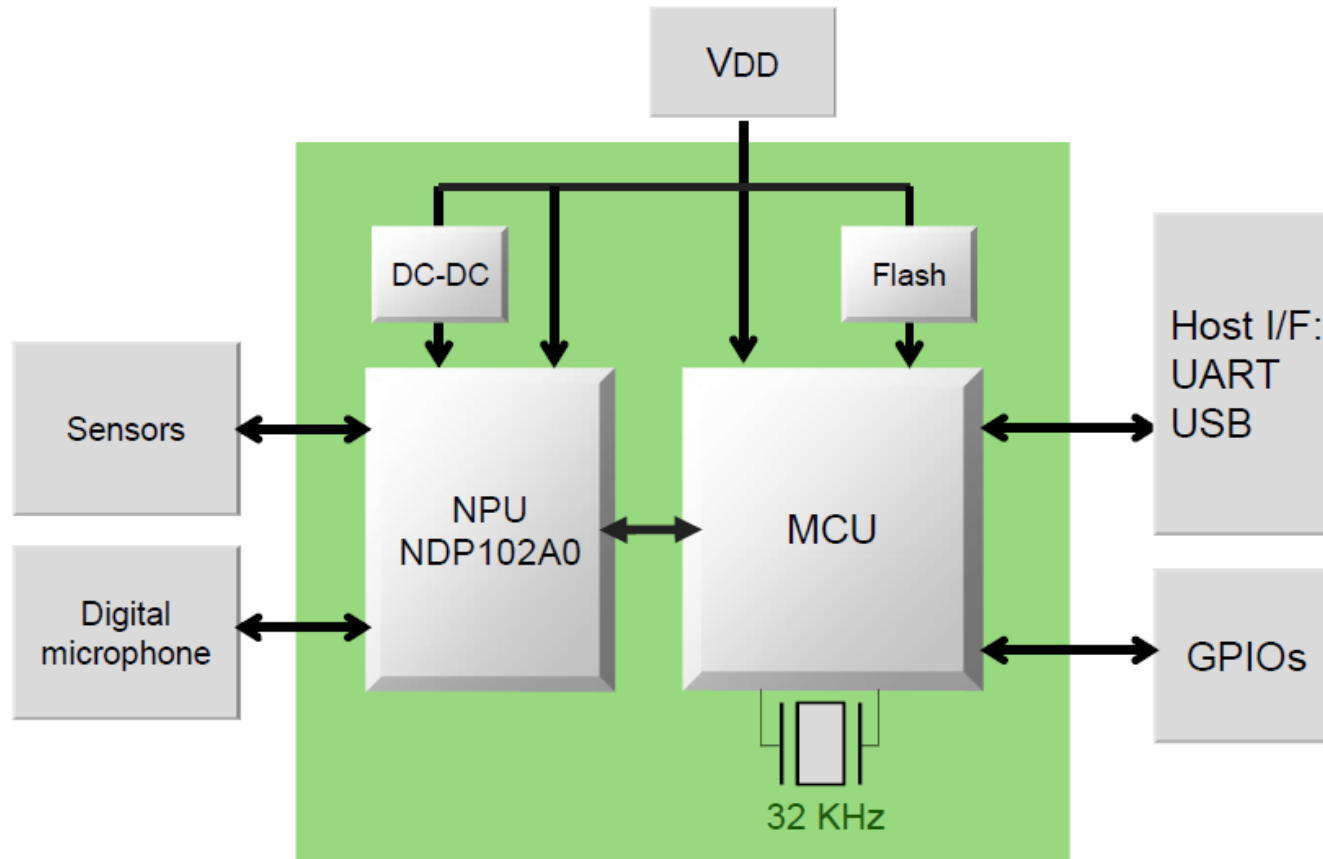


Ultra Low Power Edge AI Modules

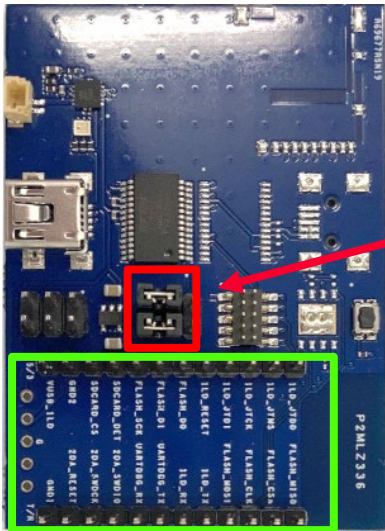
Type2DA



This module uses Syntiant AI chip 'NDP 102'

