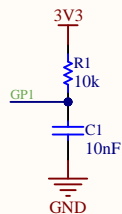
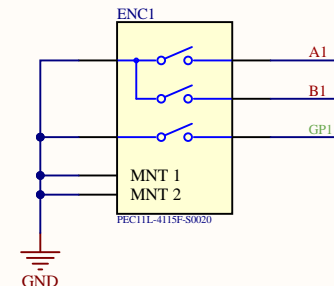
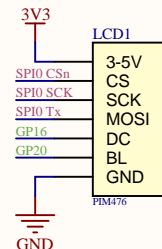
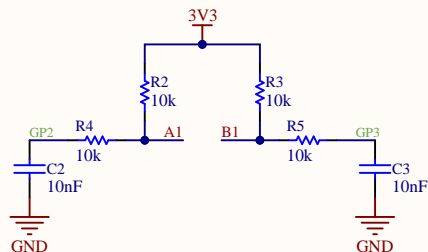




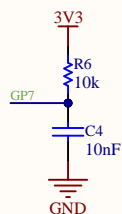
Front Panel Filtered Tactile Output



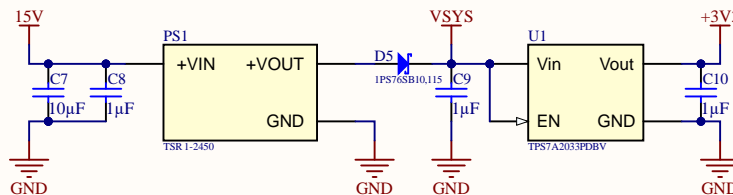
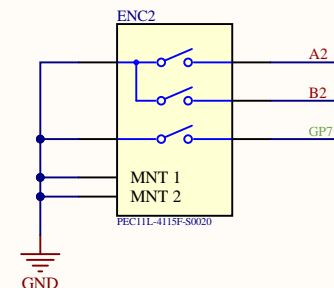
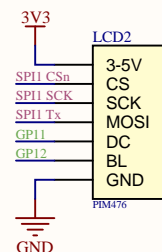
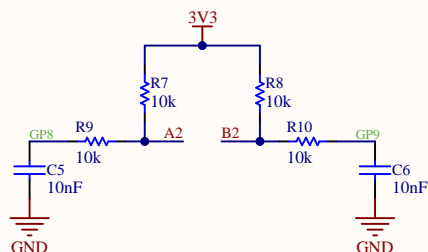
Front Panel Filtered Encoder A/B Output



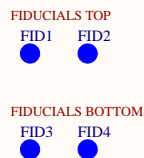
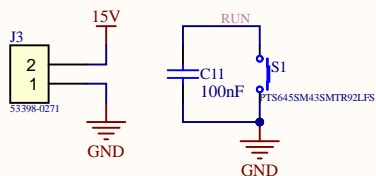
Front Panel Filtered Tactile Output



Front Panel Filtered Encoder A/B Output



Processor Reset Tactile Switch



## Base Functions

FILE BaseFunctions.SchDoc

REVISION \*

VARIANT [No Variations]

