

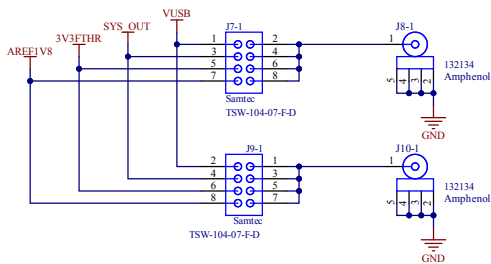
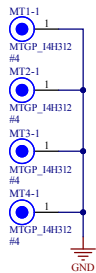
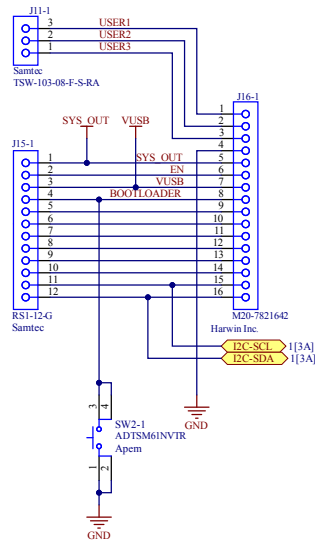
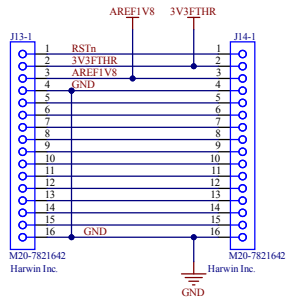
I2C SDA/SCL & GND ONLY connected between boards  
USB micro to A run underneath the boards through to the hub  
SMA mounts unpopulated, middle signal runs to single jumper that is next to options for all 4 power lines

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Title  
**eCTF Main.SchDoc**

CAGE Code: 4B080		Drawing Number: PRJ-FY23-396_eCTF_WoUSB.PjPcb		REV: 1
Date: 1/16/2024	Drawn By: Matthew McBride	Engineer: Fritz Stine	Size: B	Sheet 1 of 2

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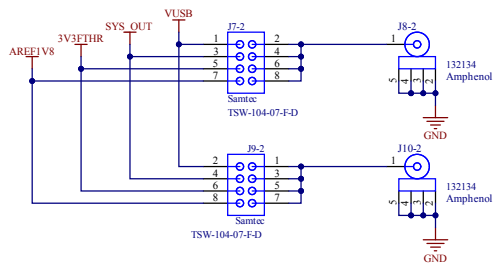
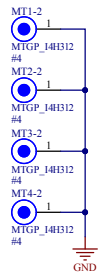
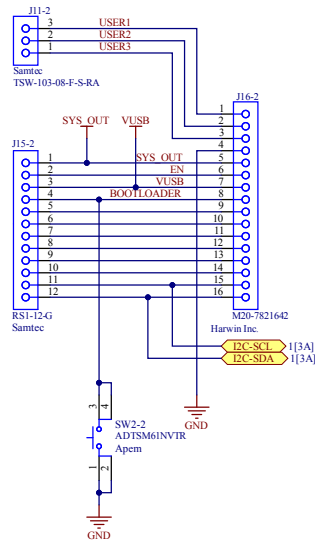
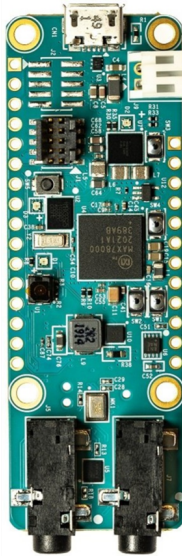
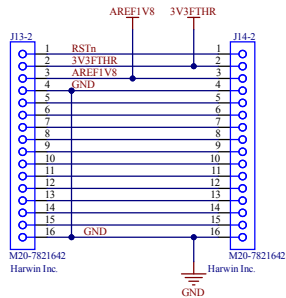
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Title  
**MAX78000FTHR.SchDoc**

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CAGE Code: 4B080	Drawing Number: PRJ-FY23-396_eCTF_WoUSB.PjtPcb	REV: 1
Date: 1/16/2024	Drawn By: Matthew McBride Engineer: Fritz Stine	Size: B
		Sheet 2 of 2



