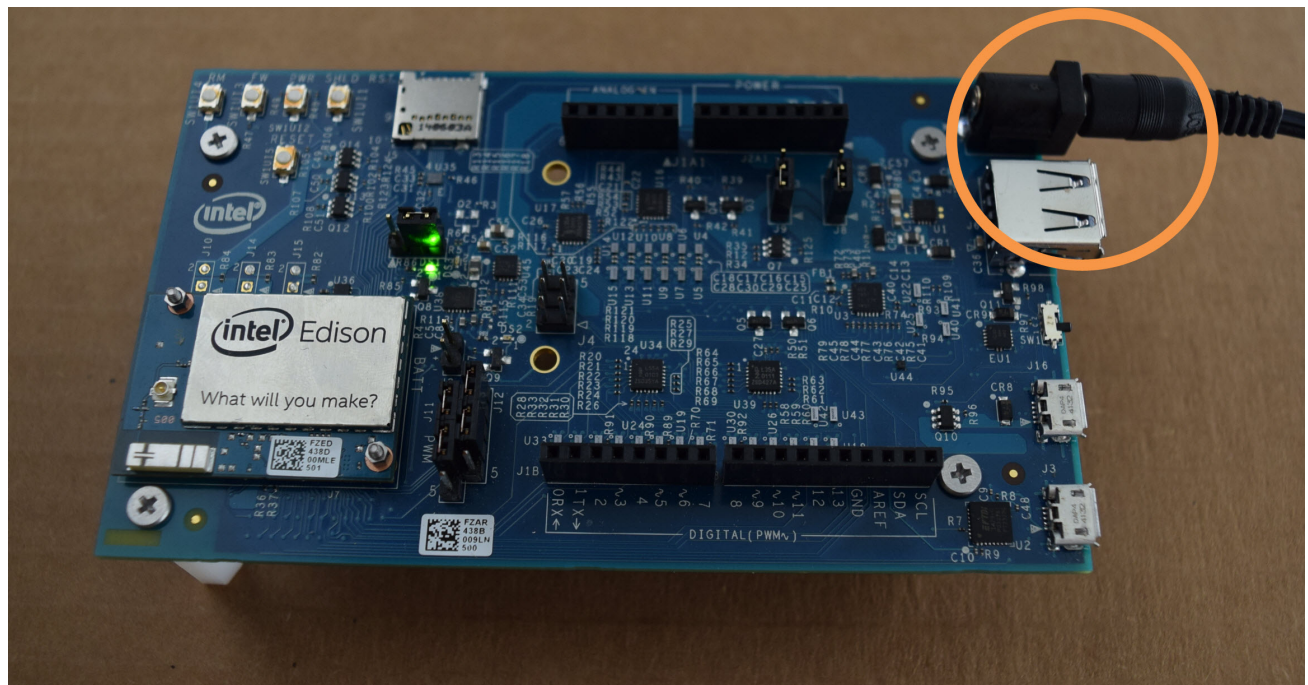5. Repeat for the other three corner spacers.
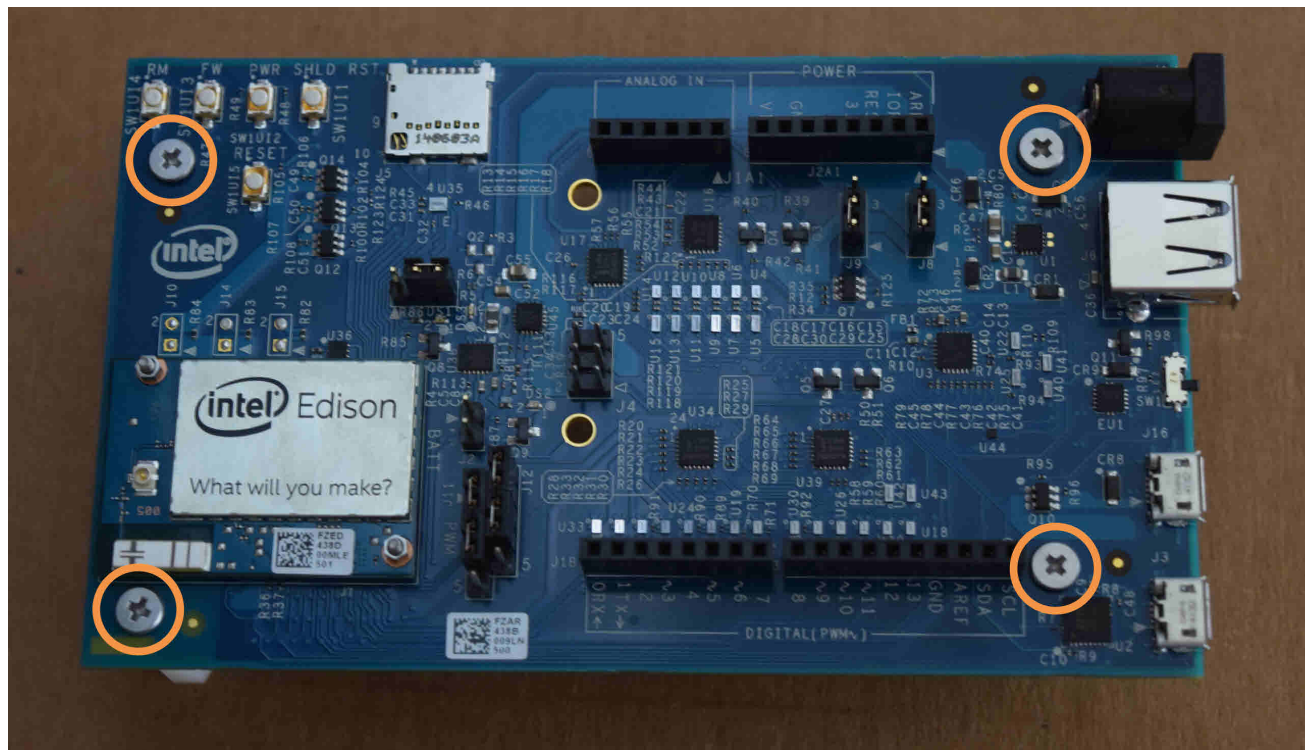
