

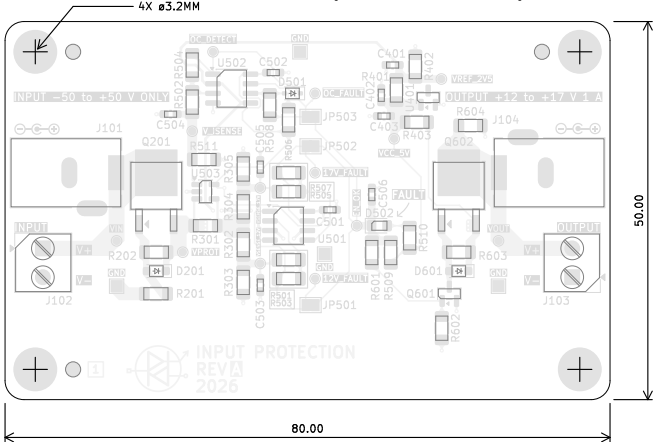
# INPUT PROTECTION Fabrication DOCUMENT

## Layer Stack Legend

	Material	Layer	Thickness	Dielectric	Type	Gerber
	F,Paste				Paste Mask	
	F,Silkscreen				Legend	GBR
	F,Mask		0,02mm	Solder Resist	Solder Mask	GBR
	Copper	L1 (Sig, PWR)	0,035mm (1,00oz)		Signal	GBR
	Core		1,48mm	FR4_7628	Dielectric	
	Copper	L2 (Sig, GND)	0,035mm (1,00oz)		Plane	GBR
	B,Mask		0,02mm	Solder Resist	Solder Mask	GBR
	B,Silkscreen				Legend	GBR
	B,Paste				Paste Mask	

Total thickness: 1,59mm  
Note: external layer thicknesses are specified after plating

## Top Fabrication (Scale 1:1)



### FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED)

- 1) FABRICATE PER IPC-6012A CLASS 2.
- 2) OUTLINE DEFINED IN SEPARATE GERBER FILE WITH "Edge\_Cuts.GBR" SUFFIX.
- 3) SEE SEPARATE DRILL FILES WITH ".DRL" SUFFIX FOR HOLE LOCATIONS.
- 4) SURFACE FINISH: HAL LEAD-FREE
- 5) SOLDERMASK ON BOTH SIDES OF THE BOARD SHALL BE LPI, COLOR GREEN.
- 6) SILK SCREEN LEGEND TO BE APPLIED PER LAYER STACKUP USING WHITE NON-CONDUCTIVE EPOXY INK.
- 7) VENDOR SHOULD FOLLOW ROHS COMPLIANT PROCESS AND Pb FREE FOR MANUFACTURING
- 8) PCB MATERIAL REQUIREMENTS:
  - A. FLAMMABILITY RATING MUST MEET OR EXCEED UL94V-0 REQUIREMENTS.
  - B. Tg 170 C OR EQUIVALENT.
  - C. EQUIVALENT MATERIAL SHALL BE RoHS COMPLIANT. HALOGEN FREE AND APPROVED BY UNIVERSITY OF NEWCASTLE.
- 9) DESIGN GEOMETRY MINIMUM FEATURE SIZES:

BOARD SIZE	80.000 x 50.000 mm
BOARD THICKNESS	1.590 mm
TRACE WIDTH	0.200 mm
TRACE TO TRACE	-0.000 mm
MIN. HOLE (PTH)	0.250 mm
MIN. HOLE (NPTH)	N/A mm
ANNULAR RING	0.150 mm
COPPER TO HOLE	0.254 mm
COPPER TO EDGE	0.250 mm
HOLE TO HOLE	0.254 mm

All dimensions are in millimeters unless otherwise specified.

PROJECT  
ASSIGNMENT 1

DRN  
2024-04-13 R. HICKS  
CHK

ENG APP

MFR APP

SHEET PATH

FILENAME Input-Protection.kicad\_pcb



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GIT HASH

3eaf265

DRAWING No

Fabrication

A4

VARIANT

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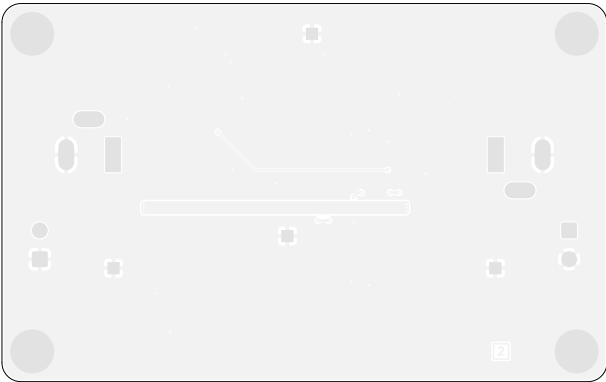
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SHEET


1 OF 7

INPUT PROTECTION Fabrication DOCUMENT

Bottom Fabrication (Scale 1:1)