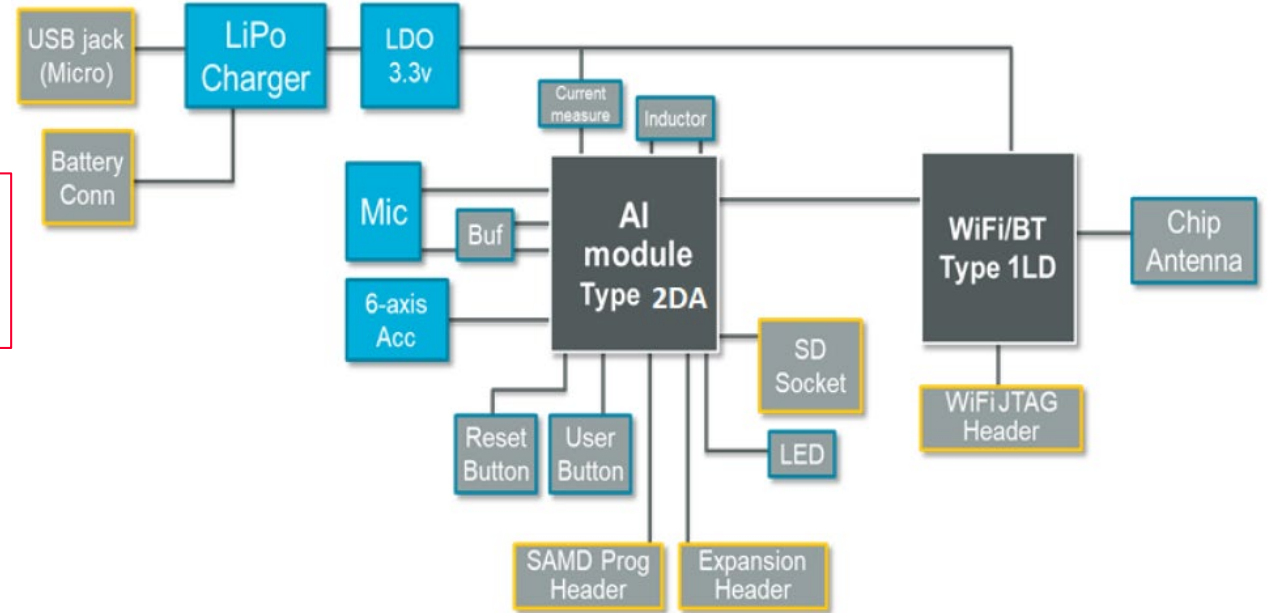
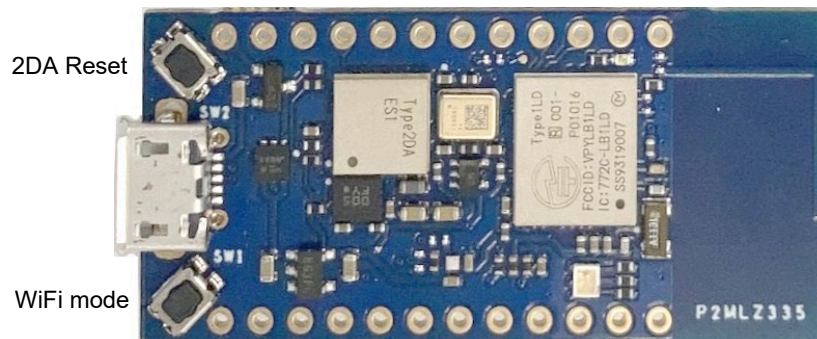


