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# Offset Attenuator Requirements

**1. CONTROLLING DOCUMENTS:**

A. FABRICATE TO THE 'PCB SPECIFICATION SELECTION' ENTERED ON THE WEBSITE.

**2. MATERIAL SUBSTITUTION:**

A. SUBSTITUTION OF STANDARD MANUFACTURER STACKUP OF INDICATED LAYER COUNT IS ACCEPTABLE.

**3. SPECIAL FEATURES**

A. NONE

Project <b>Offset Attenuator</b>		Engineer: Mathew Verian-French	
REV:		Engineer: Nicklas Koeller	
Prj:Offset_Attenuator		Engineer:	
		Units Mils	Confidential
Date:01/22/2024 14:46 of 1 Sheet		Reviewed By:	
Variant: STANDARD CONFIG		Approved By:	
File:C:\Users\Public\Documents\Altium\PCB Project\Offset Attenuator.PCBWf			



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# Offset Attenuator

## Layer Stack

Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
	Surface Material	0mil	Solder Resist	Solder Mask	GTS
Copper	M1 Top	1mil		Signal	GTL
		44mil	FR-4	Dielectric	
Copper	M4 Bottom	1mil		Signal	GBL
Surface Material	Bottom Solder	0mil	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 48mil

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		Units: Mils	Confidential
Date: 01/22/2024 24 of 48 Sheets		Reviewed By:	
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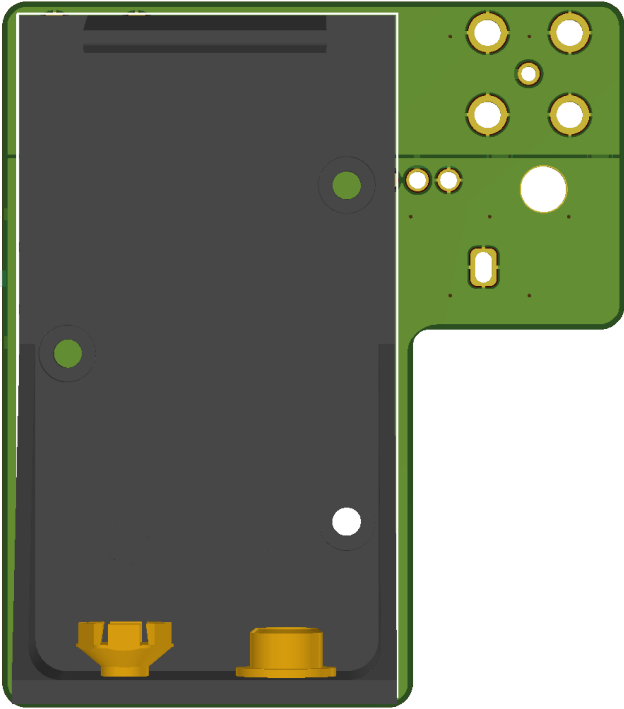
C

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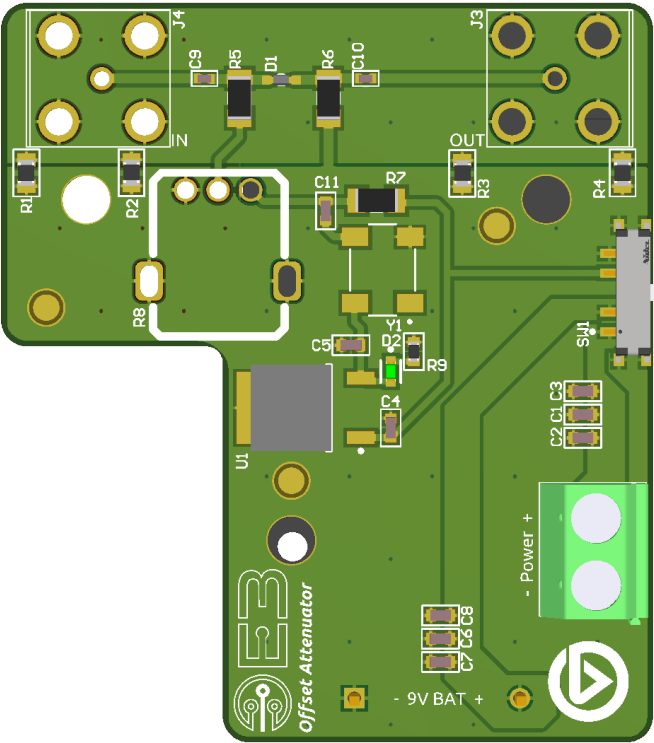
Offset Attenuator

3D Views

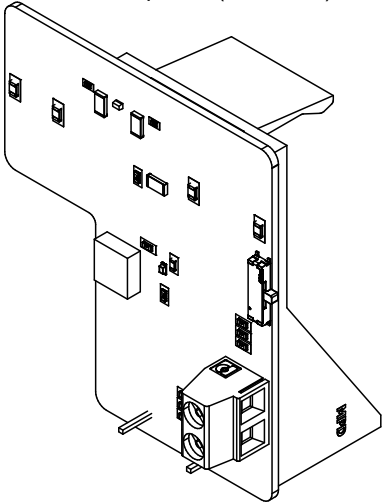
Realistic View



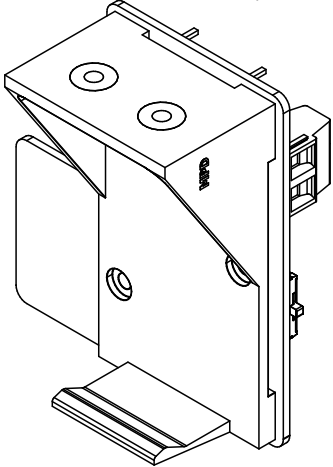
Realistic View



View from Top side (Scale 1:1)



