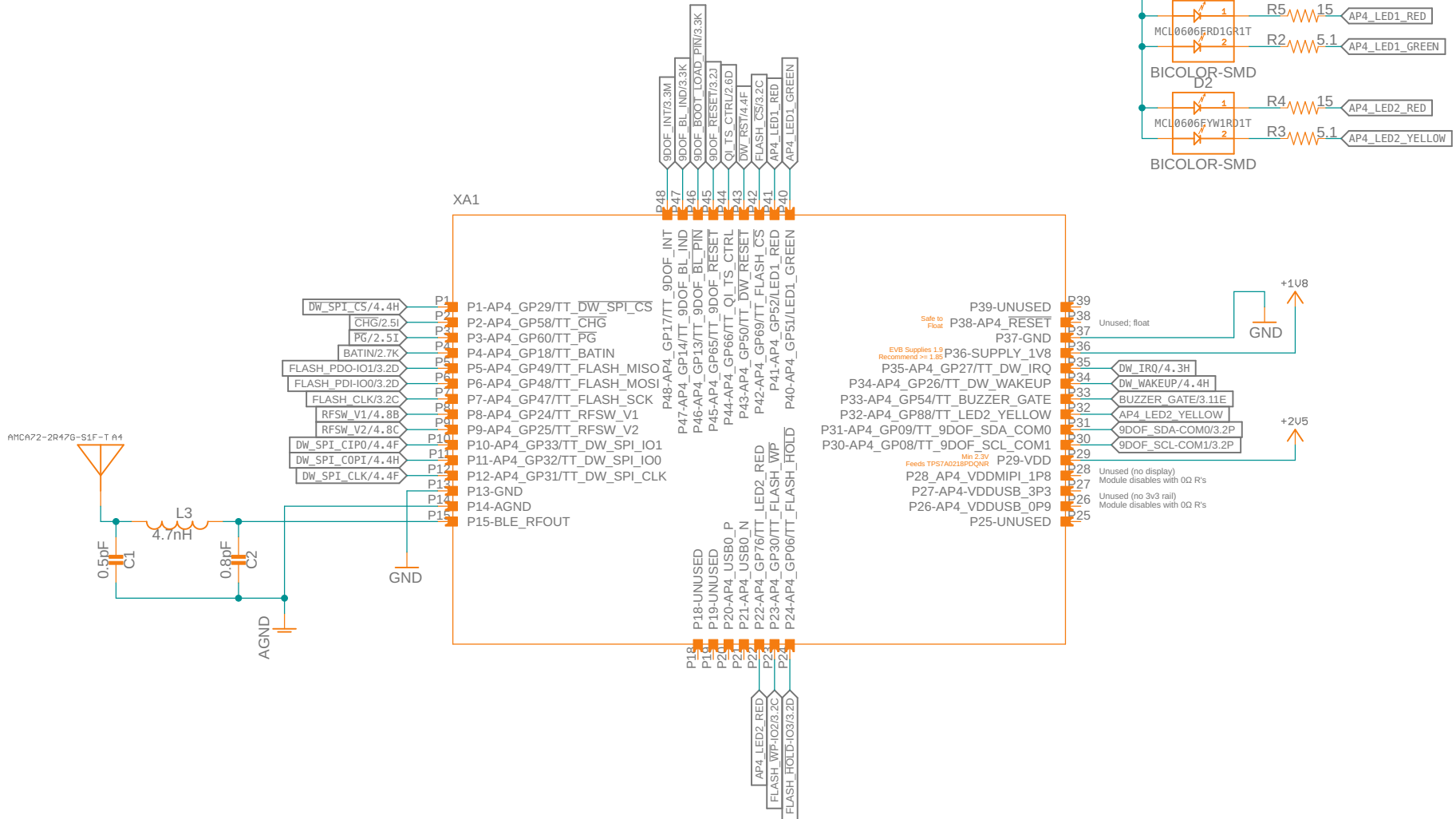


Apollo4 (M4F + M0/BLE)

Supply 1.8-2.0 V

M4 max sust: 4 mA
Buck spikes: 100 mA
BLE max sus: 6 (+1.2?) mA
BLE buck spk: 2.2 mA

