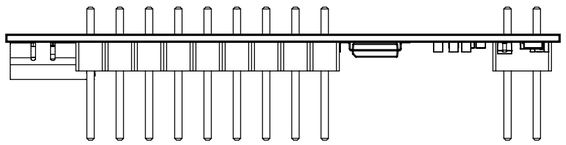
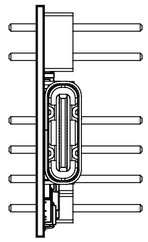
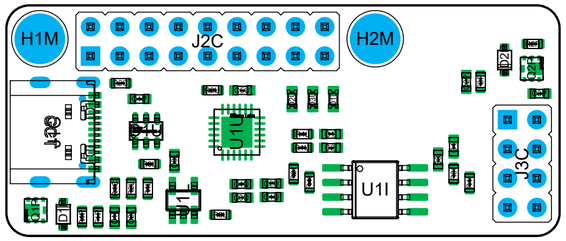
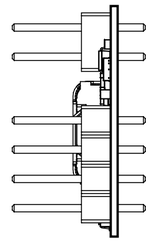
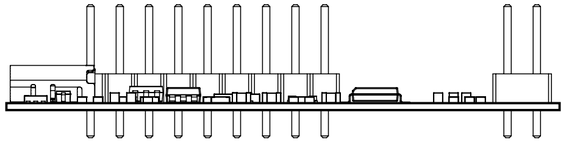
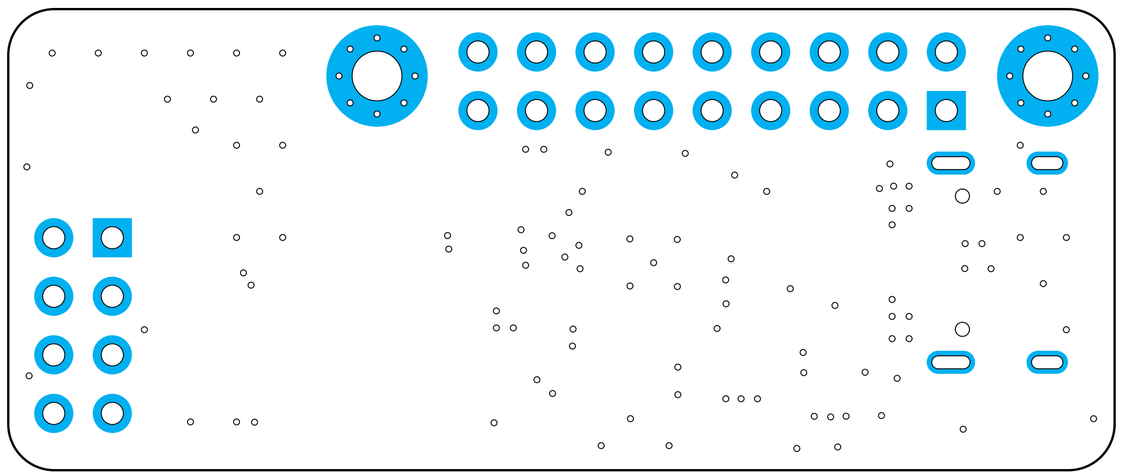












Note:

1. Text element with square border.
2. Text element with no border
3. Text element with circle border

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL± ANGULAR: MACH± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN		06-12-2024
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE			
SIZE	DWG. NO.		
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1	

PCB MANUFACTURING SPECIFICATIONS
"=ProjectTitle"

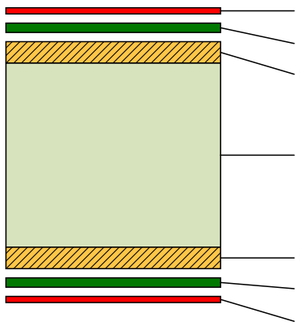
SPECIFICATIONS

NOTE #	NOTE
1	ALL SPECIFICATIONS REFERENCED ARE OF THE REVISION SPECIFIED IN THE TITLE BLOCK
2	SUPPLIER SHALL NOT MODIFY THE DESIGN OR APPROVED STACK-UP WITHOUT WRITTEN PERMISSION
3	ALL MATERIALS SHALL BE RoHS COMPLIANT AND FINAL PRODUCT SHALL BE ACCEPTABLE TO USE IN RoHS ASSEMBLY. RoHS LOGO SHALL BE MARKED IN SILKSCREEN INK BY THE SUPPLIER WHERE INDICATED BY THE TEXT "PLACE MARKINGS HERE"
4	COPPER FOIL: REFER TO LAYER STACK LEGEND FOR Cu THICKNESS DETAILS. ALL Cu THICKNESSES ARE FINISHED AND INCLUDE BASE FOIL PLUS Cu PLATING ON PLATED LAYERS
5	ELECTRICAL TEST: ALL PRINTED CIRCUITS SHALL BE 100% ELECTRICALLY TESTED FOR OPENS/SHORTS USING PROVIDED NETLIST. REJECTED PRINTED BOARDS MUST BE CLEARLY MARKED WITH NON-CONDUCTIVE, PERMANENT INK.
6	MARKINGS: VENDOR MARKING AND DATE/LOT CODES SHALL BE LOCATED ON THE BOARD IN THE RESERVED AREA AS SPECIFIED IN THE GERBER LAYER "PCBM_NOTES" BY THE TEXT "PLACE MARKINGS HERE".
7	MARKINGS: THE SIDE ONTO WHICH PLACE THE MARKINGS IS AT THE SUPPLIER DISCRESSION UNLESS OTHERWISE NOTED ONTO THE LAYER "PCBM_NOTES"
8	SUPPLIER SHALL CHECK PCBM_NOTES LAYER BEFORE ASKING FOR CLARIFICATIONS
9	MANUFACTURE TENTED/PLUGGED VIAS AS SPECIFIED IN THE GERBER FILES