View from Bottom side (Scale 1:1)



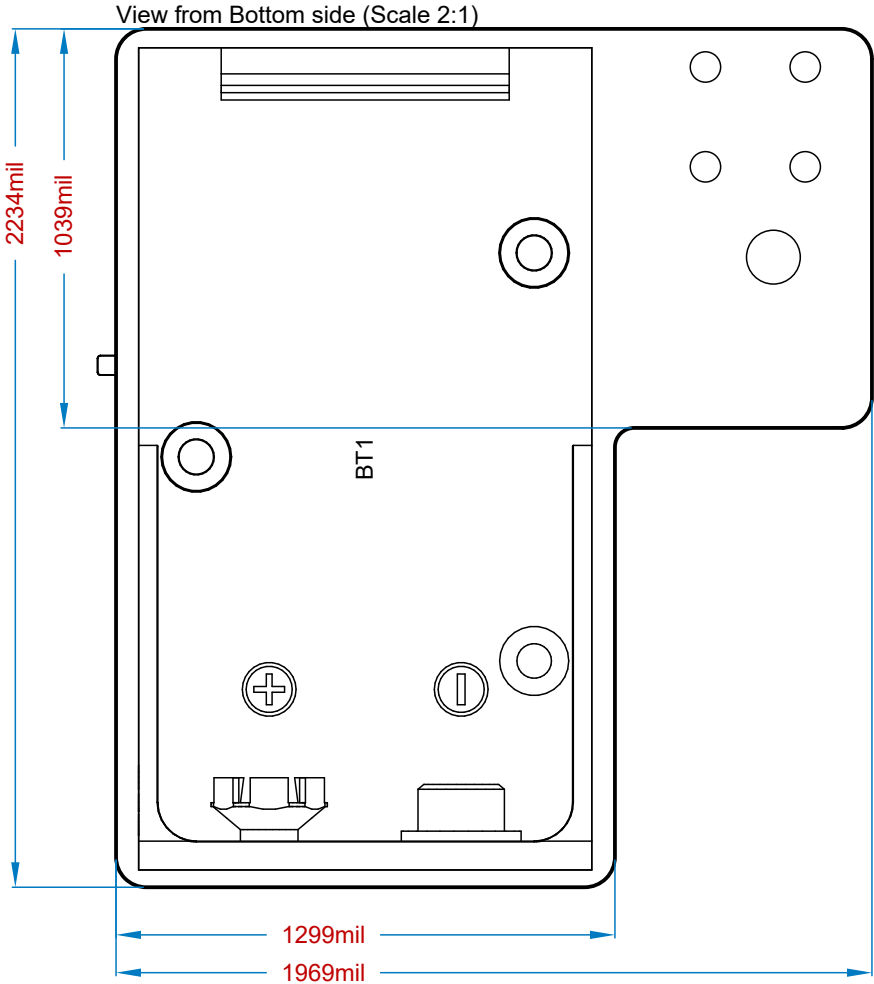
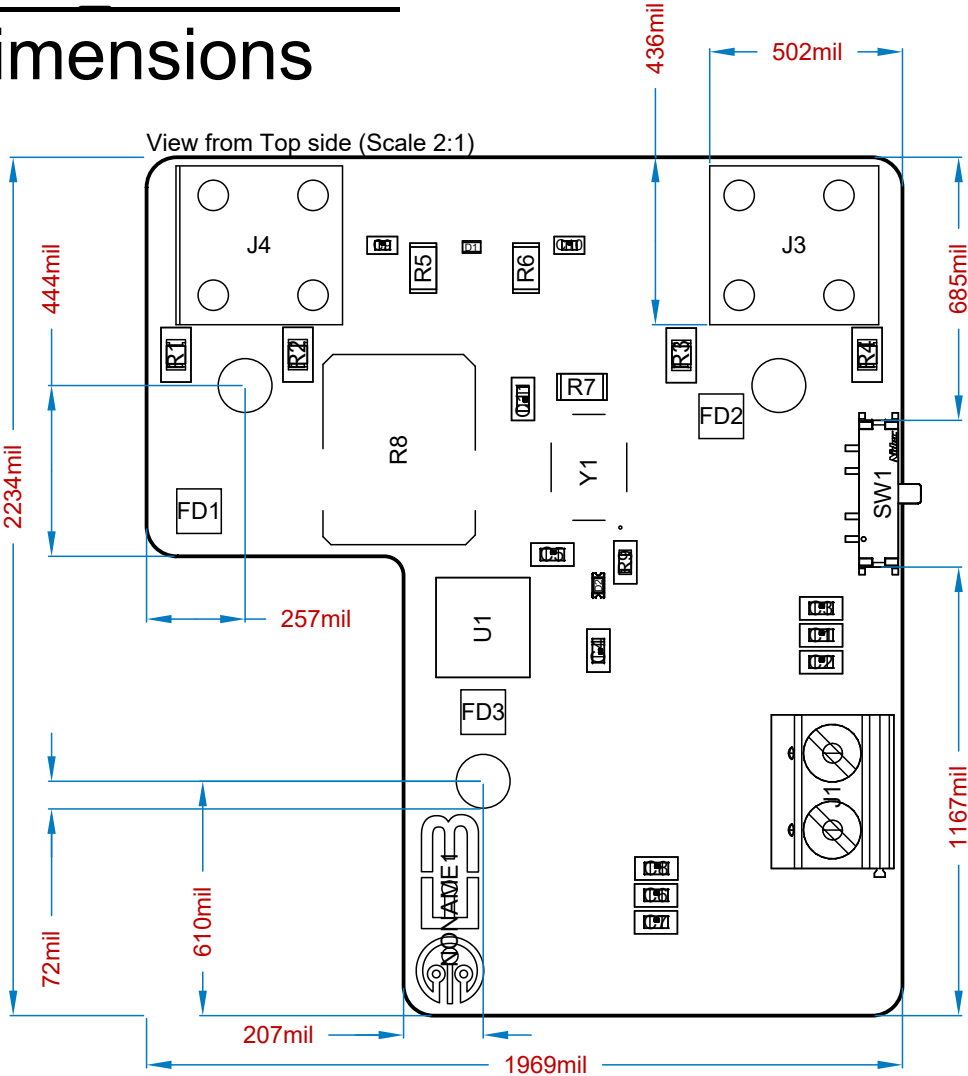
Project		<b>Offset Attenuator</b>	
REV:	Prj:Offset_Attenuator		
Date:	01/22/2024	34 of 48	Sheet 1 of 1
Variant:	STANDARD CONFIG	Edited:	01/22/2024
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Engineer:	Mathew Verian-French
Engineer:	Nicklas Koeller
Engineer:	
Units:	Mils
Reviewed By:	
Approved By:	