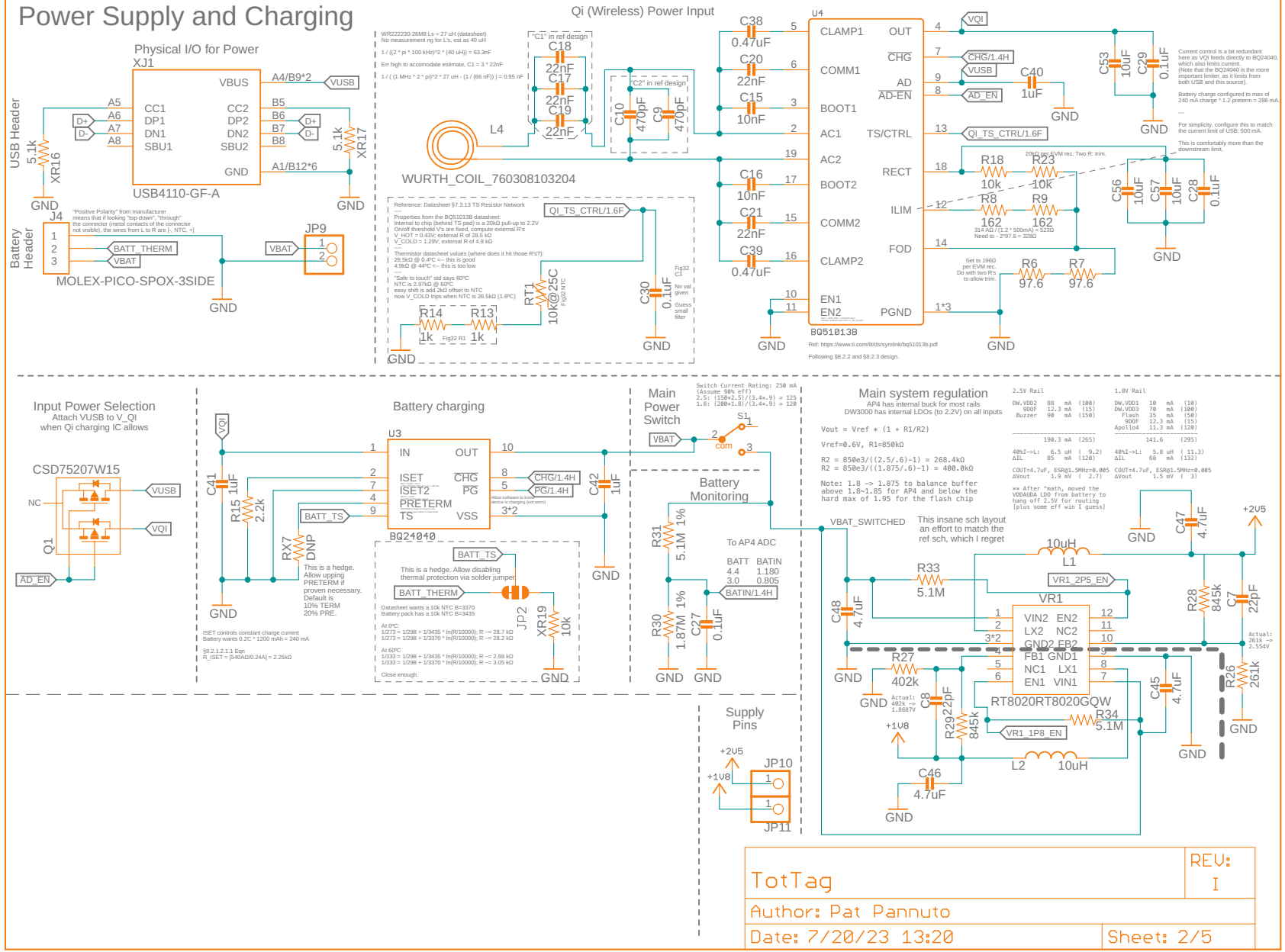


TotTag		REV:
Author: Pat Pannuto		I
Date: 7/20/23 13:20	Sheet: 1/5	

Power Supply and Charging

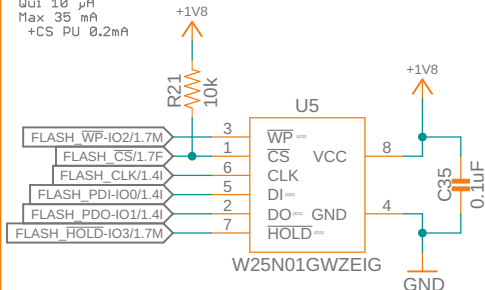
BATTERY

HCP643450N2C, 3.7V, 1200mah
Bare raw cell: 6.4*34.5*50.5mm max. in T*W*L
Assemble size: 6.4*34.5*52 mm max. in T*W*L
Over-charge voltage: 4.28V
Over- discharge voltage: 3.0V
Continuous charge rate: 0.2C
Peak charge rate: 1C
Continuous discharge rate: 0.2C
Peak discharge rate: 1C, for 2-3ms
NTC, 10K B=3435
Wire: UL1571-28AWG#, 100mm, from left
Connector: MOLEX87439-3P, positive
PCM added