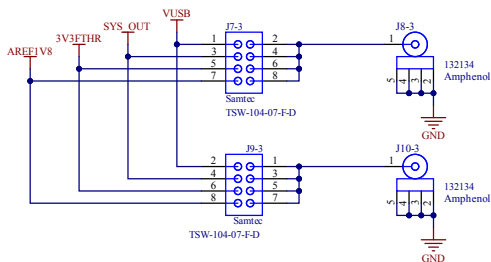
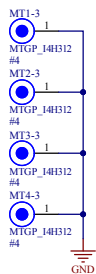
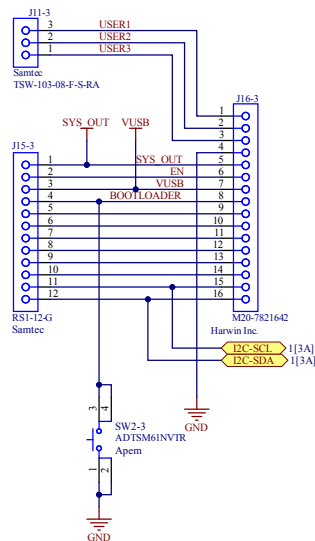
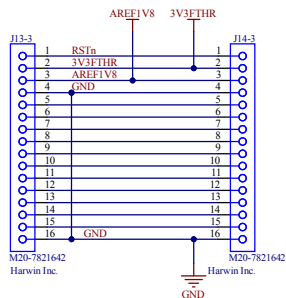
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Title  
**MAX78000FTHR.SchDoc**

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CAGE Code: 4B080	Drawing Number: PRJ-FY23-396_eCTF_WoUSB.PjPcb	REV: 1
Date: 1/16/2024	Drawn By: <u>Matthew McBride</u> Engineer: Fritz Stine	Size: <u>B</u> Sheet <u>2</u> of <u>2</u>



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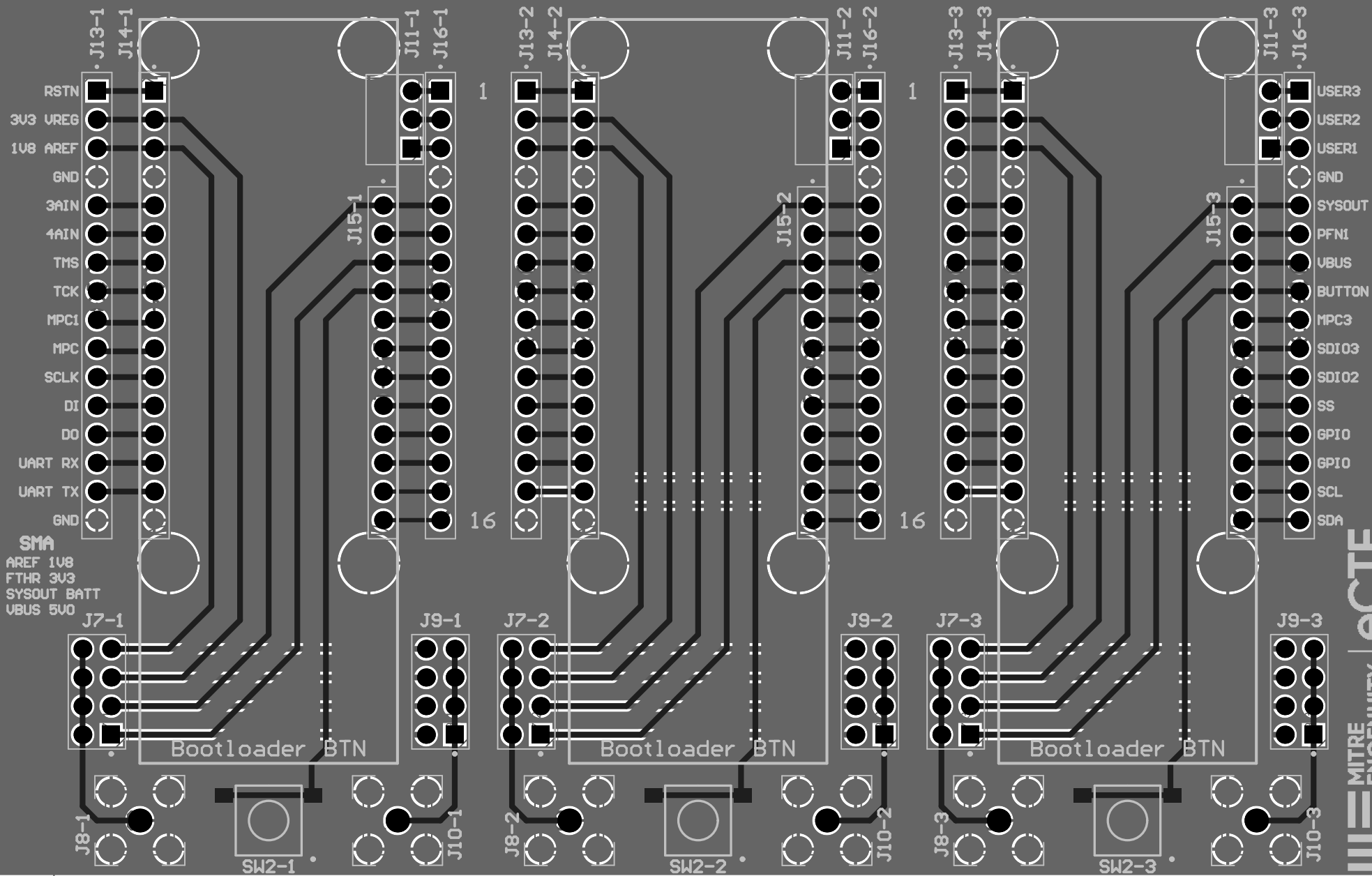
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Date: 1/16/2024	Drawn By: <u>Matthew McBride</u> Engineer: Fritz Stine	Size: B
Sheet 2 of 2		