Offset Attenuator

Dimensions



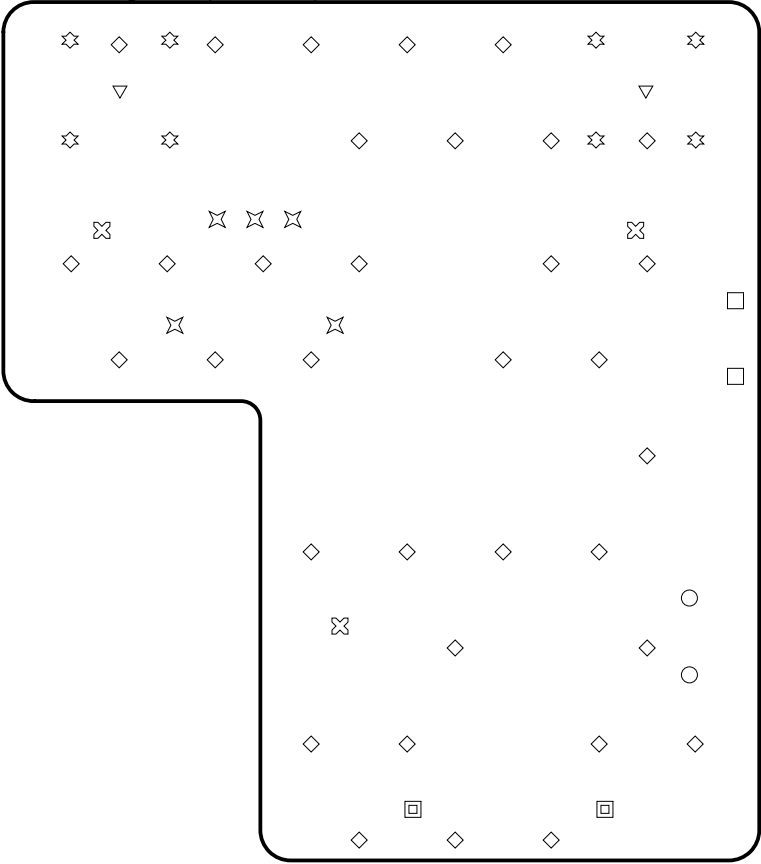
ProjectOffset Attenuator		Engineer: Mathew Verian-French	
REV:		Engineer: Nicklas Koeller	
Prj:Offset_Attenuator		Engineer:	
Date:01/22/2024 44:48 of 1 Sheets		Units:Mils	
Variant: STANDARD CONFIG		Reviewed By:	
Edited:1/22/2024		Approved By:	
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Offset Attenuator

Drill

Drill Drawing View (Scale 2:1)



Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
◇	34	12mil	Plated	
□	2	35mil	Non-Plated	
▣	2	40mil	Plated	
▽	2	46mil	Plated	
○	2	51mil	Plated	
✧	5	53mil	Plated	
☆	8	83mil	Plated	
⊠	3	144mil	Plated	
	58 Total			