SPECIFICATIONS

LENGHT	**20.00mm**
WIDTH	**48.00mm**
LAYERS	**2**
MATERIAL	**FR-4**
MATERIAL MIN TG	**130-140**
TRACK WIDTH/CLEARANCE	**10 mils / 10 mils**
THICKNESS	**0.6mm**
COPPER THICKNESS	**35um (1oz)**
SOLDERMASK	**YES, TOP AND BOTTOM**
SOLDERMASK COLOR	**GREEN**
SILKSCREEN	**YES, TOP AND BOTTOM**
SILKSCREEN COLOR	**WHITE**
SURFACE FINISH	**HASL LEAD FREE**
GOLD FINGERS	NO
CHAMFERING	YES
IMPEDANCE CONTROL	YES
HALF-CUT/CASTELLATED HOLES	NO
BURIED/BLIND VIAS	NO
VIAS FILLED WITH RESIN	NO
CARBON MASK	NO
COUNTERSINKS/COUNTERBORES	NO
Z-AXIS MILLING	NO
PEELABLE SOLDERMASK	NO

Layer Stack Legend



Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.02mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GTL
Core		*0.50mm*	*FR-4*	*Dielectric*	
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.02mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

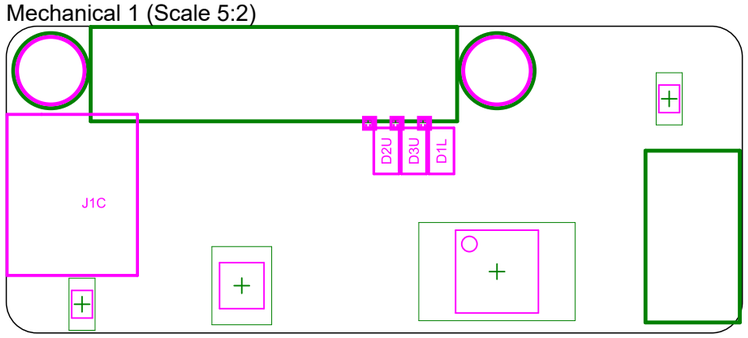
Total thickness: 0.60mm

NON-COPPER LAYER THICKNESS FOR REFERENCE ONLY
LAYERS OF TYPE "INTERNAL PLANE" ARE NEGATIVE

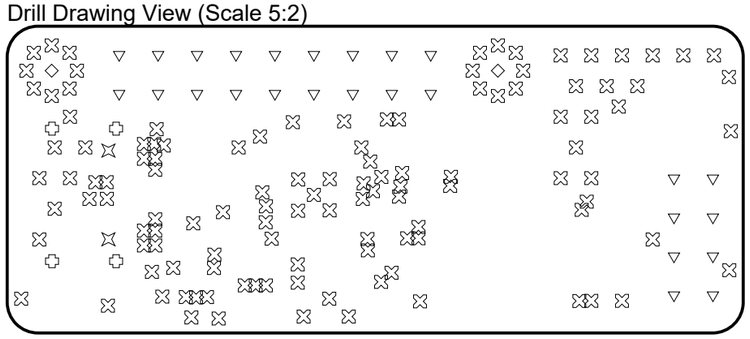
Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:08	**Sheet** 1 of 3	**SW version:** 24.10.1.45	Address Line 3
Git Hash:			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_MANUFACTURING_USB			

[YOUR LOGO HERE]

Mechanical 1 (Scale 5:2)



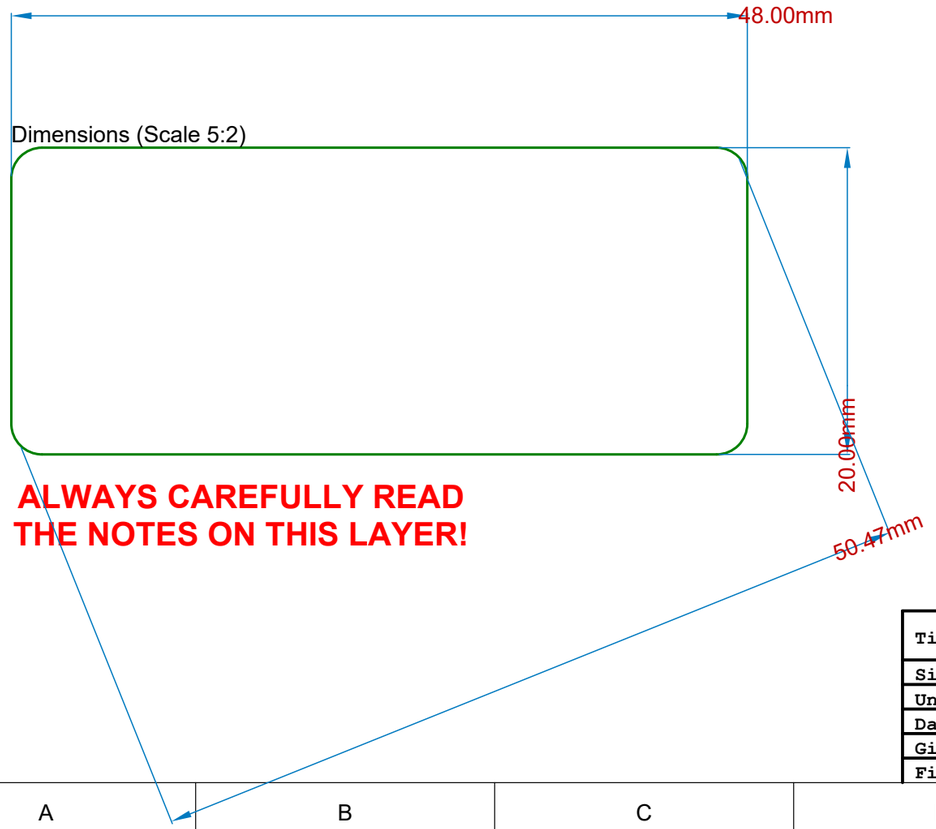
Drill Drawing View (Scale 5:2)



Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
⊠	119	0.30mm	Есть	
⌖	4	0.60mm	Есть	
⊠	2	0.65mm	Нет	
▽	26	1.00mm	Есть	
◇	2	2.20mm	Есть	
	153 Total			