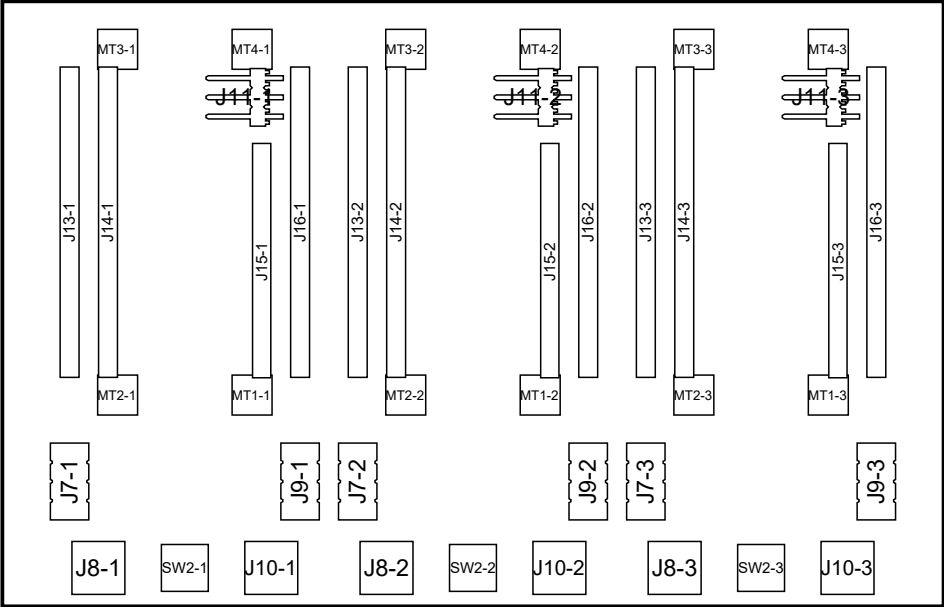
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View from Top side (Scale 1:1)



NOTES :UNLESS OTHERWISE SPECIFIED

1. This is a static sensitive assembly- use static eliminating measures during assembly and handling.
2. Manufacture to latest version of IPC-A-610 Class II workmanship standards
3. Components may contain LEAD
4. May use ROHS solder process