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REV:		Engineer: Nicklas Koeller	
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File:C:\Users\Public\Documents\Altium\PCB Project\Offset Attenuator.PCBDwf			



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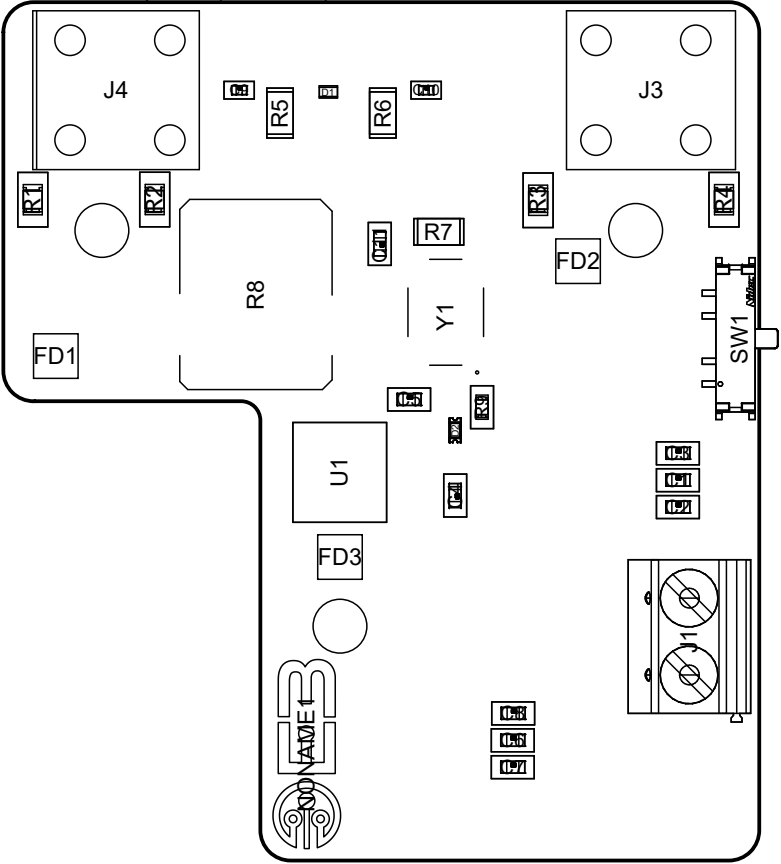
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Offset Attenuator  
Assembly Top

View from Top side (Scale 2:1)



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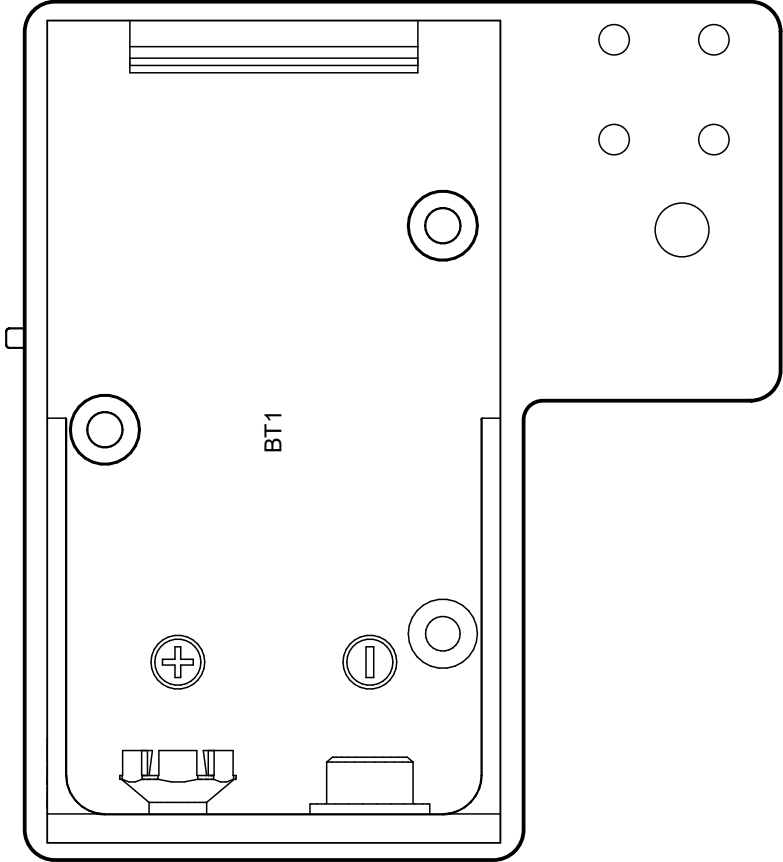
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Offset Attenuator  
Assembly Bottom

View from Bottom side (Scale 2:1)



Project		Offset Attenuator		Engineer:		Mathew Verian-French	
REV:		Prj:Offset_Attenuator		Engineer:		Nicklas Koeller	
Date:01/22/2024		74 of 74		Engineer:		Units Mils	
Variant: STANDARD CONFIG		Edited: 01/22/2024		Reviewed By:		Confidential	
File:C:\Users\Public\Documents\Altium\PCB		Project\Offset Attenuator.PCBdxf		Approved By:			



