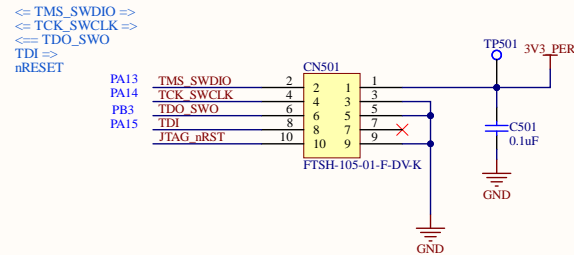
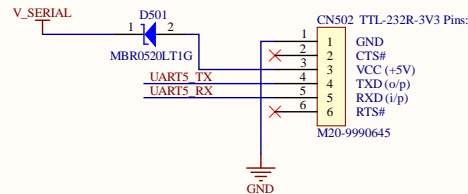


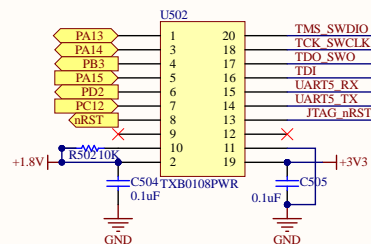
## JTAG/SWD Interface Connector



## Serial Debugging Connector

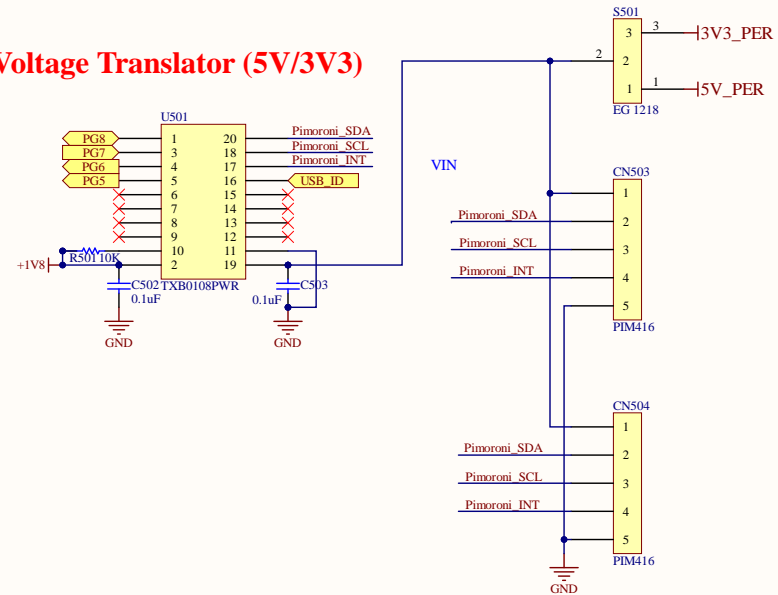


## Voltage Translator (3V3\_4)



## 2.54mm Pimoroni

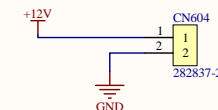
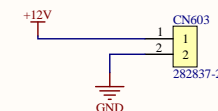
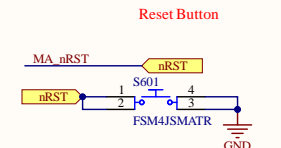
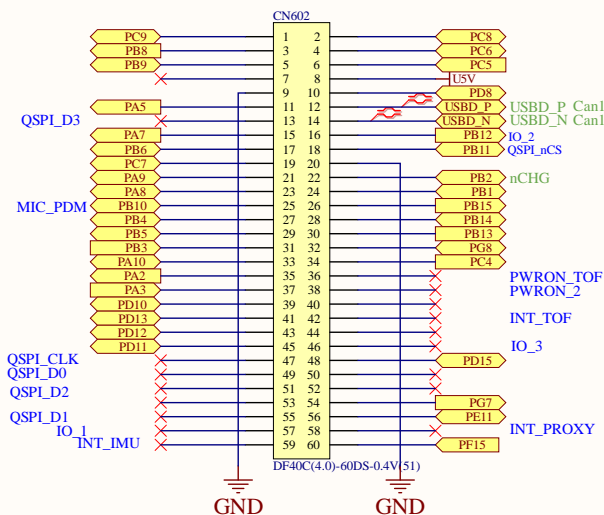