6. Once fully assembled, these four spacers add stability to the expansion board and help avoid accidental short circuits.
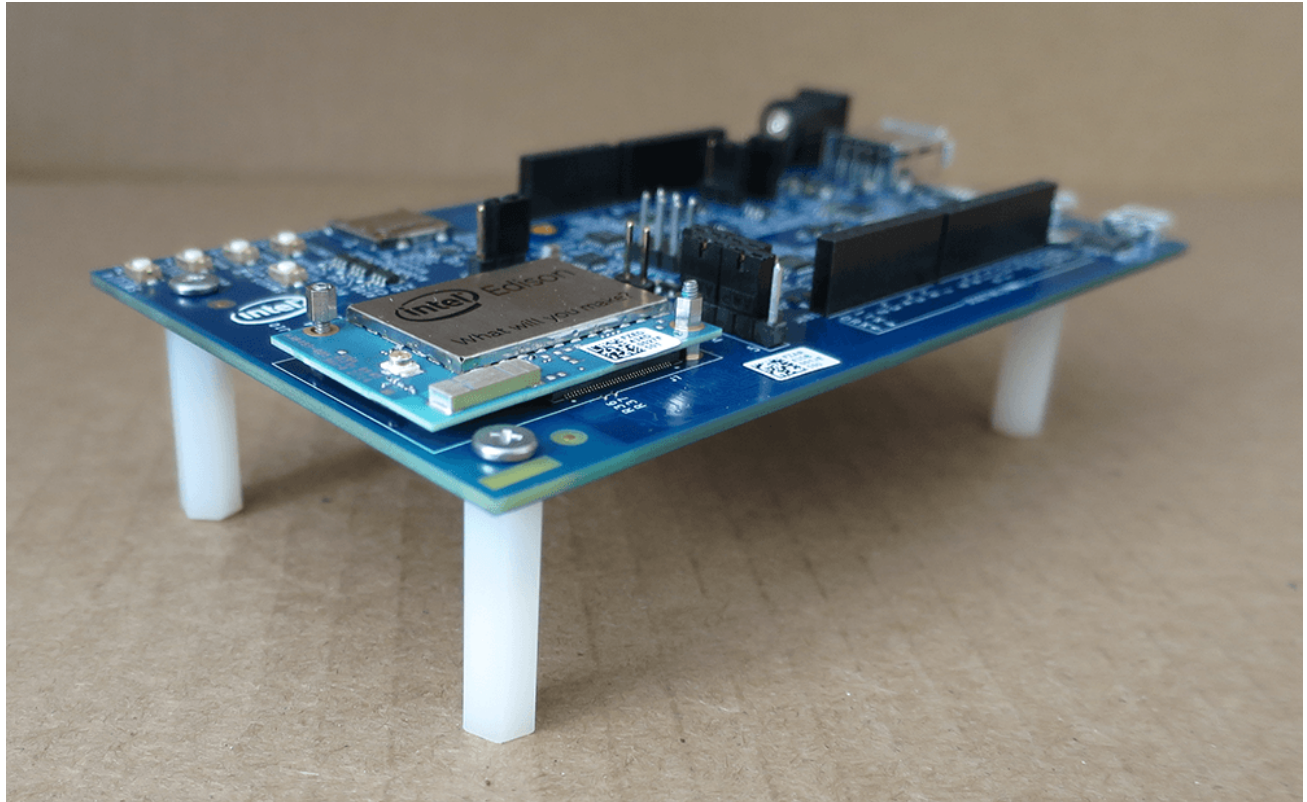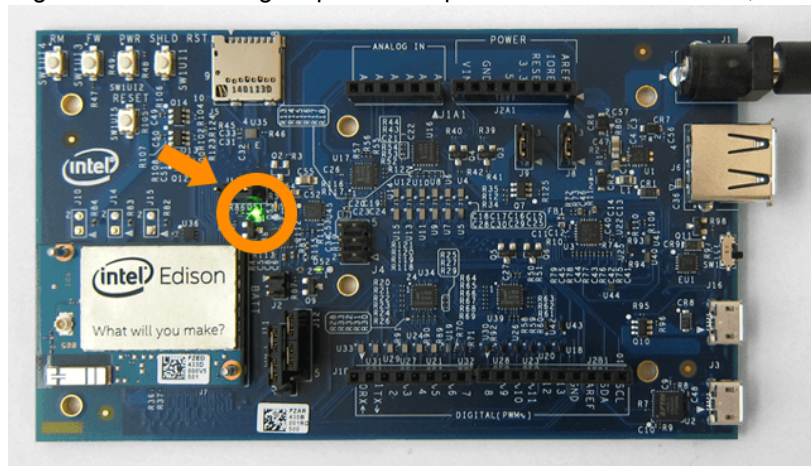