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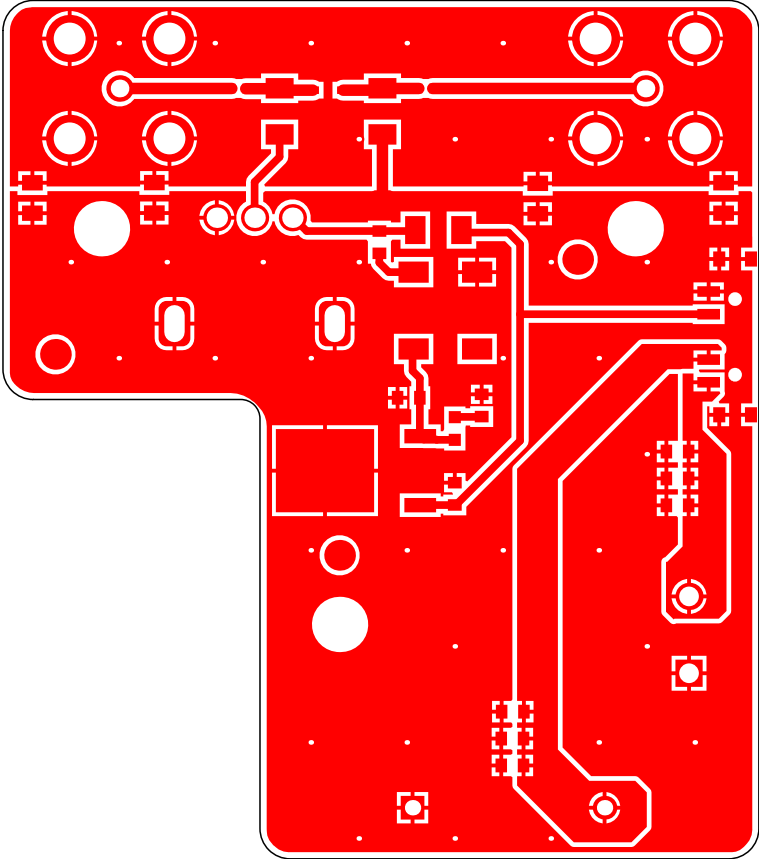
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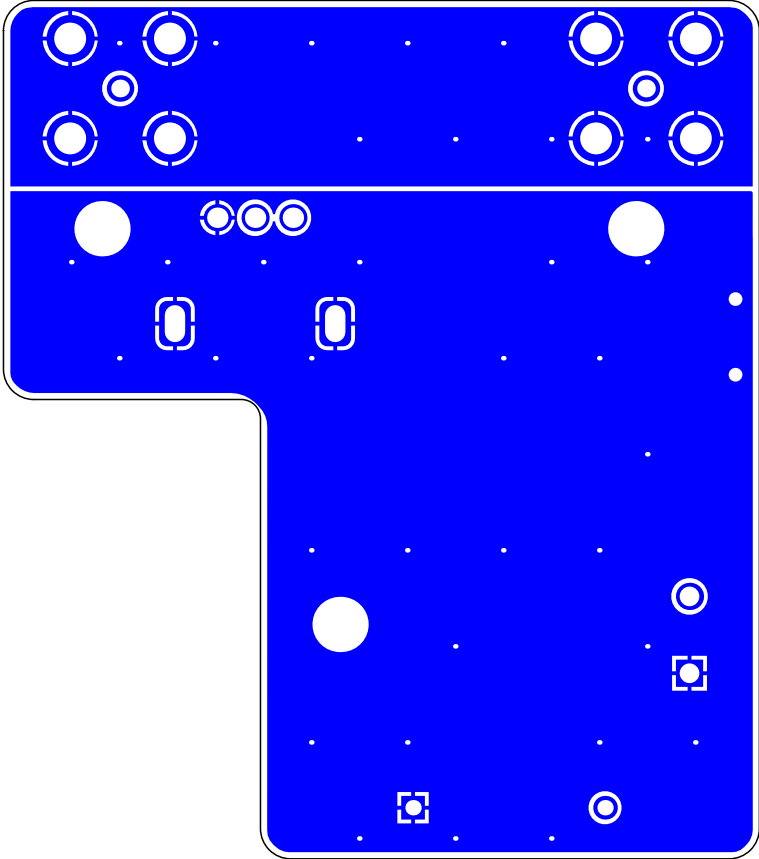
Offset Attenuator

M1 & M4

M1 Top (Scale 2:1)



M4 Bottom (Scale 2:1)