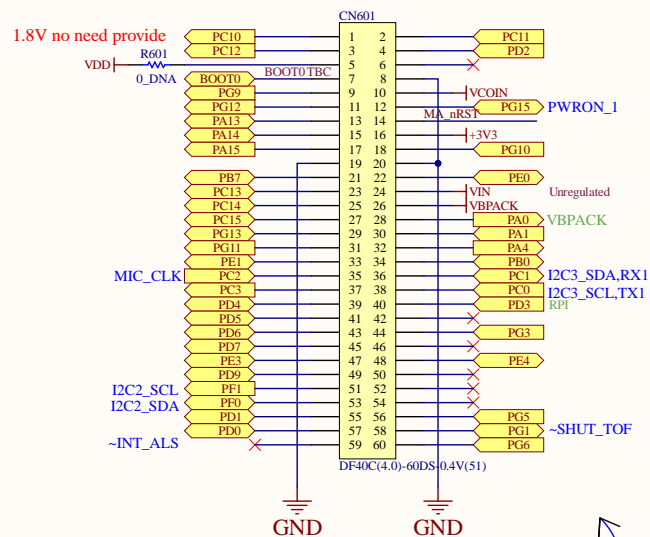
## Voltage Translator (5V/3V3)



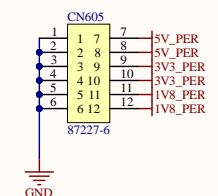
Title		
Debug_Pimoroni		
Size	Number	Revision
A3		A
Date:	11/17/2020	Sheet of 6
File:	F:\Google_Drive\Debug_Pimoroni_Sch\Drawn By: Andy Wong	

Do not reuse  
Can reuse

Conencted to MA extension port



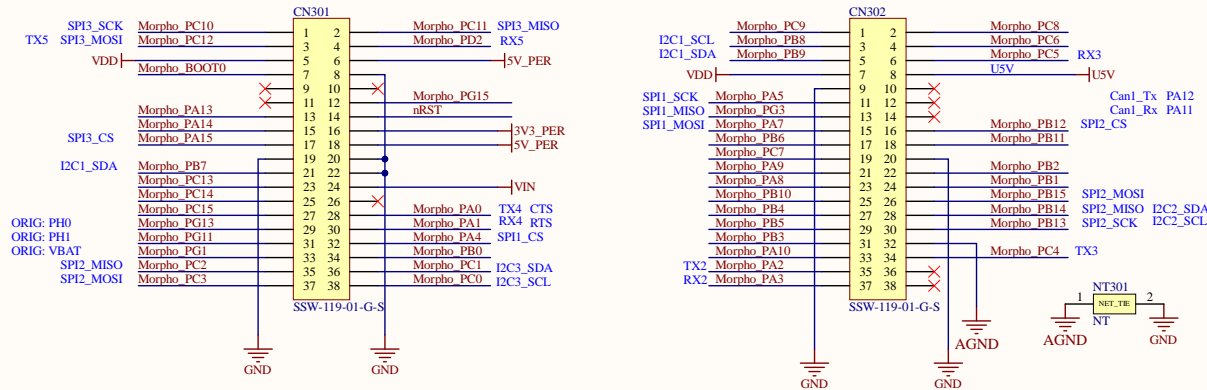
VIN: Combine U5V & VBPACK & V\_SERIAL  
VDD: Regulated 1.8V DC