Dimensions (Scale 5:2)

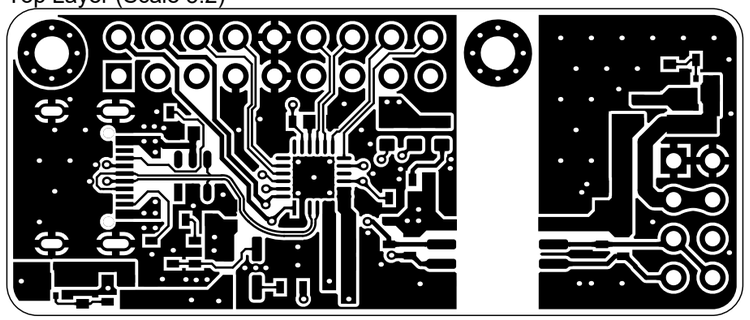


ALWAYS CAREFULLY READ THE NOTES ON THIS LAYER!

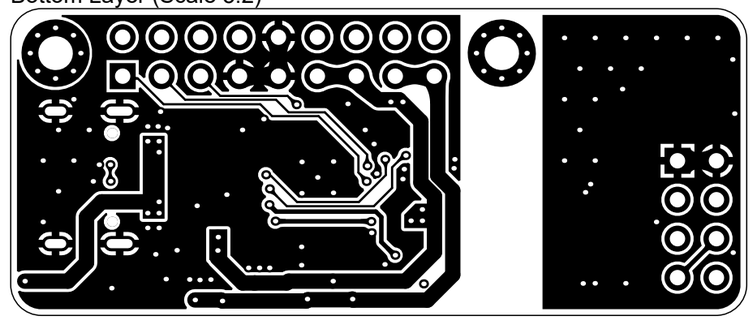
Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:08	**Sheet** 2 of 3	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_MANUFACTURING_USB			

[YOUR LOGO HERE]

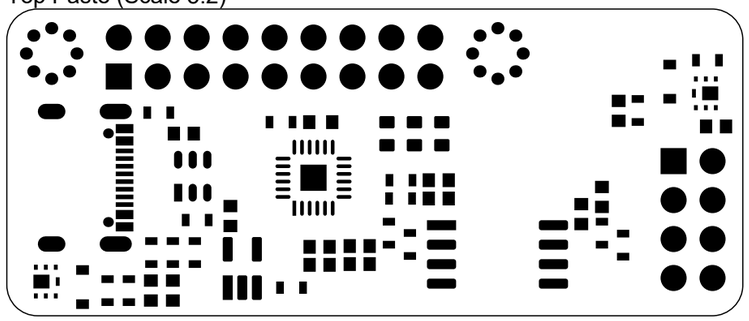
Top Layer (Scale 5:2)



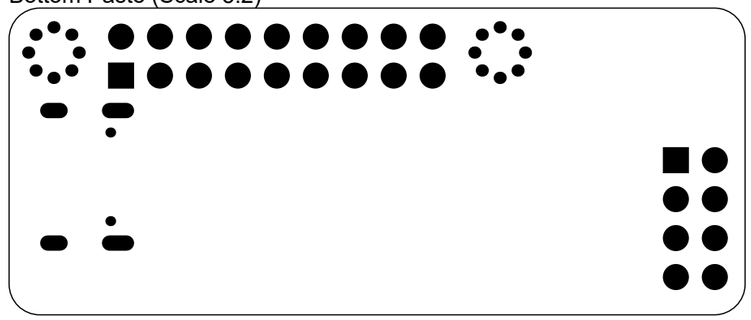
Bottom Layer (Scale 5:2)



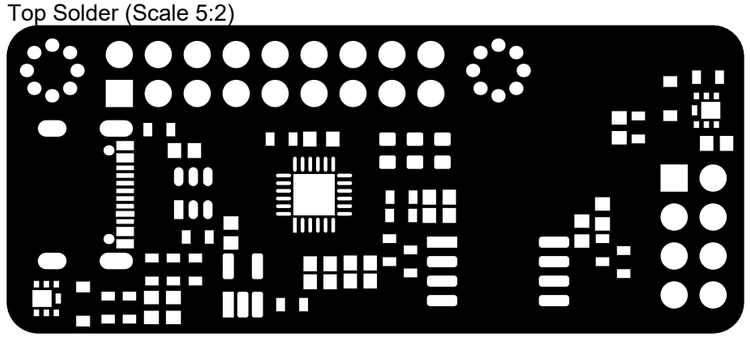
Top Paste (Scale 5:2)



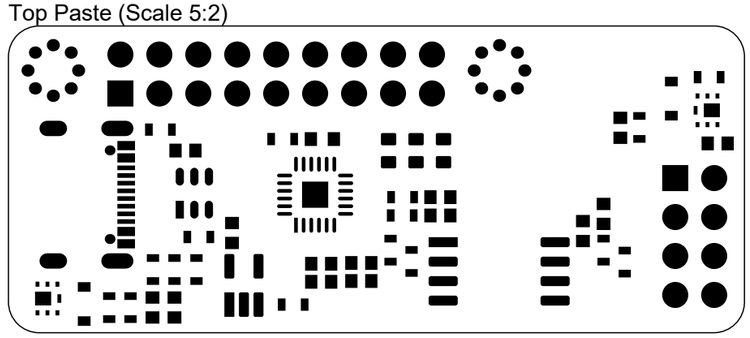
Bottom Paste (Scale 5:2)



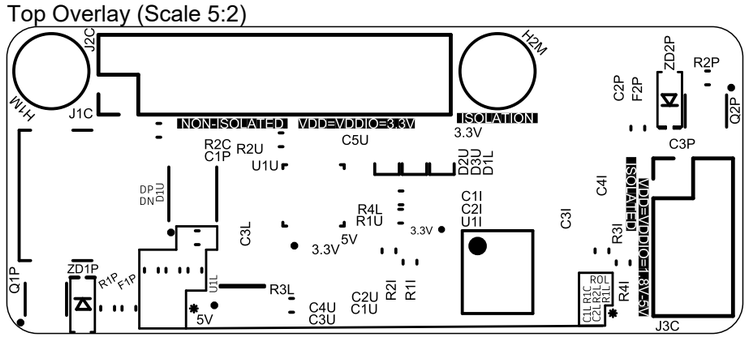
Top Solder (Scale 5:2)