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REV:		Engineer: Nicklas Koeller	
Prj:Offset_Attenuator		Engineer:	
Date:01/22/2024 84*48 of 1 Sheet		Units:Mils	Confidential
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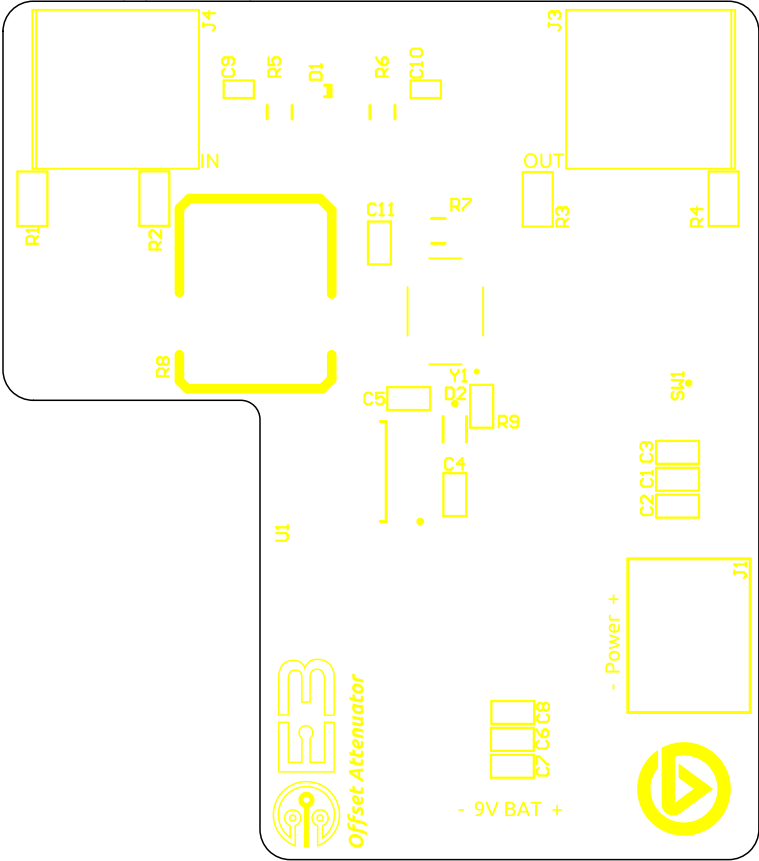




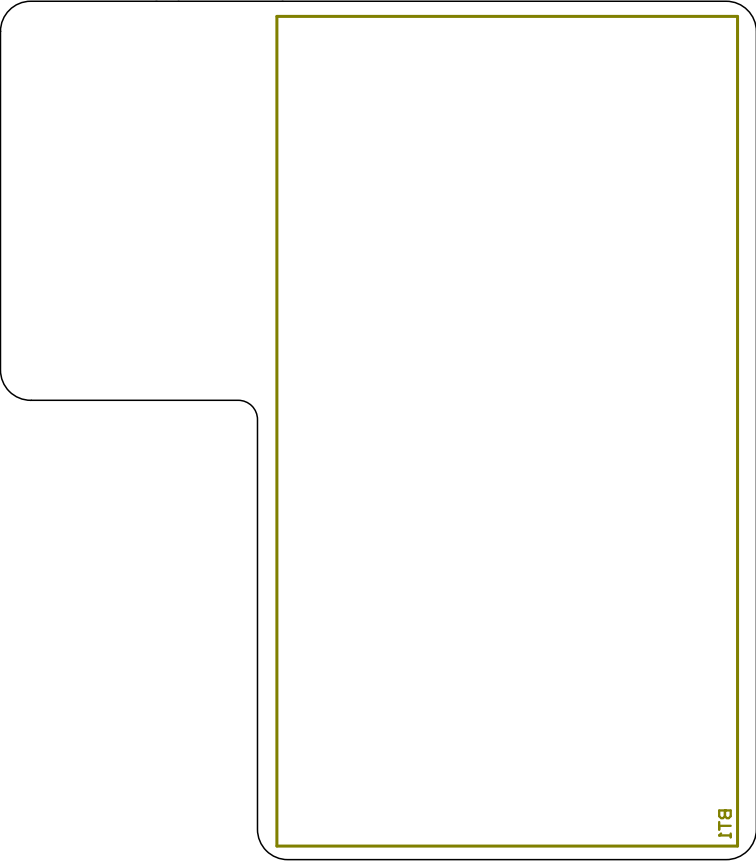
# Offset Attenuator

## Overlay

Top Overlay (Scale 2:1)



Bottom Overlay (Scale 2:1)



Project <b>Offset Attenuator</b>		Engineer: Mathew Verian-French	
REV: Prj:Offset_Attenuator		Engineer: Nicklas Koeller	
Date:01/22/2024 04:48 of 1 Sheet		Engineer: Confidantial	
Variant: STANDARD CONFIG		Units: Mils	
File:C:\Users\Public\Documents\Altium\PCB Project\Offset Attenuator.PCBDwf		Reviewed By:	
		Approved By:	