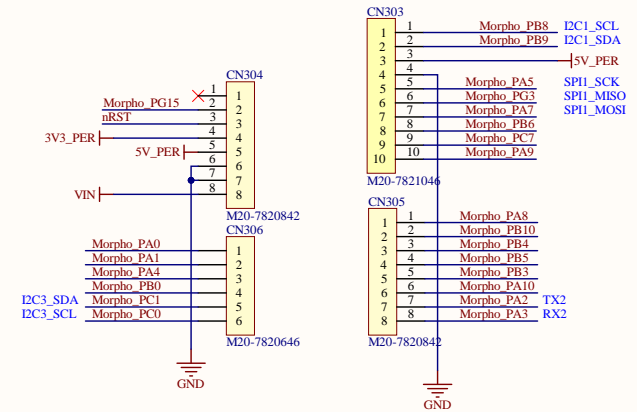
## Morpho 2.54 mm male 54 IO PINS

Use elevated ESW-119-34-T-D-LL, H = 0.635

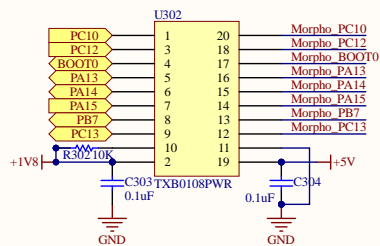
ESV\_AVDD = 5V



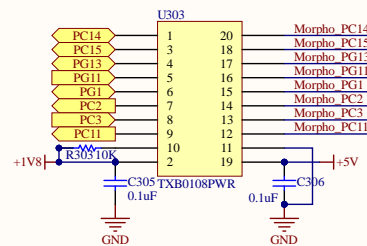
## Arduino Female 2.54mm



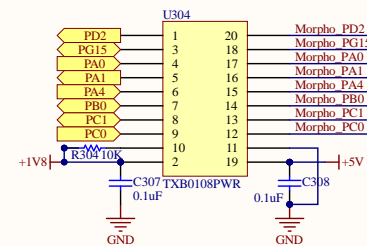
### Voltage Translator(5V\_1)



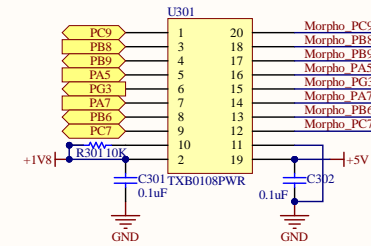
### Voltage Translator(5V\_2)



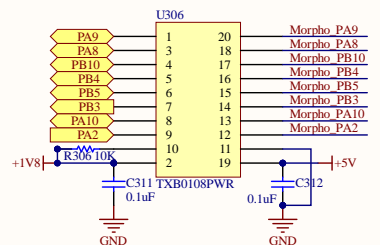
### Voltage Translator(5V\_3)



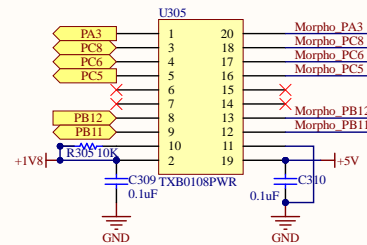
### Voltage Translator(5V\_4)



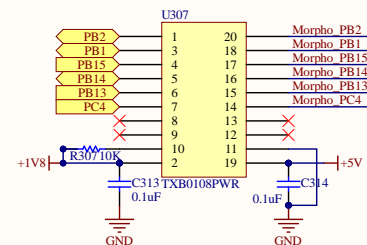
### Voltage Translator(5V\_5)



### Voltage Translator(5V\_6)

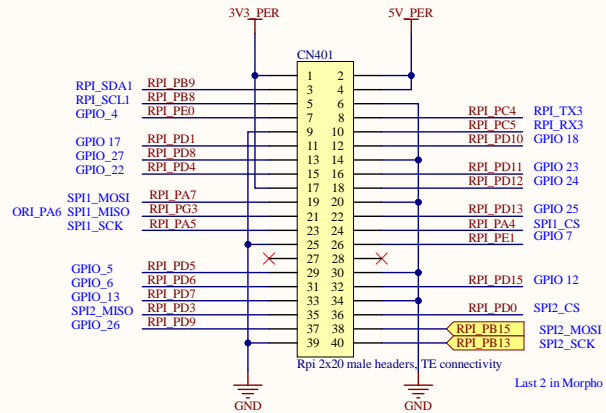


### Voltage Translator(5V\_7)

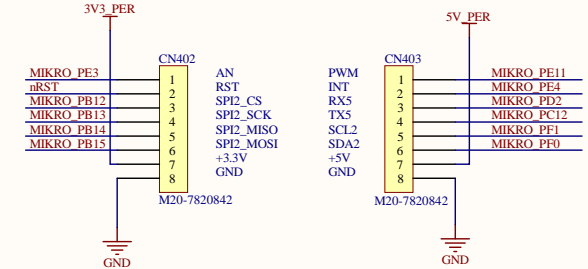


Title		
Morpho_Arduino		
Size	Number	Revision
A3		A
Date:	11/17/2020	Sheet of 6
File:	F:\Google Drive\...\Morpho_Arduino_Sch\Drawn By: Andy Wong	