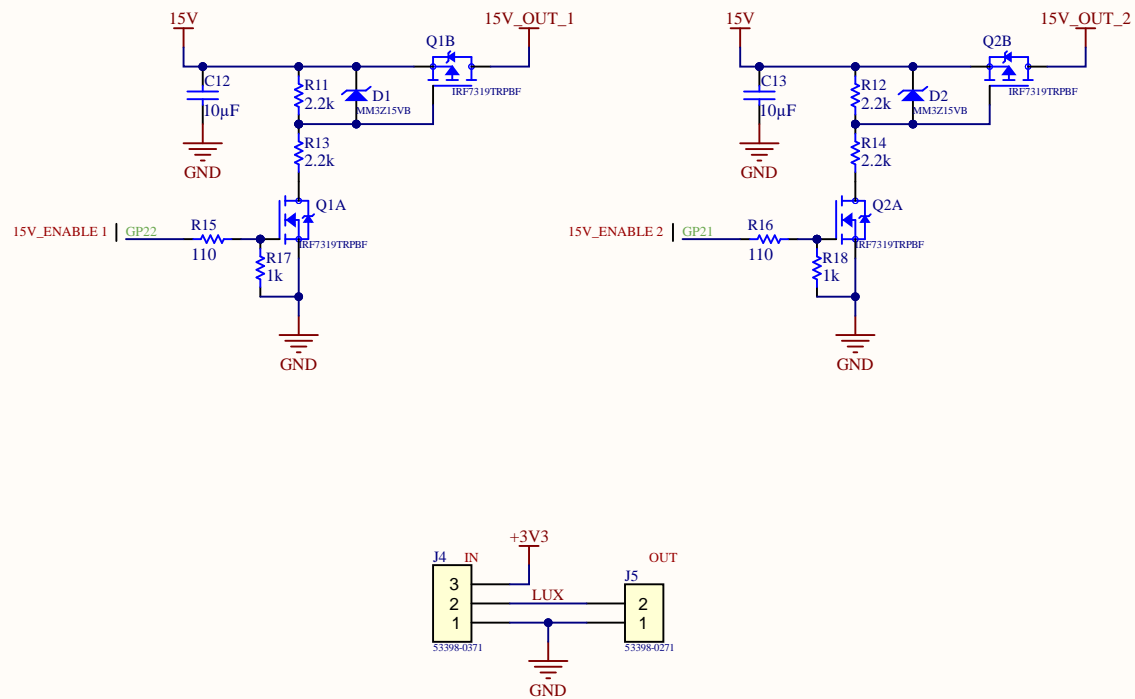
DATE 02/08/2023

SHEET 2 / 4

PROJECT Dual PMT Controller

SIZE A4





## Interlock Power Control

FILE InterlockControl.SchDoc

REVISION \*

VARIANT [No Variations]

DATE 02/08/2023

SHEET 3/4

PROJECT Dual PMT Controller

SIZE A4



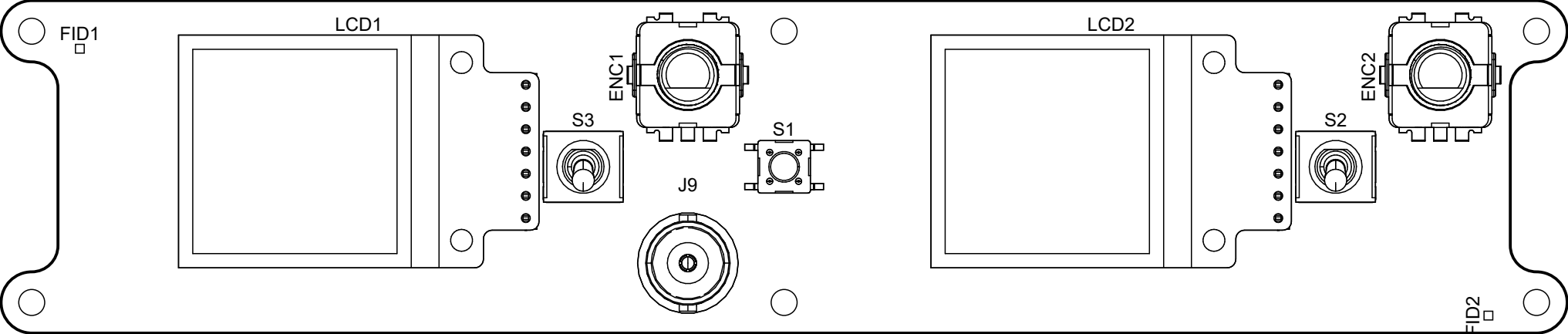
Sainsbury Wellcome Centre



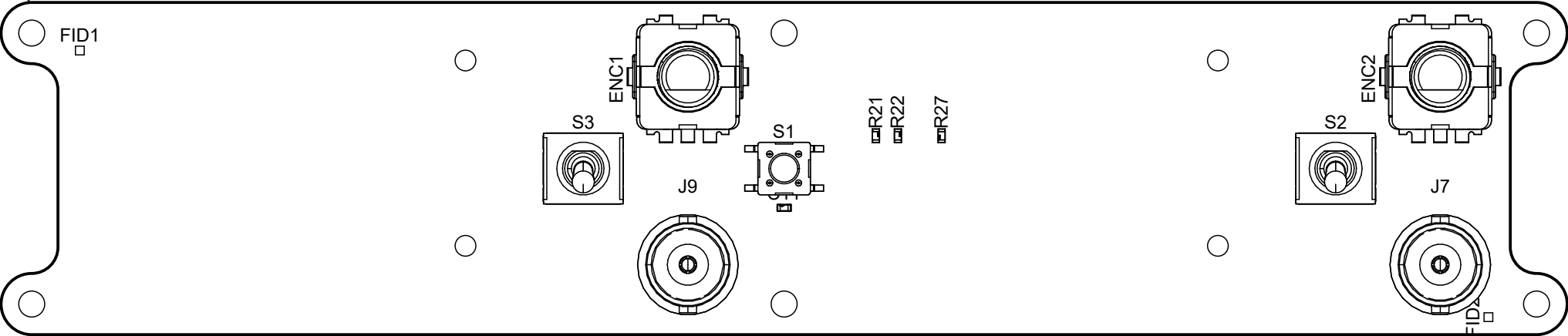
Bill Of Materials (Top)