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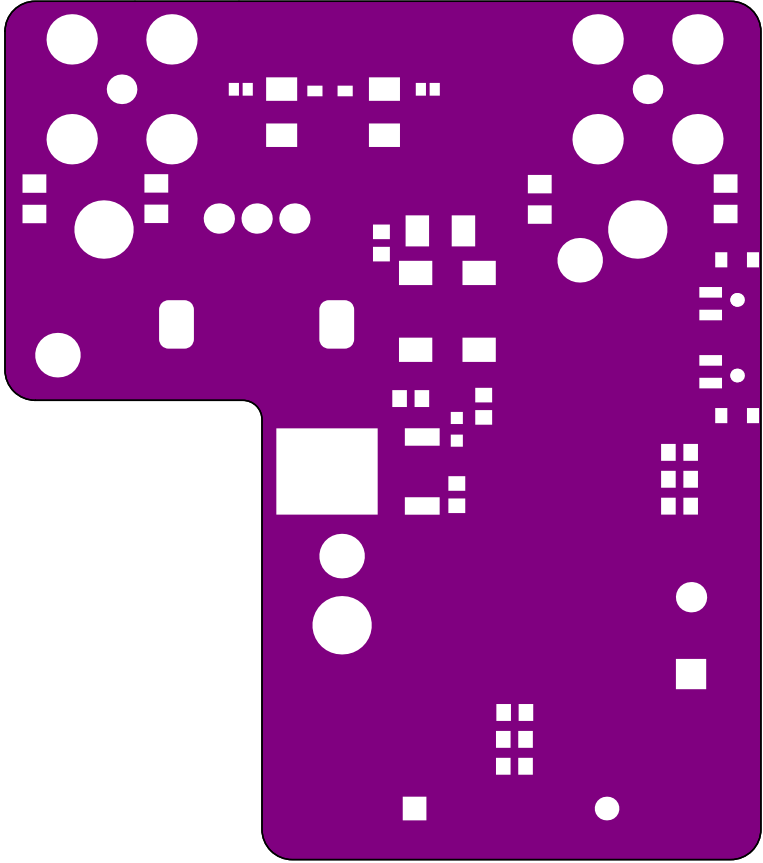
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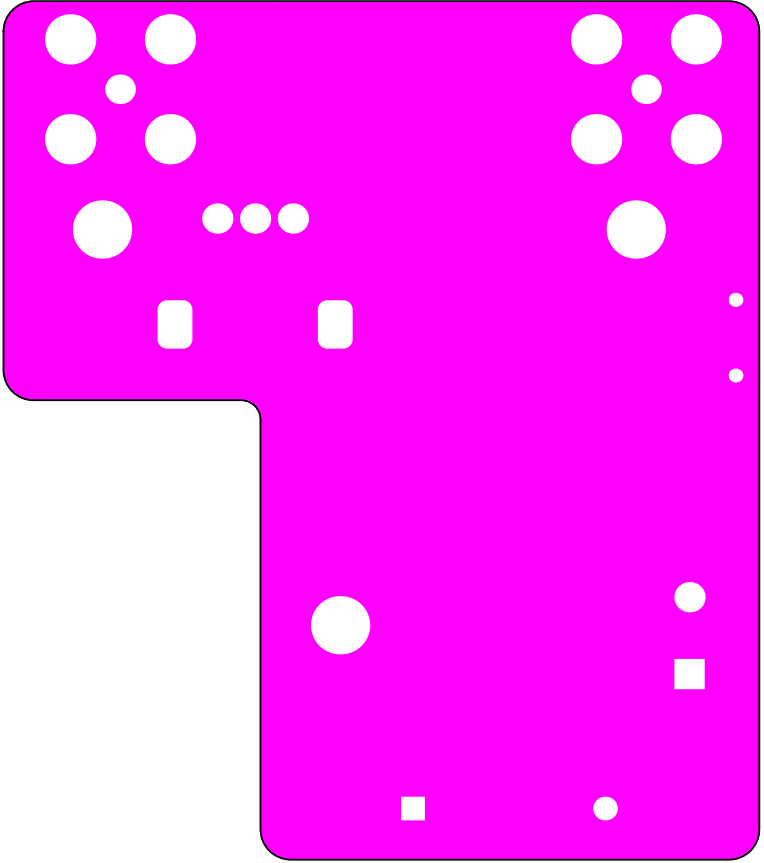
D

Offset Attenuator  
Solder Resist

Top Solder (Scale 2:1)



Bottom Solder (Scale 2:1)