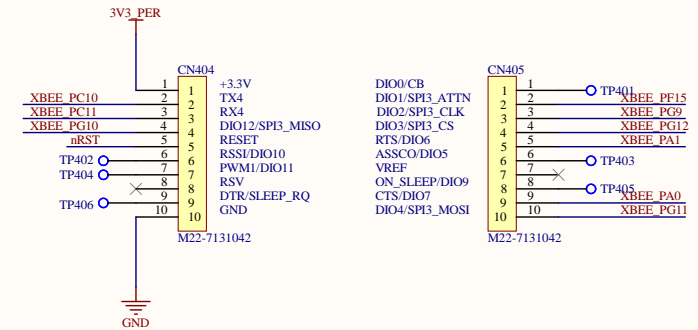
## RPi 2.54mm Male



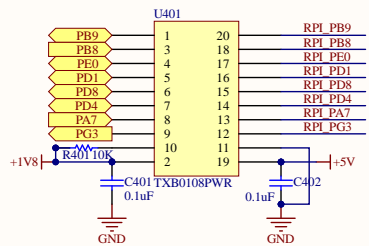
## MikroBus 2.54mm Female



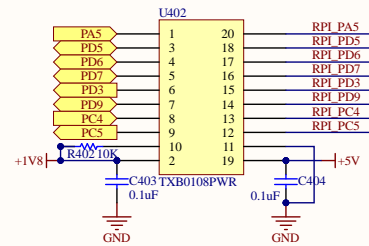
## XBee Female 2mm



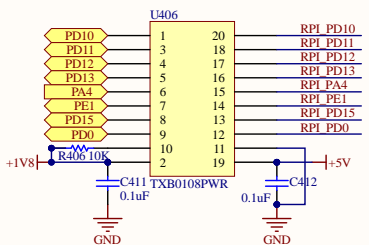
## Voltage Translator(5V\_8)



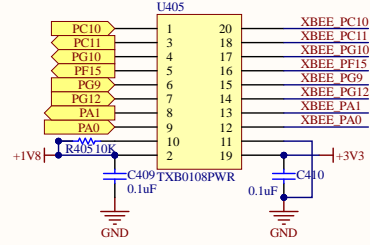
## Voltage Translator(5V\_9)



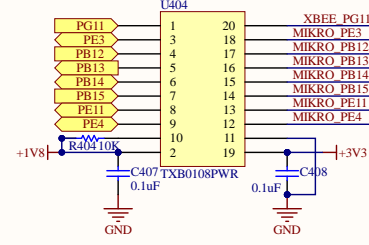
## Voltage Translator(5V\_10)



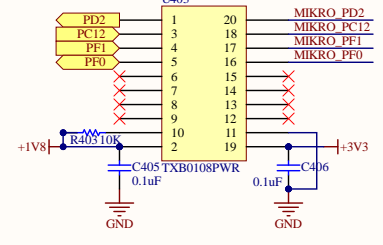
## Voltage Translator(3V3\_1)



## Voltage Translator(3V3\_2)



## Voltage Translator(3V3\_3)



Title		
Rpi_Xbee_MikroBus		
Size	Number	Revision
A3		
Date:	11/17/2020	Sheet 06 6
File:	F:\Google_Drive\PI_Xbee_MikroBus\Drawn By: Andy Wong	