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Bill Of Materials

Line #	Designator	Name	Quantity	Design Item Id
13	J7-1, J7-2, J7-3, J9-1, J9-2, J9-3	TSW-104-07-F-D	6	CMP-02602-2
14	J8-1, J8-2, J8-3, J10-1, J10-2, J10-3	132134	6	CMP-02625-3
15	J11-1, J11-2, J11-3	TSW-103-08-F-S-RA	3	CMP-02600-1
16	J13-1, J13-2, J13-3, J14-1, J14-2, J14-3, J16-1, J16-2, J16-3	M20-7821642	9	CMP-02608-1
17	J15-1, J15-2, J15-3	RS1-12-G	3	CMP-02612-1
23	SW2-1, SW2-2, SW2-3	ADTSM61NVTR	3	CMP-01656-3

APPROVALS

ENGINEER: Fritz Stine

DESIGNER: PCB\_Designer

Last Accessed Date: 1/16/2024 12:01 PM

DATE

TITLE: PCB1\_ASY\_.PCBDwf

DWG NO: PRJ-FY23-396\_eCTF\_W,oUSB.PrjPcb

CAGE CODE: 4B080

Units: Mils

SIZE: A4

SHEET: 2 OF 3

REV: 1

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A

B

C

D

E

1

1

2

2

3

3

4

4



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APPROVALS		DATE	TITLE: PCB1_ASY_.PCBDwf				
ENGINEER:	Fritz Stine		DWG NO: PRJ-FY23-396_eCTF_W,oUSB.PrjPcb				REV: 1
DESIGNER:	=PCB_Designer		CAGE CODE: 4B080				
Last Accessed Date:		1/16/2024 12:01 PM	Units: Mils	SIZE: A4	SHEET: 3	OF 3	

A

B

C

D

E



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NOTES :UNLESS OTHERWISE SPECIFIED

1. LATEST VERSION OF ALL REFERENCED SPECIFICATIONS TO BE USED UNLESS OTHERWISE SPECIFIED

2. FABRICATE IN ACCORDANCE WITH IPC-A-600, CLASS 2 UNLESS OTHERWISE SPECIFIED

3. INSPECT IN ACCORDANCE WITH IPC-6012, CLASS 2 UNLESS OTHERWISE SPECIFIED.

4. MATERIAL PP-006, FR-4. Displayed stack-up for refrence only.

5. PLATED-THRU HOLES TO HAVE A COPPER WALL THICKNESS NOT LESS THAN 0.001" THICKNESS TO BE DETERMINED BY IPC-6012, CLASS 2.

6. SILKSCREEN NOMENCLATURE [WHITE] , NOT TO COVER ANY PORTION OF A COMPONENT PAD. FABRICATOR TO CLIP ANY NON-CONFORMING SILKSCREEN NOMENCLATURE.

7. USE LPI SOLDER MASK [GREEN] OVER BARE COPPER PER IPC-SM-840, CLASS 2.

8. SOLDER MASK SHALL BE CAPABLE OF FIVE SOLDER EXPOSURES AT 500 DEGREES F.

9. GLOBAL AND LOCAL FIDUCIALS MUST BE FREE OF ANY MARKINGS, WITH .020" MASK CLEARANCE.

10. FULL NETLIST TESTING REQUIRED UNLESS OTHERWISE SPECIFIED. TESTING SHOULD CONFORM TO IPC-ET-652.

11. REMOVAL OF NON-FUNCTIONAL PADS ON INNER LAYERS ALLOWED

12. PRIOR TO BOARD FABRICATION, COMPARE GERBER DATA TO SUPPLIED IPC-D-356 NETLIST. REPORT ALL DISCREPANCIES

13. BOARD OUTLINE TOLERANCE TO BE +/- 0.005" VISION ROUTE RECOMMENDED

14. BOARD FINISH : SMOBC WITH ENIG PER IPC-4552 LATEST REVISION

Layer Stack Legend

Top Overlay

Top Solder

Top Surface Finish

Top Layer

Layer 1

Layer 2

Bottom Layer

Bottom Surface Finish

Bottom Solder

Bottom Overlay

Total thickness: 65.67mil

Thickness	Dielectric Material	Type
		Legend
1.00mil	SM-003	Solder Mask
0.79mil		Surface Finish
1.38mil		Signal
8.28mil	PP-022	Dielectric
0.60mil		Internal Plane
41.58mil	Core-039	Dielectric
0.60mil		Internal Plane
8.28mil	PP-022	Dielectric
1.38mil		Signal
0.79mil		Surface Finish
1.00mil	SM-003	Solder Mask
		Legend