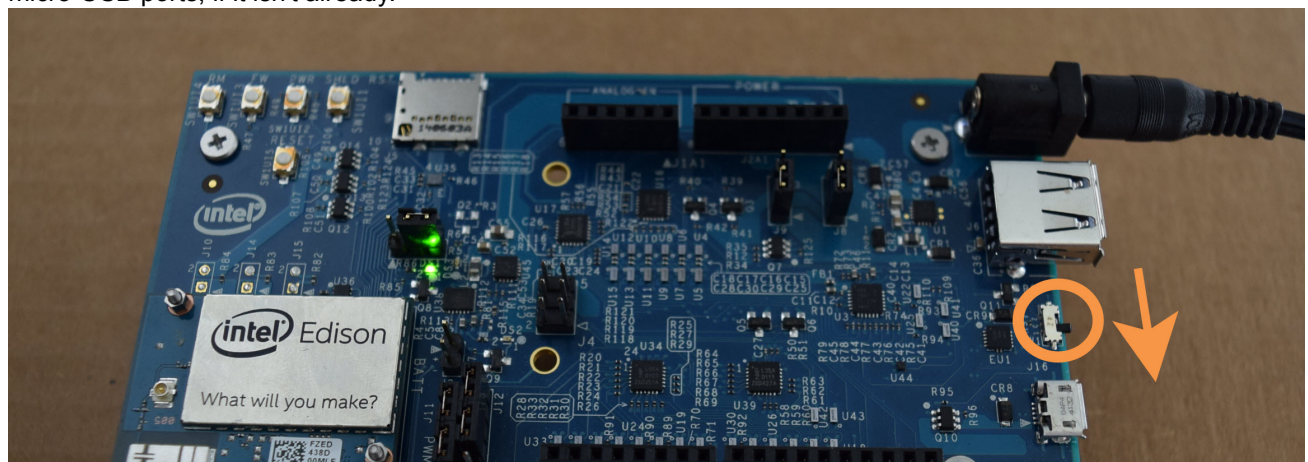# Connect the board to your system

1. Plug in the 7-15 V DC power supply.

2. A green LED should light up on the expansion board. If it doesn't, check your connection.

3. Find the microswitch in between the USB ports on the expansion board. Switch the microswitch down towards the micro-USB ports, if it isn't already.
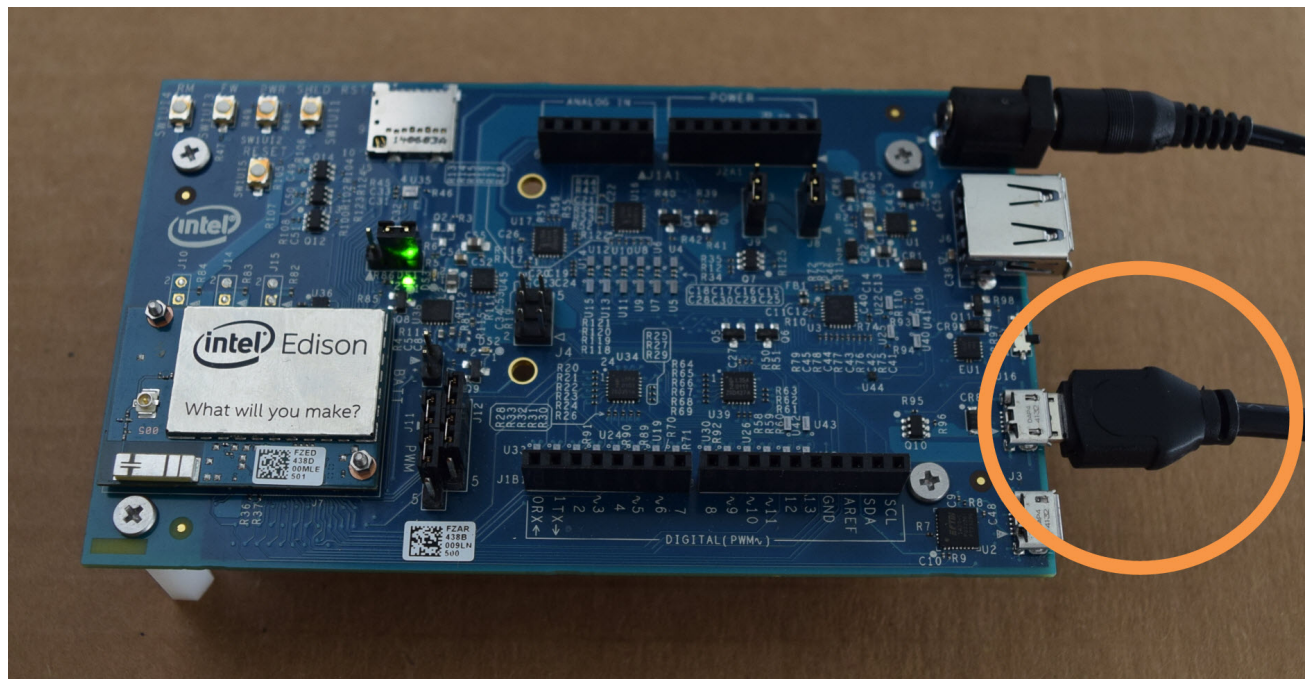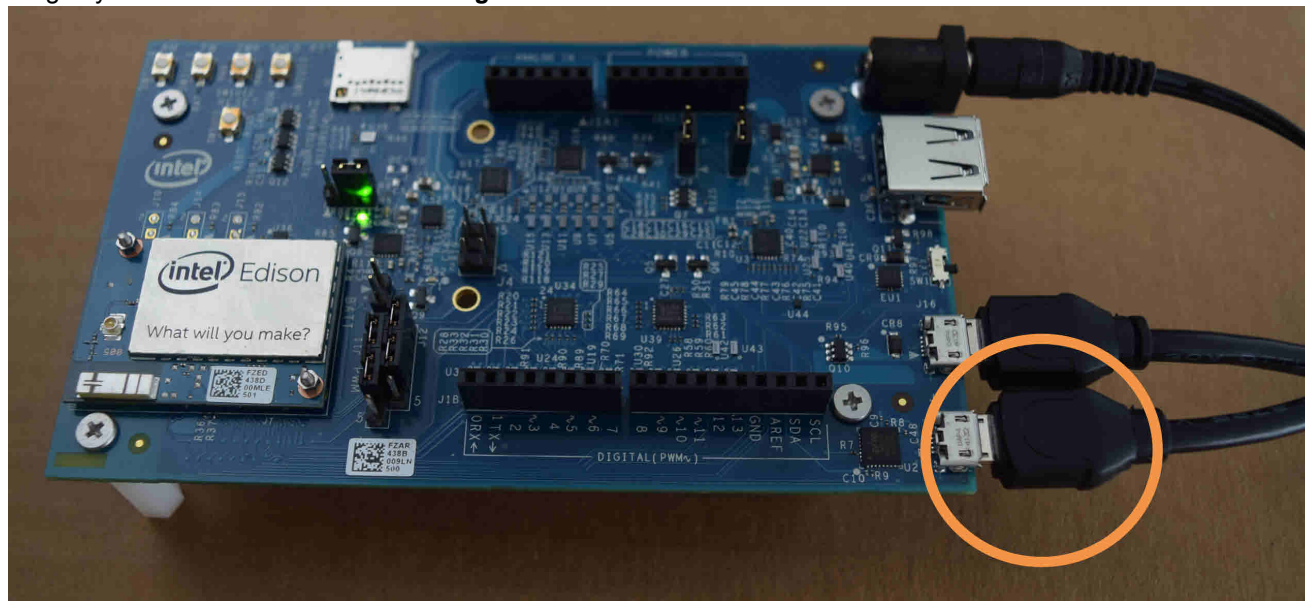
4. Plug in one of the micro-USB cables to the *middle* USB connector on the expansion board.

5. Plug in the other end of the USB cable to your computer. Wait for approximately one minute for the board to boot up.

   See the section How do you know when the board is ready? (/node/ed01199f-3a37-413f-bd11-05fb57afa6e5)

6. Plug in your second USB cable to the *edge* USB connector on the board.

7. Plug the other end of the USB cable in to your computer.
   Your board is now set up and connected.

For more complete information about compiler optimizations, see our Optimization Notice (/en-us/articles/optimization-notice#opt-en).