The configuration of 2DA development board

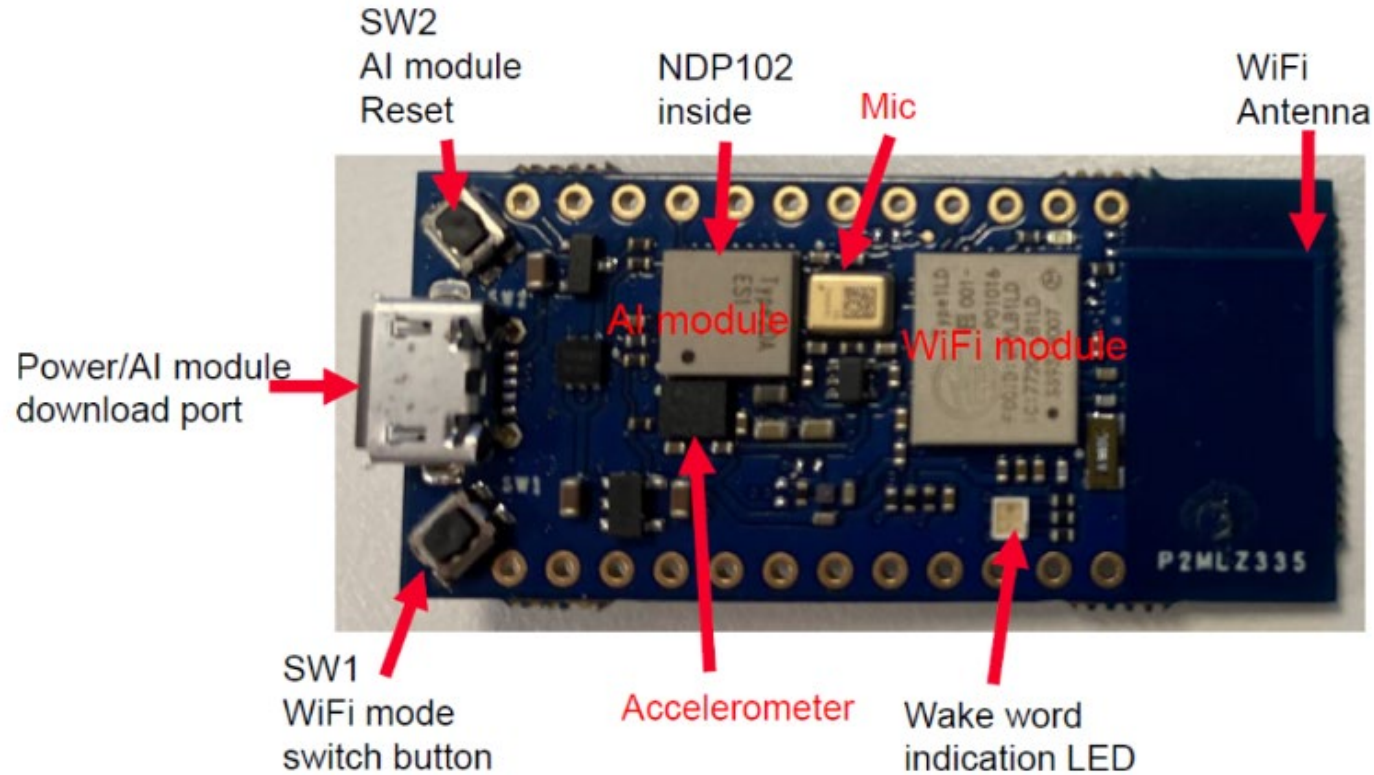


Choose UART operation
Right : Type2DA(AI)
Left : Type1LD(WiFi)

Mountable



Type2DA Evaluation Board



◆ Caution

There is a microphone hole on the back of the EVB.
Please do not block this area with stickers.

If this is blocked, the detection accuracy will deteriorate greatly.