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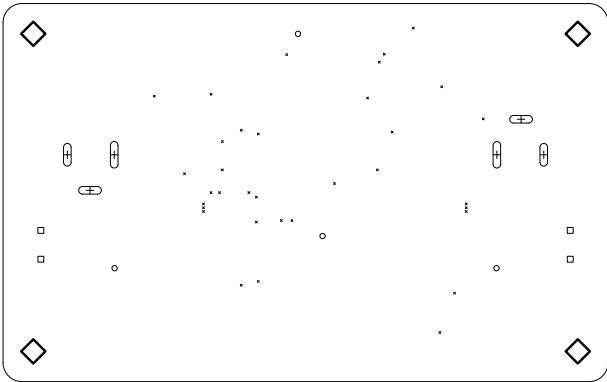
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			SHEET 2 OF 7	

# INPUT PROTECTION Fabrication DOCUMENT

Drill Table

Symbol	Count	Hole Size	Plated	Hole Shape	Drill Layer Pair	Hole Type
×	34	0,25mm (9,84mils)	PTH	Round	L1 (Sig, PWR) - L2 (Sig, GND)	Via
○	4	0,70mm (27,56mils)	PTH	Round	L1 (Sig, PWR) - L2 (Sig, GND)	Pad
+	6	1,00mm (39,37mils)	PTH	Slot	L1 (Sig, PWR) - L2 (Sig, GND)	Pad
□	4	1,10mm (43,31mils)	PTH	Round	L1 (Sig, PWR) - L2 (Sig, GND)	Pad
◇	4	3,20mm (125,98mils)	PTH	Round	L1 (Sig, PWR) - L2 (Sig, GND)	Pad
Total 52						

Drill Drawing L1 – L2 (Scale 1:1)



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**A**

**B**

**D**

A

**B**

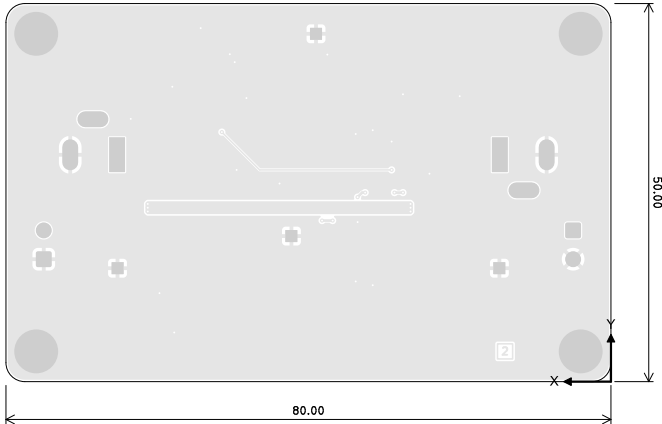
Q

**E**

INPUT PROTECTION Fabrication DOCUMENT

Bottom Test Points (Scale 1:1)

Ref.	Net	X [mm]	Y [mm]
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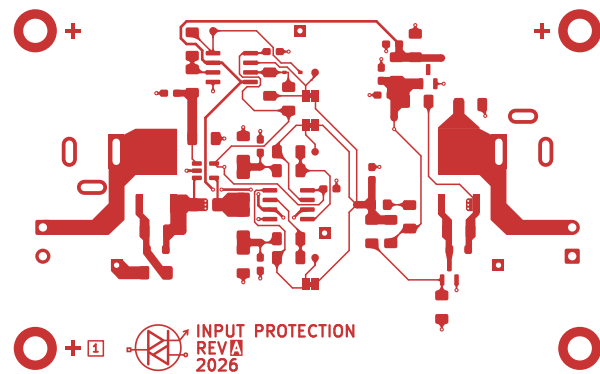
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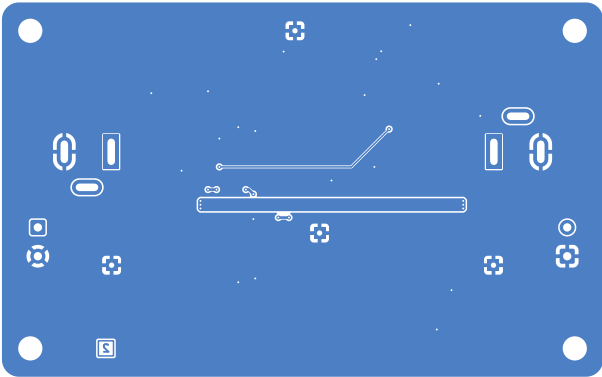
L1 (Sig, PWR) (Scale 1:1)




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MFR APP						
SHEET PATH	GIT HASH	DRAWING No		A4		
	3eaf265	Fabrication				
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L2 (Sig. GND) (Scale 1:1)



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ENG APP					
MFR APP					
SHEET PATH		GIT HASH 3eaf265	DRAWING No Fabrication		A4
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