REVISIONS

REV	DESCRIPTION	DATE	APPROVED

APPROVALS

DATE

TITLE:

ENGINEER: Fritz Stine

DESIGNER: PCB\_Designer

Last Accessed Date: 1/16/2024 12:01 PM

PCB1\_FAB\_.PCBDwf

DWG NO: PRJ-FY23-396\_eCTF\_W,oUSB.PrjPcb

CAGE CODE: 4B080

Units: Mils

SIZE: A4

SHEET: 1 OF 3

REV: 1

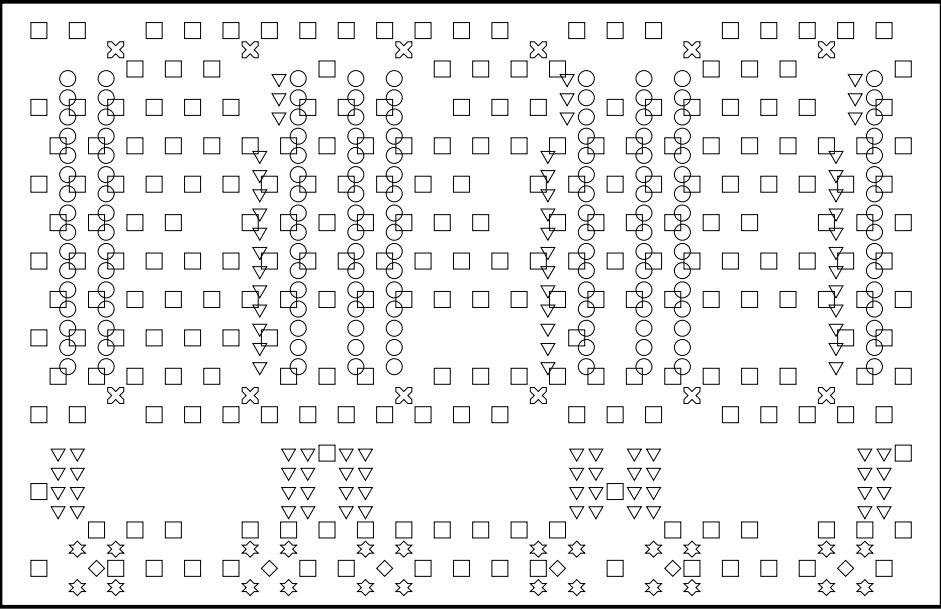
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Drill Table

Symbol	Count	Hole Size	Plated	Drill Layer Pair	Hole Tolerance
□	251	12.00mil	Plated	Top Layer - Bottom Layer	+/-4.00mil
▽	93	40.16mil	Plated	Top Layer - Bottom Layer	
○	144	40.94mil	Plated	Top Layer - Bottom Layer	
◇	6	59.06mil	Plated	Top Layer - Bottom Layer	
☆	24	66.93mil	Plated	Top Layer - Bottom Layer	
⊠	12	127.99mil	Plated	Top Layer - Bottom Layer	
	530 Total				


Drill Drawing View (Scale 1:1)



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APPROVALS		DATE	TITLE: PCB1_FAB_.PCBDwf			
ENGINEER:		Fritz Stine	DWG NO: PRJ-FY23-396_eCTF_W,oUSB.PrjPcb			REV: 1
DESIGNER:		=PCB_Designer	CAGE CODE: 4B080			Units: Mils
Last Accessed Date:		1/16/2024 12:01 PM	SIZE: A4	SHEET: 2	OF 3	

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APPROVALS		DATE	TITLE: PCB1_FAB_.PCBDwf	
ENGINEER:	Fritz Stine		DWG NO: PRJ-FY23-396_eCTF_W,oUSB.PrjPcb	
DESIGNER:	=PCB_Designer		REV: 1	
Last Accessed Date:		1/16/2024 12:01 PM	CAGE CODE: 4B080	Units: Mils
			SIZE: A4	SHEET: 3 OF 3