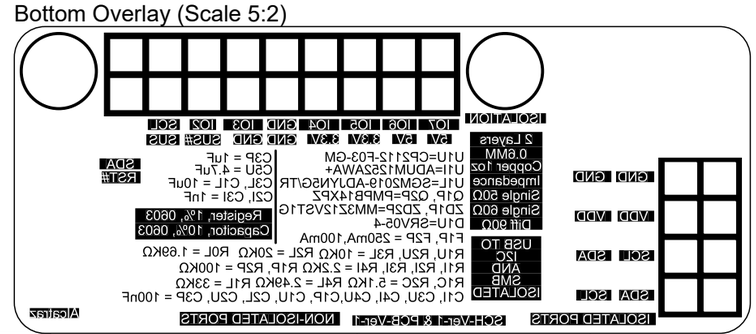
Top Paste (Scale 5:2)



Top Overlay (Scale 5:2)



Bottom Overlay (Scale 5:2)



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		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:08	**Sheet** 3 of 3	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_MANUFACTURING_USB			

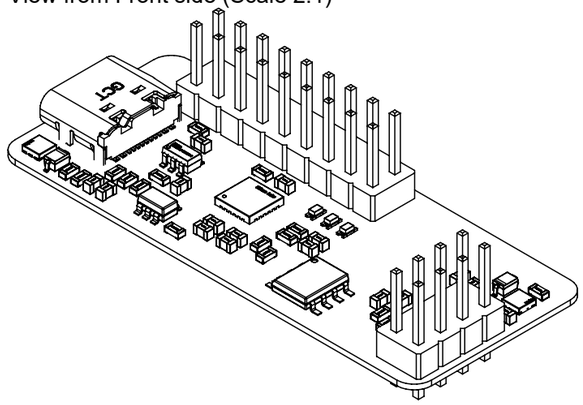
[YOUR LOGO HERE]

PCB ASSEMBLY SPECIFICATIONS
"=ProjectTitle"
Variant: "[No Variations]"

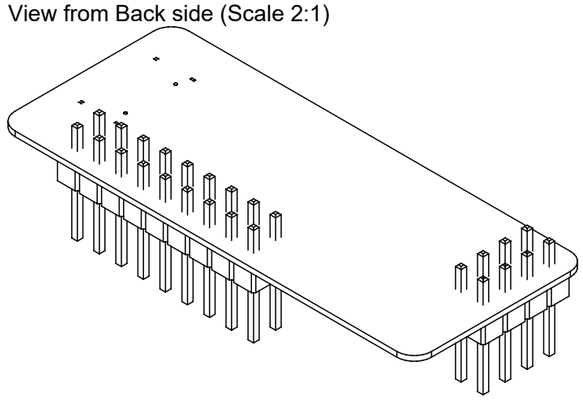
SPECIFICATIONS

NOTE #	NOTE
1	ALL SPECIFICATIONS REFERENCED SHALL BE OF THE LATEST REVISION UNLESS OTHERWISE NOTED
2	SUPPLIER SHALL NOT MODIFY THE DESIGN WITHOUT WRITTEN PERMISSION
3	REFER TO EXCEL BOM FOR UP-TO-DATE INFORMATION
4	THE BOM IN THIS DOCUMENT IS PURELY AN AID TO ASSEMBLY OPERATIONS AND MAY NOT HAVE THE MOST UP-TO-DATE DATA OR ALL APPROVED COMPONENT ALTERNATIVE.

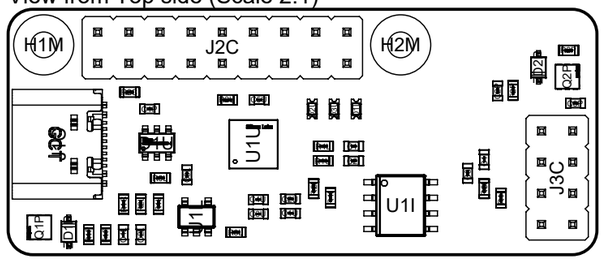
View from Front side (Scale 2:1)



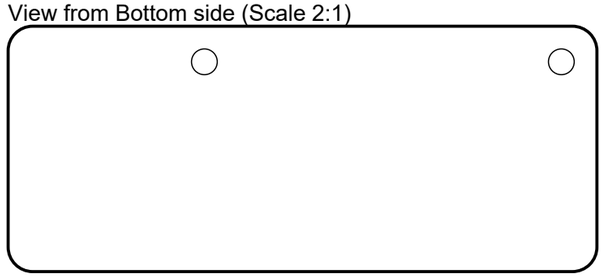
View from Back side (Scale 2:1)



View from Top side (Scale 2:1)



View from Bottom side (Scale 2:1)