Good

Bad

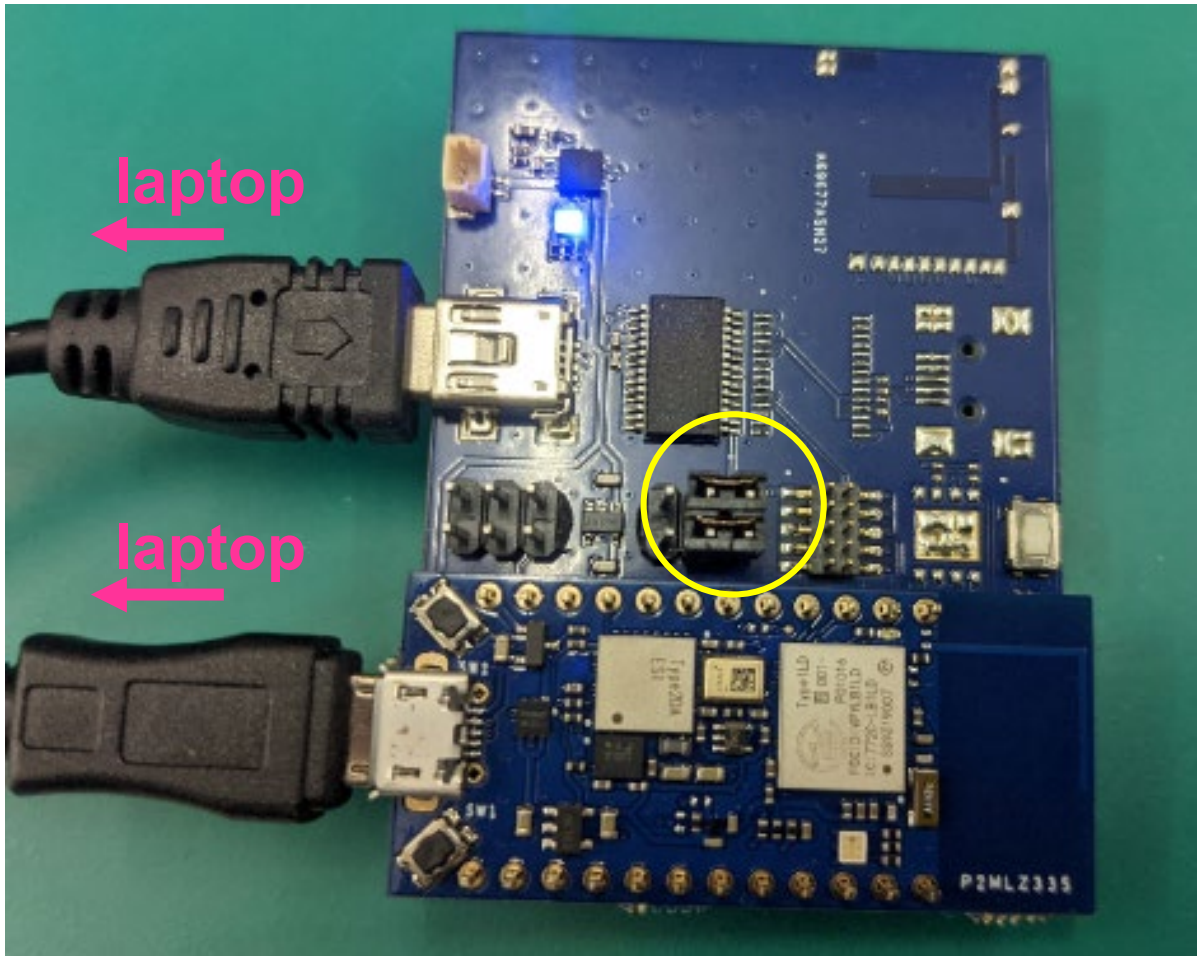


The board already has the sample firmware and AI model built in.
Just plug in the USB as shown below to run.



If you pronounce 'UP' , the LEDs on the board will glow.

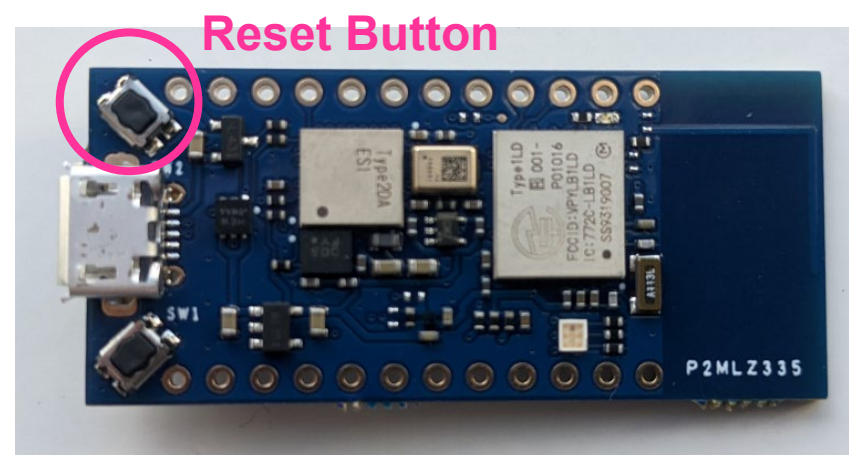
You can also display inference results by putting them on the debug board. The EVB and the debug board should be connected as shown below.



How a Serial Port Displays Inference Results

1. Launch Tera Term and select USB Serial Port
2. Set the serial port to 115200 and press the AI Reset button (location '○' in the figure below).
3. Pronounce "UP" to confirm recognition

```
COM23 - Tera Term VT
ファイル(F) 編集(E) 設定(S) コントロール(O) ウィンドウ(W) ヘルプ(H)
User Switch = PRESSED
Hello from Murata 2DA-evb!
Built on Nov  7 2021, 14:13:09, v0.1.1218
FlashType[0]=194
Tessolve TinyML Board
Failed to initialize PMIC!
model.bin: BIN File Loaded correctly from Serial Flash
Model Matching Table:
0 --> ON
1 --> OFF
2 --> NO
3 --> GO
4 --> UP
5 --> RIGHT
6 --> YES
7 --> DOWN
8 --> LEFT
9 --> STOP
10 --> INVALID
Sleep mode Disabled.
setup done
Synchronized to USB, disable sleep mode
SYSCTRL->PCLKSR.reg = 5A9A
MATCH - "UP" ←
```



recognition



The model included in the sample board is a Google 10 model.

Voice	
UP	DOWN
GO	STOP
RIGHT	LEFT
YES	NO
ON	OFF