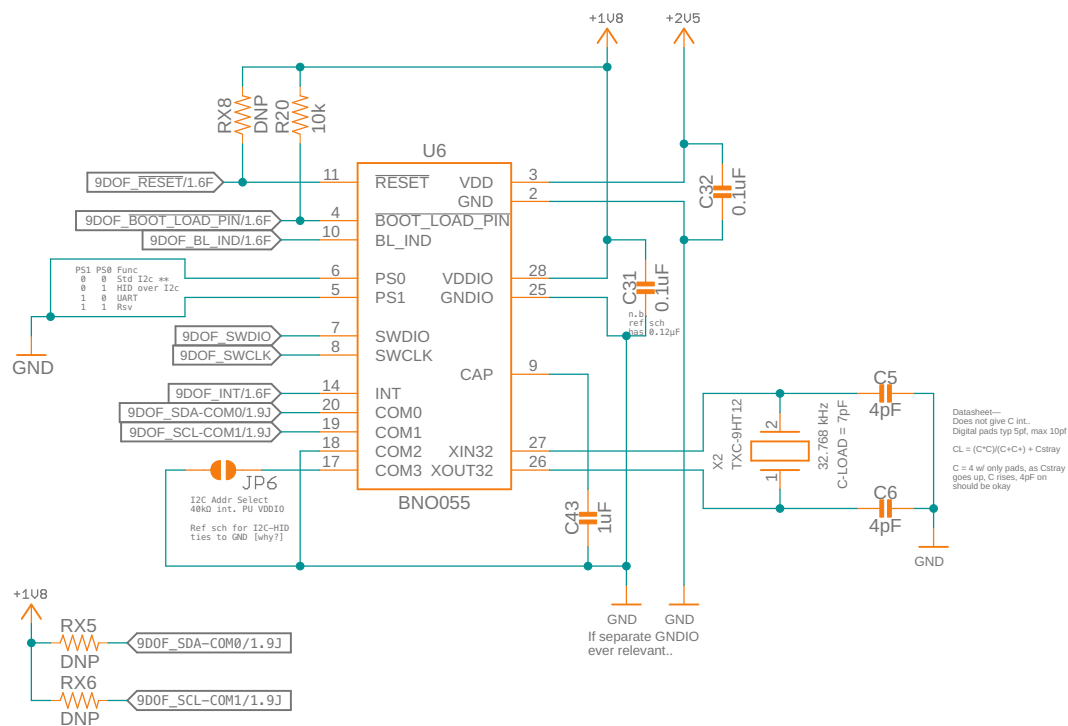
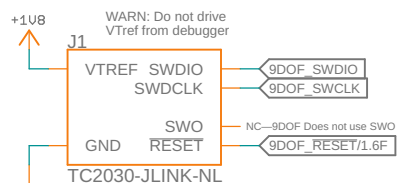
External Flash

Sup 1.7 - 1.95 V
Qui 10 μ A
Max 35 mA
+CS PU 0.2mA



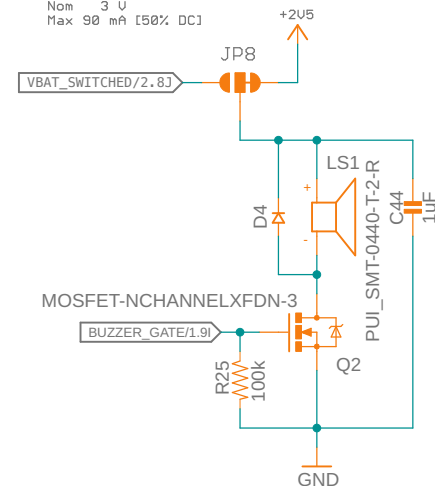
9-DOF

Sensors 2.4 - 3.6 V
I/O 1.7 - 3.6 V
Qui 40 μ A
Max 12.3 mA
(current max sum rails)



Buzzer

Sup 2 - 4 V
Nom 3 V
Max 90 mA [50% DC]