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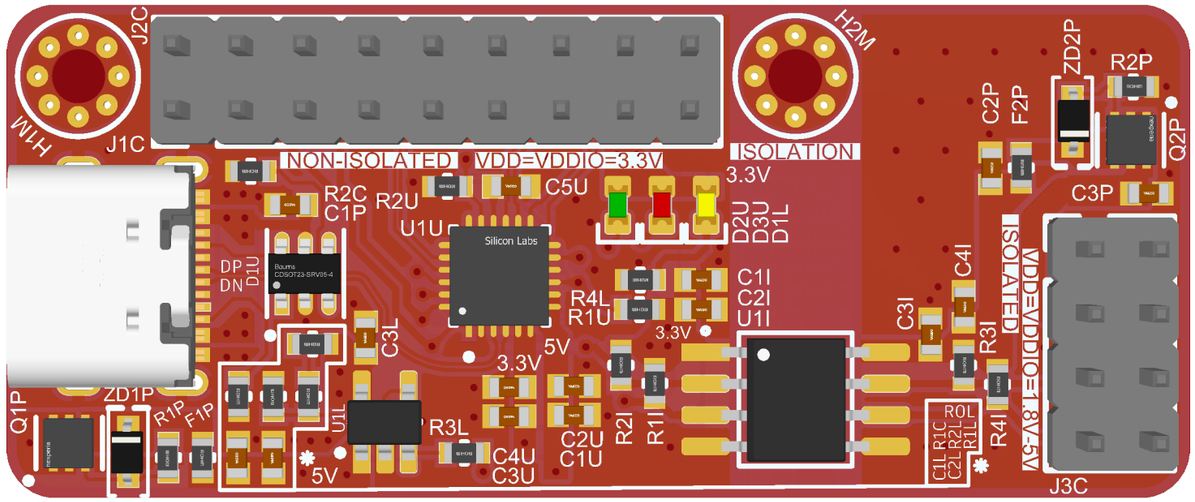
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	**Sheet** 1 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash:			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-			

[YOUR LOGO HERE]

Realistic View TOP



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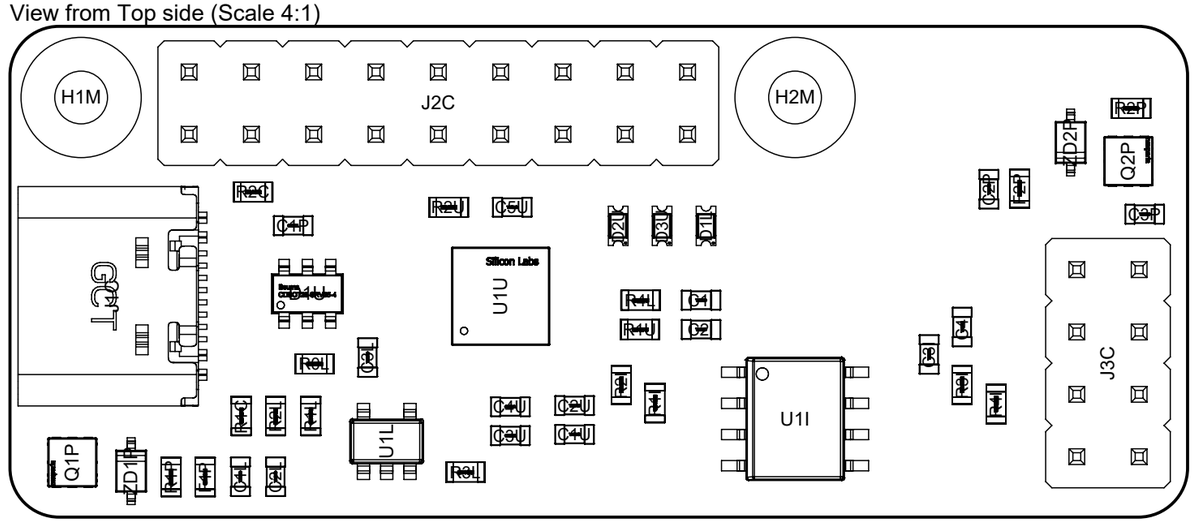
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	Sheet 2 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-			

[YOUR LOGO HERE]

View from Top side (Scale 4:1)



DIODE ORIENTATION

Name	ANODE
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot ( )

2 1

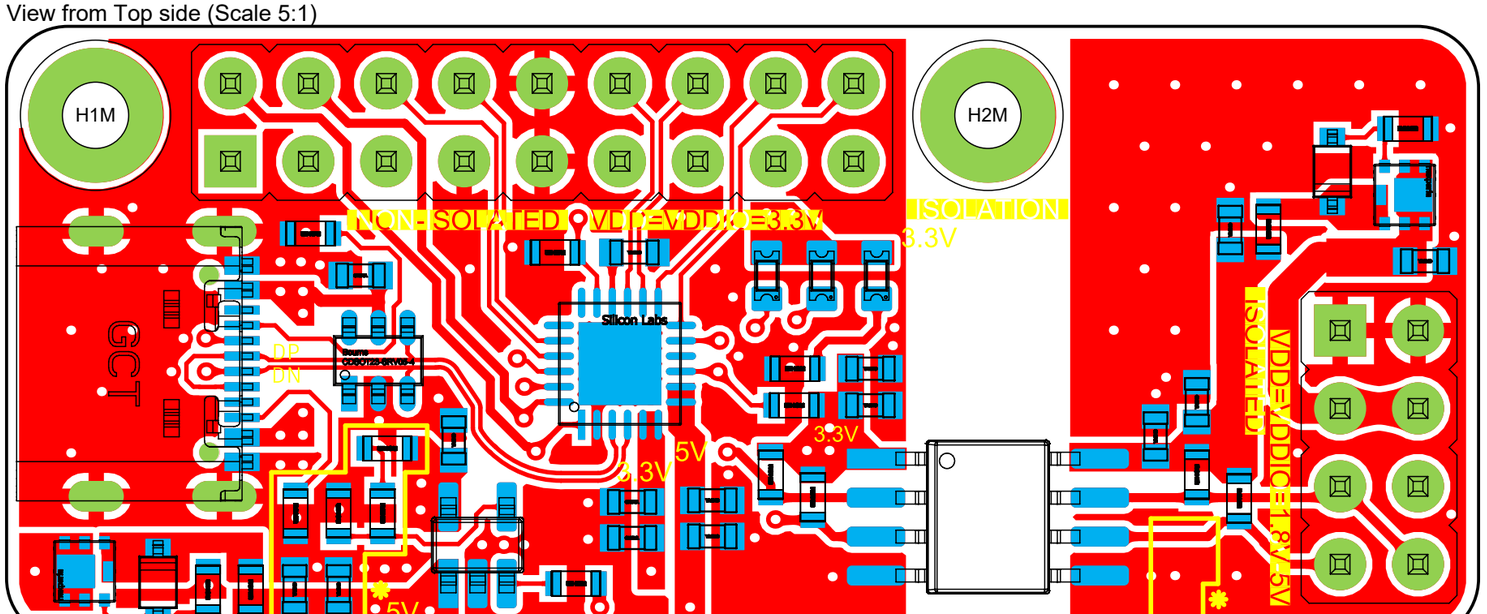
Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot (•)

Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	**Sheet** 3 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4

File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-

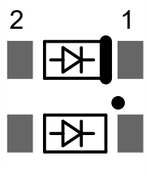
[YOUR LOGO HERE]

View from Top side (Scale 5:1)



DIODE ORIENTATION

Name	ANODE
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot ( )

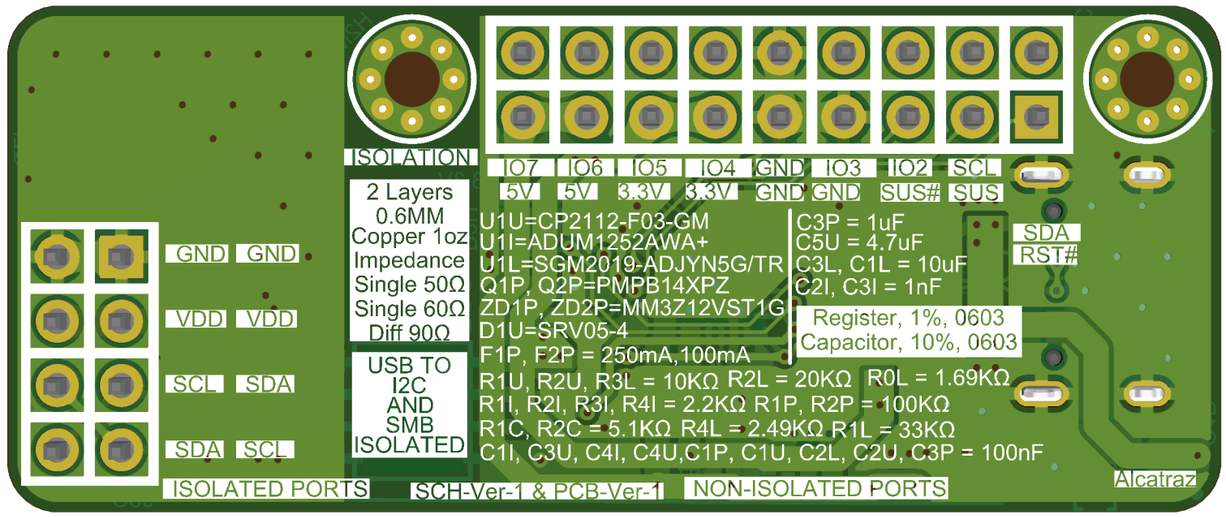


Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot (•)

Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	**Sheet** 4 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-			

[YOUR LOGO HERE]

Realistic View BOTTOM



Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
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Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	**Sheet** 5 of 9	**SW version:** 24.10.1.45	Address Line 3
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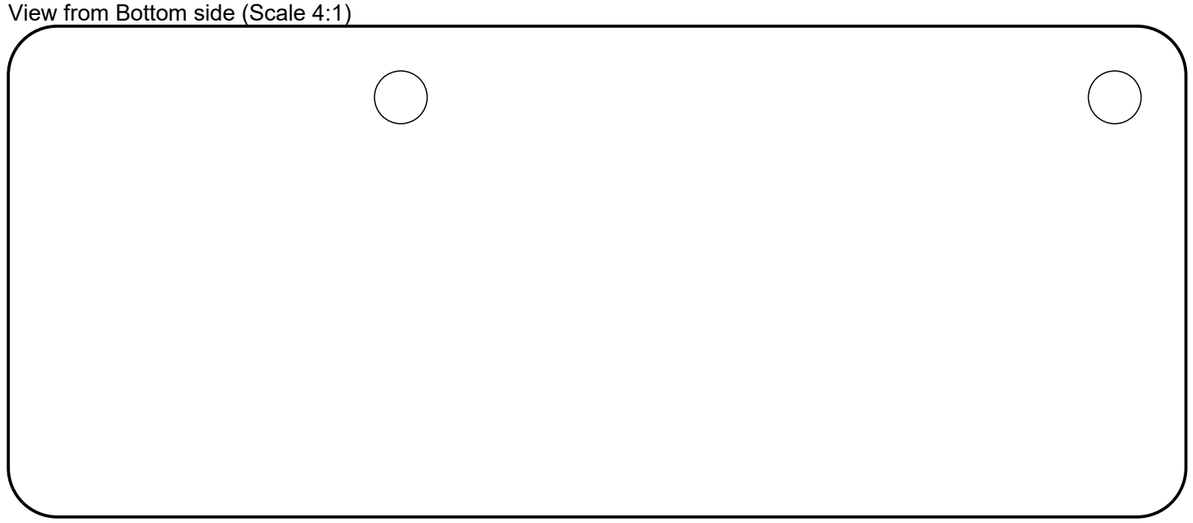
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-			

[YOUR LOGO HERE]

View from Bottom side (Scale 4:1)



DIODE ORIENTATION

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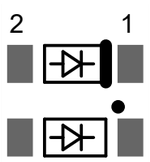
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot ( )



Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot (•)

Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
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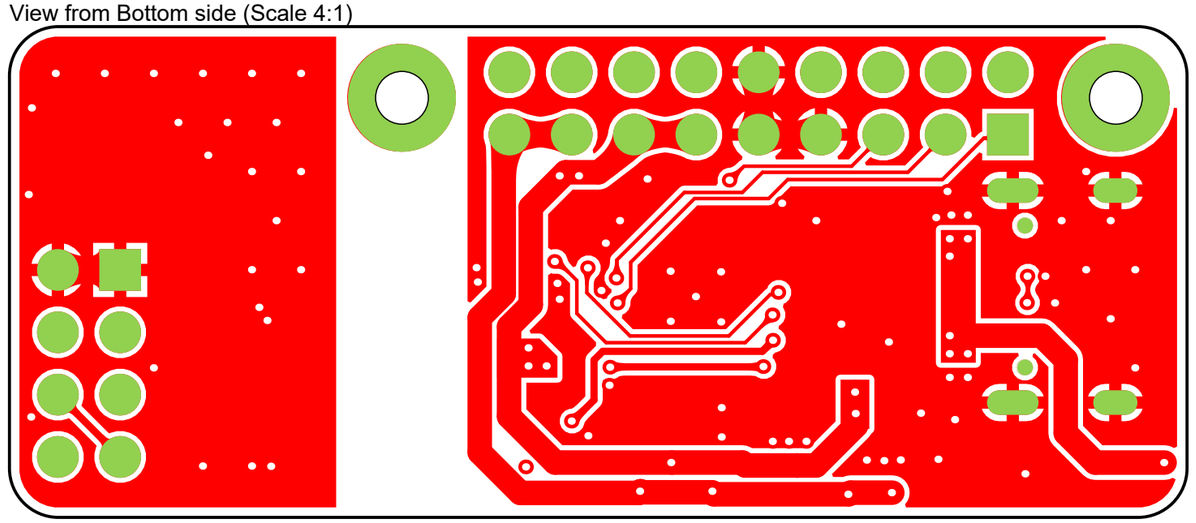
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	PMSheet 6 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4

[YOUR LOGO HERE]

File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-

View from Bottom side (Scale 4:1)



DIODE ORIENTATION

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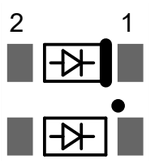
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot ( )



Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot (•)

Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
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Date: 06-12-2024 06:11	**Sheet** 7 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Devlopment\USB-SMB-ISO-CP2112\PCB_ASSEMBLY_USB-SMB-			

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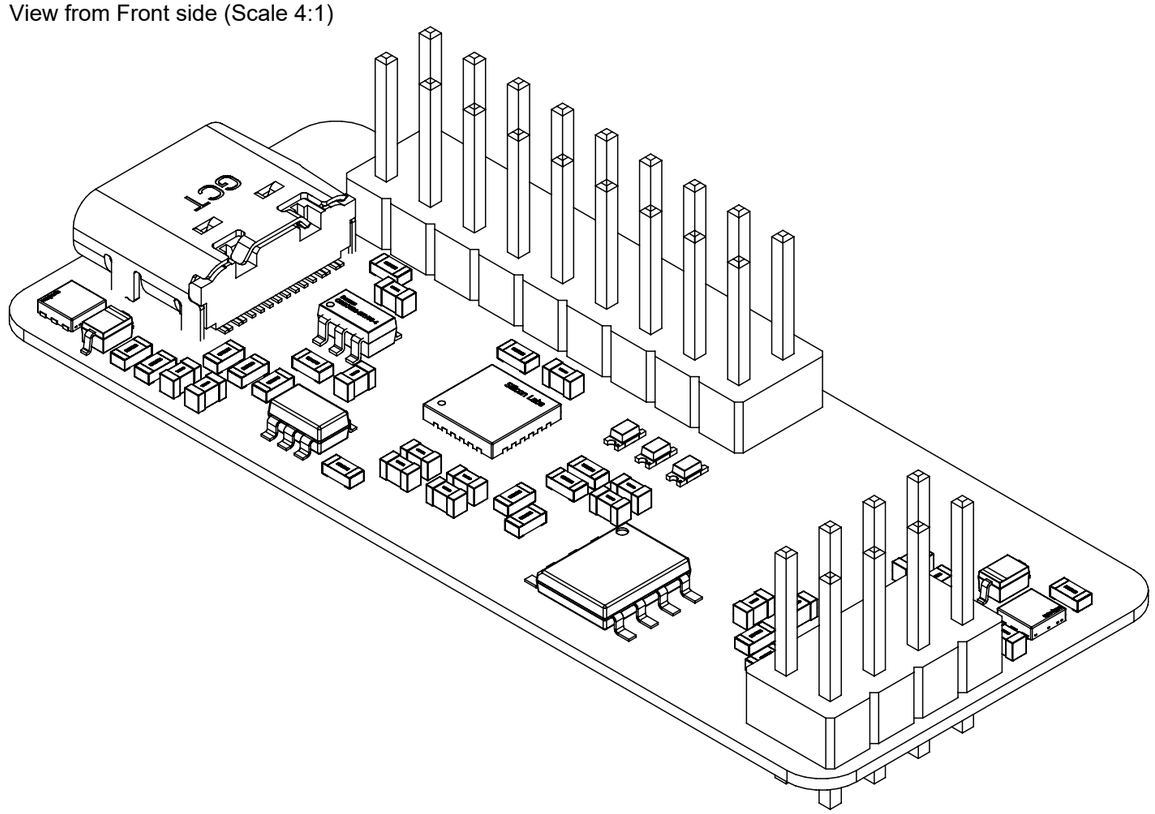
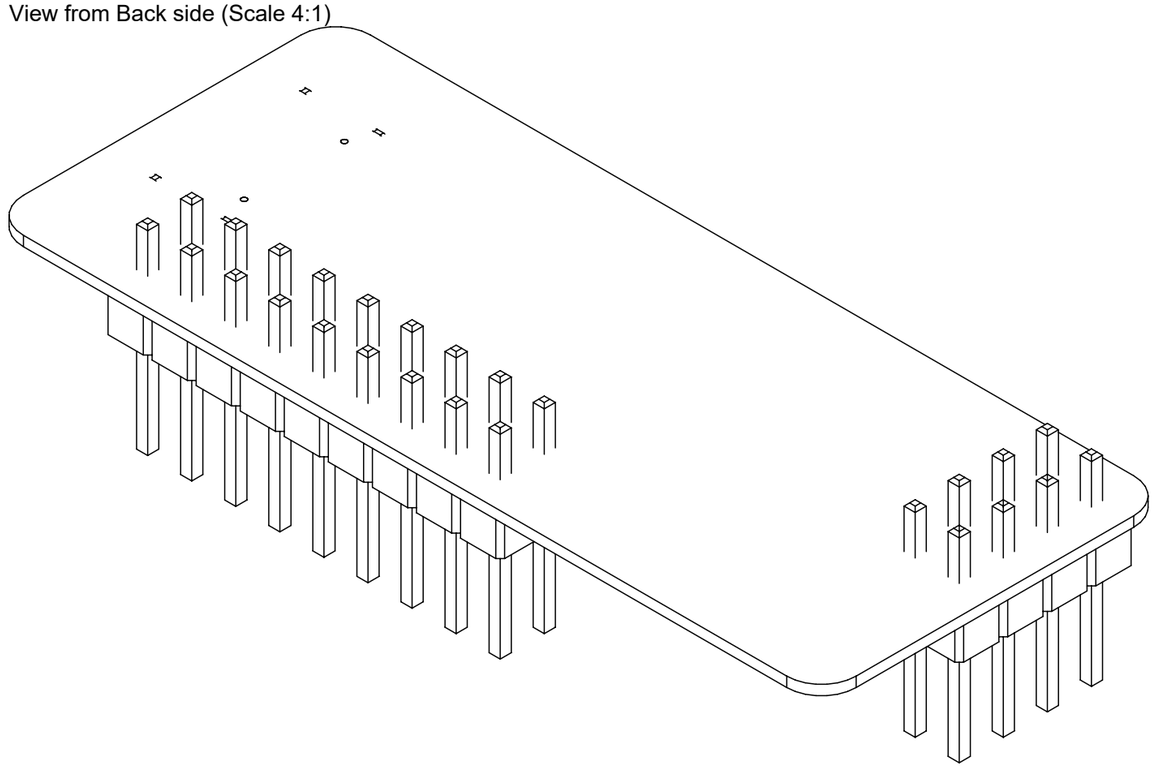
View from Front side (Scale 4:1)