A

B

C

D

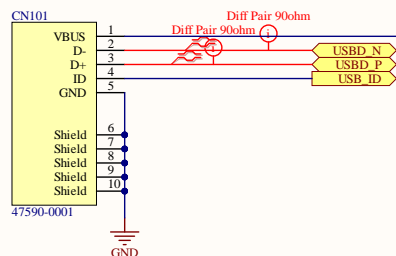
A

B

C

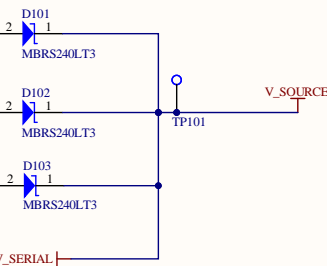
D

## USB Connector



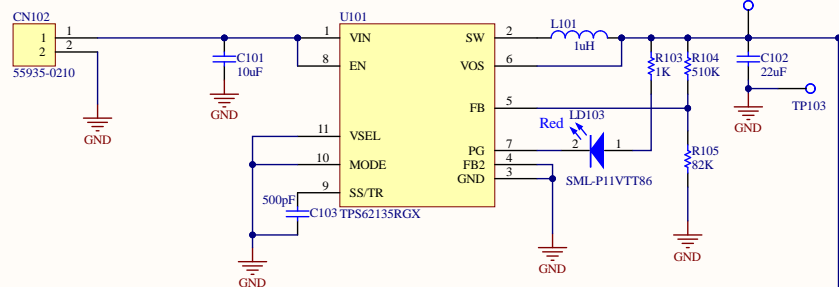
U5V

## Input Selection



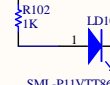
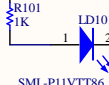
## 12V

## 12V-5V DC-DC Buck

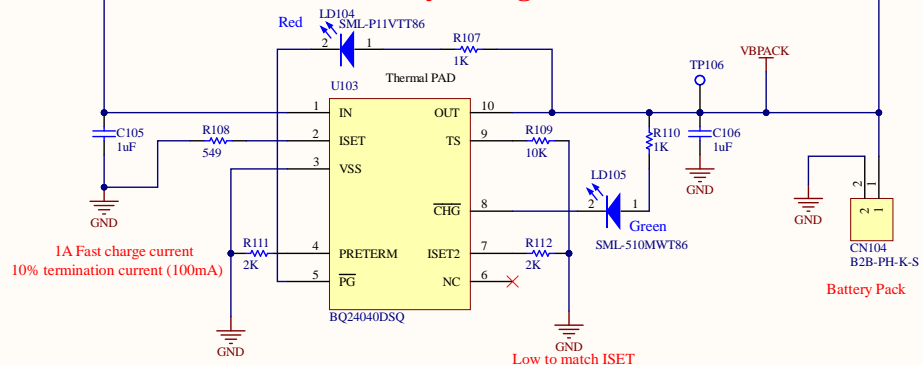


V\_SOURCE

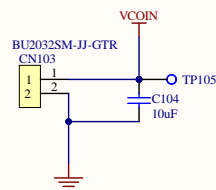
VIN



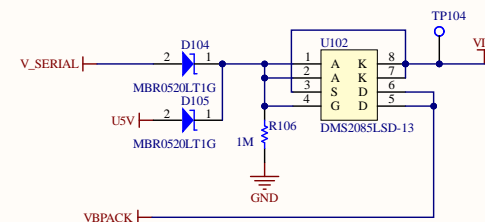
## Li-Po Battery Charger



## VCOIN



## VIN Selection



Title		
Power_Source		
Size	Number	Revision
A3		A
Date: 11/17/2020		Sheet of 2 6
File: F:\Google Drive\...\Power_Source.SchDoc		Drawn By: Andy Wong