TotTag

REV:
I

Author: Pat Pannuto

Date: 7/20/23 13:20

Sheet: 3/5

UWB: DW3210 and Switches

Supply 2.4 - 3.6 V
ds #'s @ 3.0 V

VDD1 min typ max
1.6 3.0 3.6
VDD2a,b 2.4 3.0 3.6
VDD3 1.5 3.0 3.6

Voltage on GPIO0-5,
WAKEUP, RSTn, SPICSn,
SPIMOSI, SPICLK
→ Max: VDD1+0.3V

I/O current (max): 10 mA
VDD1 → I/O

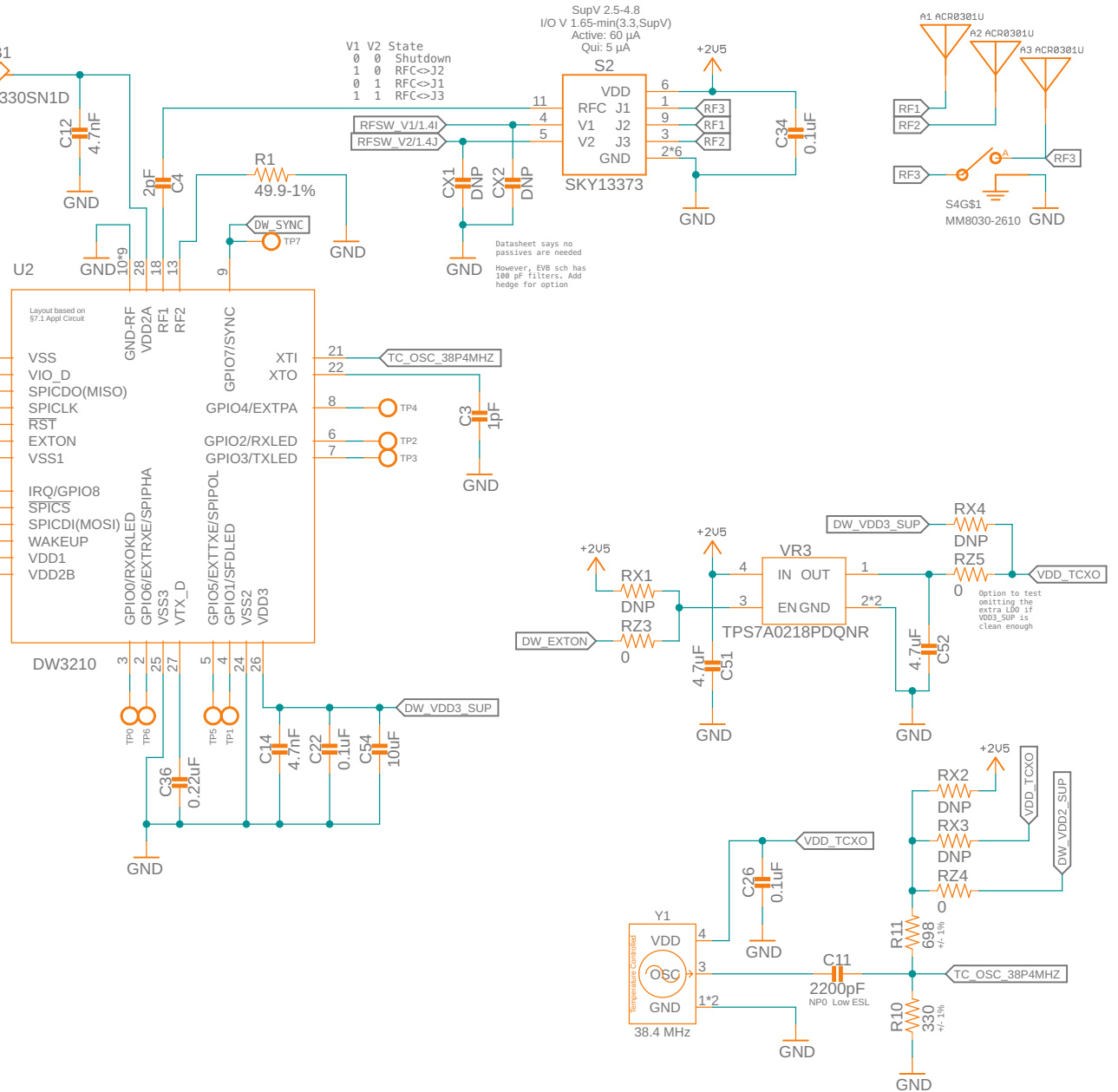
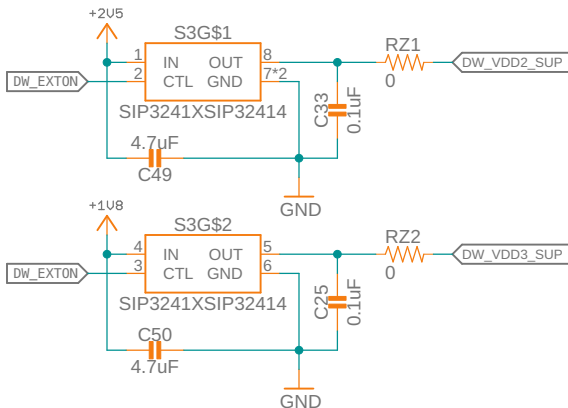
Peak cont current
is RX CH9: 88 mA

TX worst-case:
VDD2a/b: 20 mA
VDD3: 20 mA

RX worst-case:
VDD2a/b: ~5 mA
VDD3: ~70 mA

Quiescent: 0.26 µA

VDD2, VDD3 Control



TotTag

Author: Pat Pannuto

Date: 7/20/23 13:20

REV:
I

Sheet: 4/5

Miscellany

Fiducials - Top



Fiducials - Bottom



Test Points

TotTag		REV: I
Author: Pat Pannuto		
Date: 7/20/23 13:20		Sheet: 5/5