View from Back side (Scale 4:1)



Title: =ProjectTitle		**Author:**	**CONFIDENTIAL**
		Approved:	**My Company**
Size: A3	**Prj:** =ProjectTitle	**Edited:** 23-11-2024	Address Line 1
Unit: mm		**Variant:** [No Variations]	Address Line 2
Date: 06-12-2024 06:11	BMSheet 8 of 9	**SW version:** 24.10.1.45	Address Line 3
Git Hash: 433 [No modification]			Address Line 4

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Bill Of Materials

Line #	Description	Designator	Quantity	Manufacturer Part Number 1	Part Number	Layer
	Cap Cer 0.1UF 6.3V X7R 0603	C1I, C3U, C4U	3	KGM15AR70J104KM		
	Multilayer Ceramic Capacitor, 10 uF, 10 V, ± 10%, X5R, 0603 [1608 Metric]	C1L	1			
	Multilayer Ceramic Capacitor, 0.1 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric]	C1P, C1U, C2L, C2U, C3P, C4I	6	C0603C104K8RAC7867		
	Cap Ceramic 0.001uF 6.3V C0G 10% SMD 0603 125°C Paper T/R	C2I	1	06036A102KAT2A		
	Ceramic Capacitor, Multilayer, Ceramic, 10V, 10% +Tol, 10% -Tol, X5R, 15% TC, 1uF, 0603	C2P	1			
	Cap Ceramic 0.001uF 10V X7R 10% SMD 0603 125°C Paper T/R	C3I	1	CC0603KRX7R6BB102		
	Multilayer Ceramic Capacitor, 10 uF, 6.3 V, ± 10%, X5R, 0603 [1608 Metric]	C3L	1	CL10A106KQ8NNNC		
	Multilayer Ceramic Capacitor, 4.7 uF, 10 V, ± 10%, X5R, 0603 [1608 Metric]	C5U	1	CL10A475KP8NNNC		
	LED 0603 YELLOW SMD	D1L	1			
	TVS DIODE 5V 15V SOT23-6	D1U	1			
	LED 0603 GREEN SMD	D2U	1			
	LED 0603 RED SMD	D3U	1			
	Fuse PPTC SMD 0603	F1P	1			
	Fuse PPTC SMD 0603	F2P	1			
	USB Connector Type C SMT 16 Pin (Power pins joints = 12 pins)	J1C	1			
		J2C	1			
		J3C	1			
	PMPB14XPZ	Q1P, Q2P	2	PMPB14XPZ		
	Surface Mount Thick Film Chip Resistor 0603 Case 1.69K Ohms 1% Tolerance 100 PPM	R0L	1	MCR03EZPFX1691		
	SMD Chip Resistor, 5.1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R1C, R2C	2	CRCW06035K10FKEA		
	SMD Chip Resistor, 2.2 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R1I, R2I, R3I, R4I	4	RC0603FR-072K2L		
	Res Thick Film 0603 33K Ohm 1% 0.1W(1/10W) ±100ppm/C Pad SMD Automotive T/R	R1L	1	ERJ-3EKF3302V		
	SMD Chip Resistor, 100 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R1P, R2P	2	AC0603FR07100KL		
	SMD Chip Resistor, 10 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R1U, R2U, R3L	3	RC0603FR-0710KL		
	SMD Chip Resistor, 20 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R2L	1	CR0603-FX-2002ELF		
	Res Thick Film 0603 2.49K Ohm 1% 1/10W ±100ppm/°C Molded SMD SMD Paper T/R	R4L	1	MCR03EZPFX2491		
	Ultra-Low Power, Bidirectional I2C Isolator with Extended VDD, Idle-Bus Hot-Swap and Low VOL	U1I	1	ADUM1252AWA+		
	LDO U-Reg Adj 0, 3A SOT23-5	U1L	1			
	IC HID USB-TO-SMBUS BRIDGE 24QFN	U1U	1			
	MM3Z12VST1G Zener Diode, 12V 2% 200 mW SMT 2-Pin SOD-323 | ON Semiconductor MM3Z12VST1G	ZD1P, ZD2P	2	MM3Z12VST1G		

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