1

2

3

4

5

6

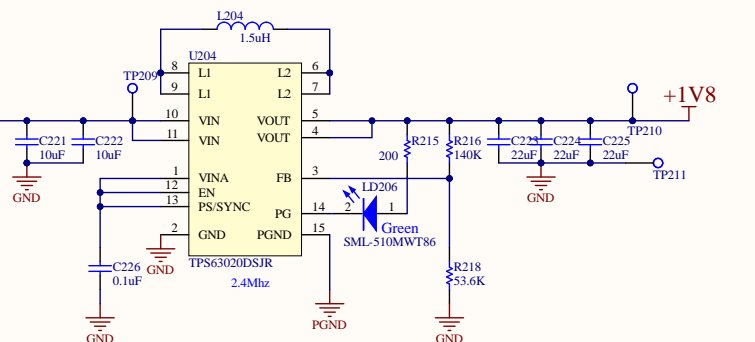
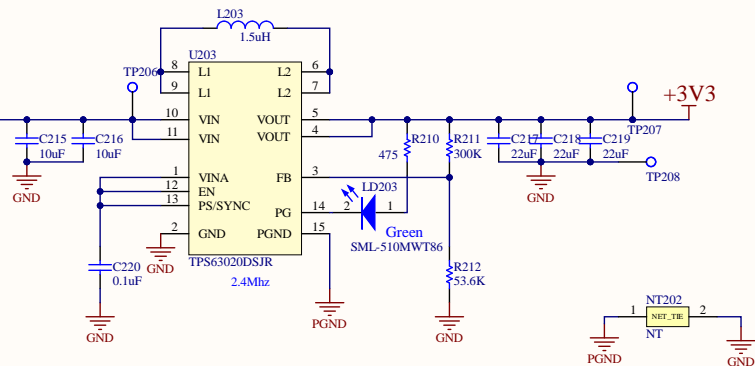
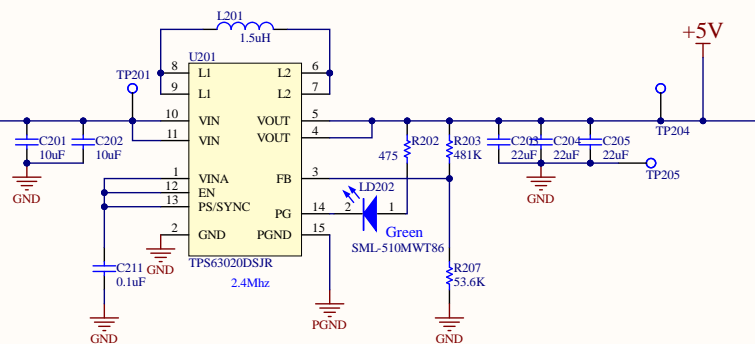
7

8

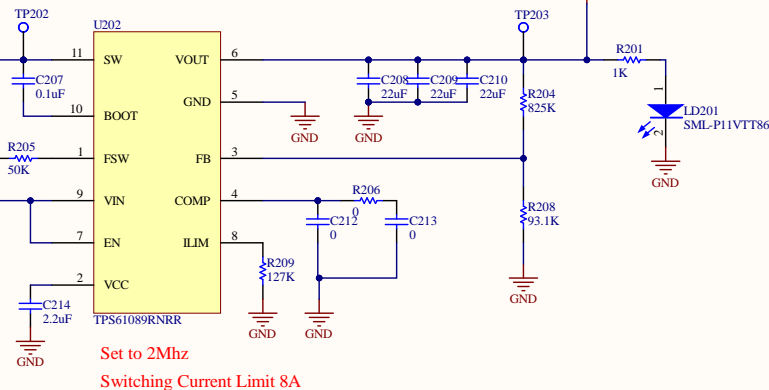
5V/3.7V  
V\_SOURCE

## DC-DC Buck Boost

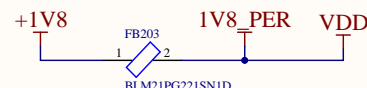
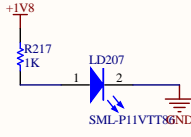
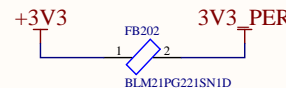
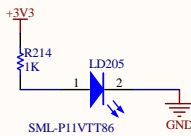
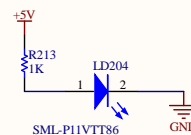
## DC-DC Boost



Hooked to 5V because of set frequency



Set to 2Mhz  
Switching Current Limit 8A



Title		
Size	Number	Revision
A3		
Date:	11/17/2020	Sheet of
File:	F:\Google Drive\Voltage_Regulators_Sch	Down By: