

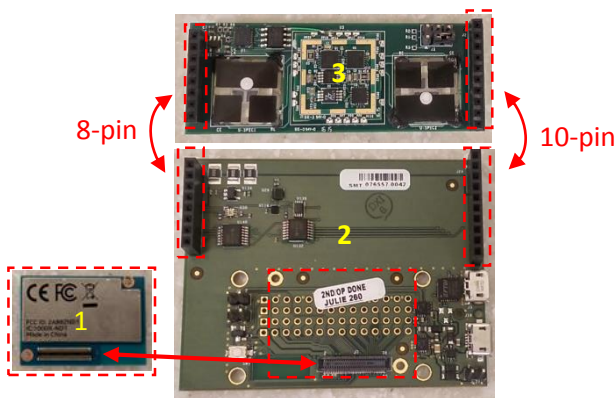
Intel Briza - Environmental Monitoring Platform



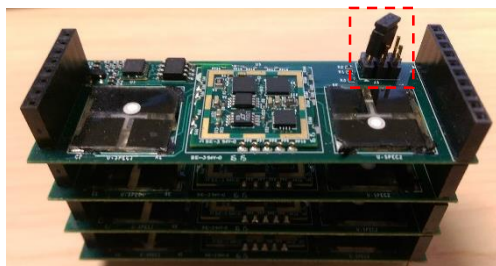
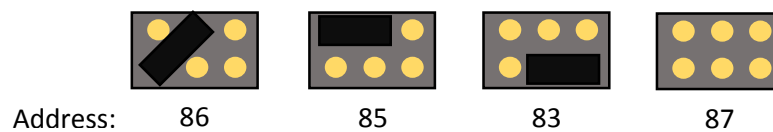
Hardware Assembly

Connect (1) Edison to (2) base module. (Refer to Edison [Getting Started Guide](#) for more on powering and interfacing).

Sensor modules (3) are connected to base module via the 8 and 10 pin connectors.



Before stacking sensor modules, each module must be assigned unique I²C address using its 6-pin (male)/ dual row header. Jumper configurations should be as follows:



Once properly addressed, sensor modules may be stacked in any order and connected to base module. Ensure sensor module headers are connected to matching (e.g. 8-pin sensor module headers to 8-pin base module headers). Hardware setup is now complete.

Software installation

Update Edison

Before installing Briza software, ensure Edison I flashed with the most recent image from [here](#). Instructions for flashing can be found there also. Upon completion of the flashing process, verify your image version with the command:

```
uname -a
```

At the time of writing, the most recent image was packaged as “**edison-image-ww25-15.zip**” and is dated June 19 2015.

Configure Edison

After successfully flashing, Edison should be configured and connected to the Internet. Run:

```
configure_edison --setup
```

from an Edison command line and follow the setup prompts.

Retrieve installer

Installation of the Briza software can be performed automatically by the installer. The installer is located [here](#). Save the installer to “**/home/root/startup.sh**” on Edison.

Run the script by typing this command:

```
sh startup.sh
```

The installer should now retrieve all the necessary dependencies and software automatically. Installation takes approximately 8 minutes, depending on the speed of the Internet connection.

In the final steps of the installation process, the installer will attempt to run the main Briza programs. You should see the following display in the terminal:

```
initing
```

```
reading Socket
```

At this point, you must press **ctrl+C** to kill the test run. Immediately after this, the second test will be conducted. You should see something like this:

```
DB FOUND
```

```
Address of the boards : 0 boards.
```

```
calibrate
```

```
ui2eeprom
```

```
UPDATE eeprom SET unit="ppb",sensitivity="15.37",  
baseline="161.41", offset="0", span="0", type="TOX" WHERE addr=83  
and socket="spec1"
```

...

Again press **ctrl+C** to end the test. Edison will now reboot.

When Edison restarts, the Briza service will run automatically. Opening <http://192.168.2.15/> in a web browser should open the interface for Edison, to include controls for Briza. (Note: Depending on the method used for connecting to Edison, your Edison's IP address may vary. If you are connected over USB/RNDIS, then the above link should work fine).

Manual install

As a troubleshooting measure, installation can be done manually by entering the commands contained within the startup.sh script into your Edison command line. If beginning with a new Edison module, automatic installation should be sufficient, however for those wishing to add the Briza service to an already configured Edison module, manual installation may be preferable. All necessary files can be found in the repo located [here](#).