Project <b>Offset Attenuator</b>		Engineer: Mathew Verian-French	
REV:		Engineer: Nicklas Koeller	
Prj:Offset_Attenuator		Engineer:	
Date:01/22/2024 10:46 of 1 Sheet		Units:Mils	Confidential
Variant:STANDARD CONFIG		Reviewed By:	
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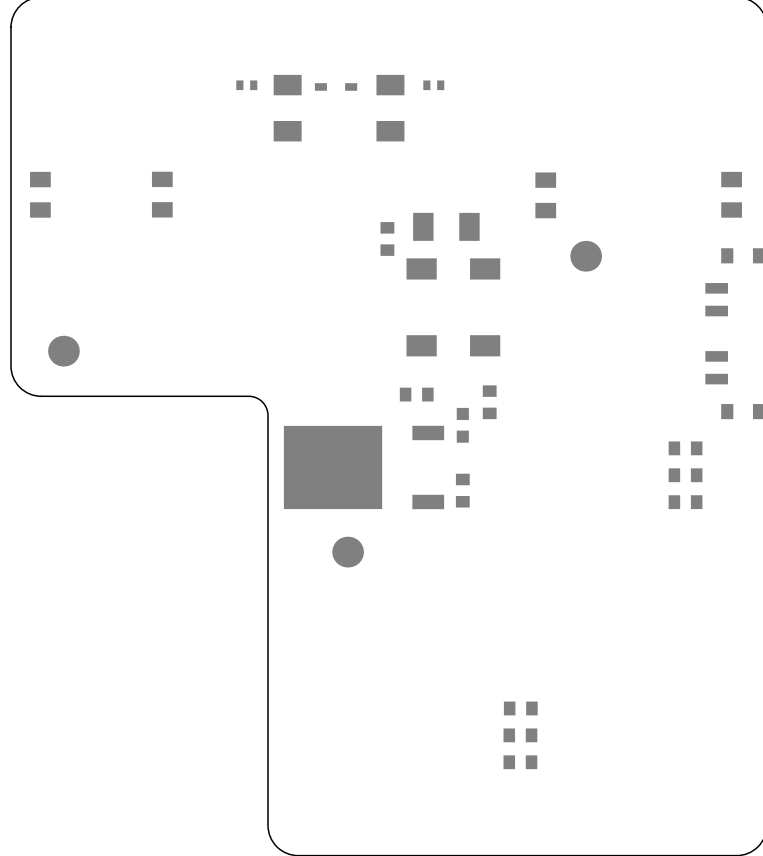
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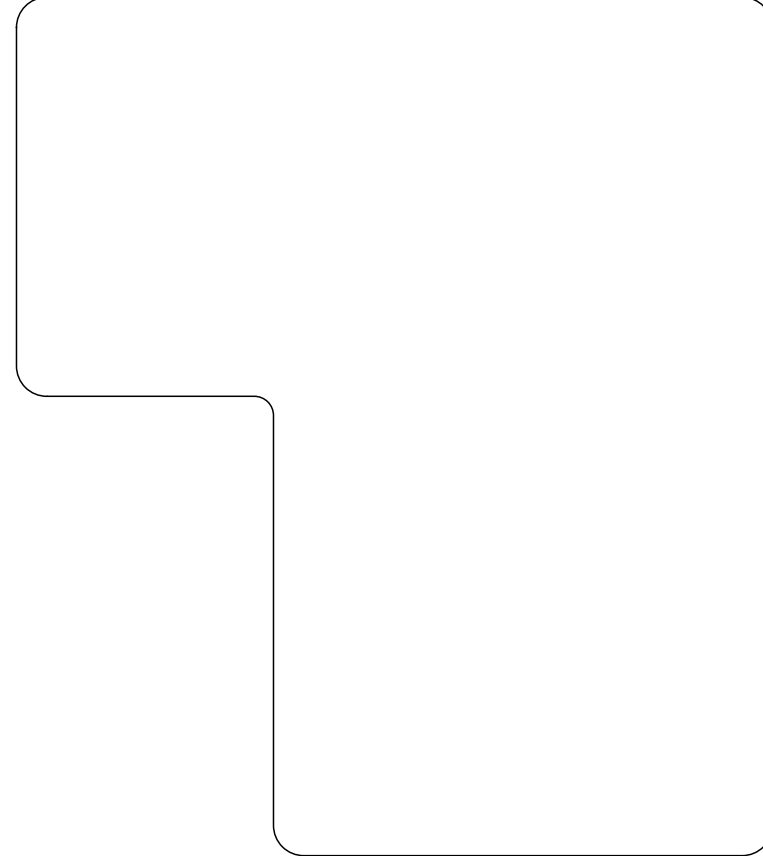
# Offset Attenuator

## Solder Paste

Top Paste (Scale 2:1)



Bottom Paste (Scale 2:1)



Project <b>Offset Attenuator</b>		Engineer: Mathew Verian-French	
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Prj:Offset_Attenuator		Engineer:	
Date:01/22/2024 11:46 of 1 Sheet		Units:Mils	Confidential
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Designator	Description	Vendor	Vendor P/N	Manufacturer	Quantity	Manufacturer P/N	Price	Value
[NoValue], R8					2			
BT1	BATTERY HOLDER 9V PC PIN			Memory Protection Devices	1			
C1, C4, C6	0603 Ceramic Chip Capacitor - Standard				3			1uF
C2, C3, C5, C7, C8	0603 Ceramic Chip Capacitor - Standard				5			0.1uF
C9, C10	0402 Ceramic Chip Capacitor - Standard				2			470pF
C11	0603 Ceramic Chip Capacitor - Standard				1			0.0047uF
D1	High Conductance Fast Switching Diode, 75 V, -55 to 150 degC, 2-Pin SOD523F, RoHS			Fairchild Semiconductor	1			
D2	LED GREEN CLEAR SMD				1			
J1	Block, Terminal; 13.5 A; 250 V; 5.08 mm; 26 to 16 AWG; 2; Screw; Solder; 4 kV				1			
J3, J4	Nickel Plating 50 Ohm Right Angle Metalized Jack PCB BNC Connector				2		None	
R1, R2, R3, R4	0805 Chip Resistor - Standard				4			0
R5, R6, R7	Chip Resistor, 0 Ohm, +/- 5%, 0.25 W, - 55 to 155 degC, 1206 (3216 Metric)				3			
R9	0603 Chip Resistor - Standard				1			150
SW1	SWITCH SLIDE SP3T 300MA 4V				1			
U1	Positive Voltage Regulator, 3-Pin DPAK, Tape and Reel				1			
Y1	SMD CLOCK OSCILLATOR				1		None	