Line #	Designator	Comment	Quantity
4	C11	C0603-100nF-100V-10%-X7R	1
8	ENC1, ENC2	PEC11L-4115F-S0020	2
14	J7, J9	112515	2
18	R21, R22	R0603-10k-1/16W-0.1%	2
21	R27	R0603-1k-1/16W-0.1%	1
25	S1	PTS645SM43SMTR92LFS	1
26	S2, S3	T201MH9CBE	2

Top side with LCD



Top side without LCD



Dual PMT Controller

VARIANT [No Variations]

FILE Assembly.PCBDwf

APPR \*

PROJECT Dual PMT Controller

REVISION 1

SHEET 1 / 2

SIZE A4

SCALE 3:2

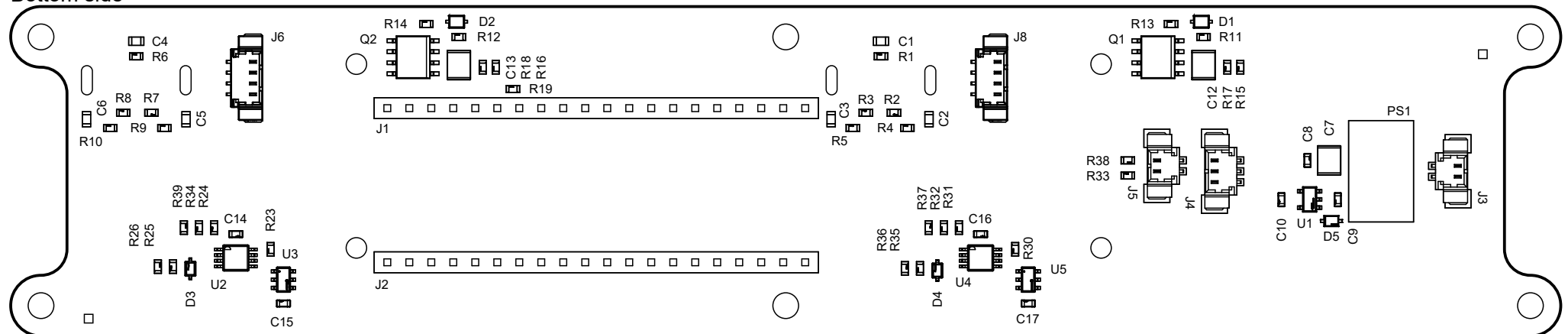
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Sainsbury Wellcome Centre  
25 Howland Street  
London  
W1T 4JG  
[www.sainsburywellcome.org](http://www.sainsburywellcome.org)



# Bill Of Materials (Bottom)

Line #	Designator	Comment	Quantity
1	C1, C2, C3, C4, C5, C6	C0603-10nF-100V-10%-X7R	6
2	C7, C12, C13	C1210-10uF-50V-10%-X7R	3
3	C8, C9, C10	C0603-1uF-25V-10%-X7R	3
4	C14, C15, C16, C17	C0603-100nF-100V-10%-X7R	4
5	D1, D2	MM3Z15VB	2
6	D3, D4	PESD5V0S1BA,115	2
7	D5	1PS76SB10,115	1
9	J1	SSW-120-01-x-S	1
10	J2	SSW-120-01-x-S - 21-40	1
11	J3, J5	53398-0271	2
12	J4	53398-0371	1
13	J6, J8	53398-0471	2
16	PS1	TSR 1-2450	1
17	Q1, Q2	IRF7319TRPBF	2
18	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R26, R36	R0603-10k-1/16W-0.1%	12
19	R11, R12, R13, R14	R0603-2k2-1/16W-0.1%	4
20	R15, R16	R0603-110R-1/16W-0.1%	2
21	R17, R18, R19, R25, R35	R0603-1k-1/16W-0.1%	5
22	R23, R24, R30, R31	R0603-150R-1/16W-0.1%	4
23	R32, R33, R34	R0603-22k6-1/16W-0.1%	3
24	R37, R38, R39	R0603-27k4-1/16W-0.1%	3
27	U1	TPS7A2033PDBV	1
28	U2, U4	OPA2353EA/250	2
29	U3, U5	MCP4725A0T-E/CH	2

Bottom side



## Dual PMT Controller

VARIANT [No Variations]

FILE Assembly.PCBDwf

APPR \*

PROJECT Dual PMT Controller

REVISION 1

SHEET 2 / 2

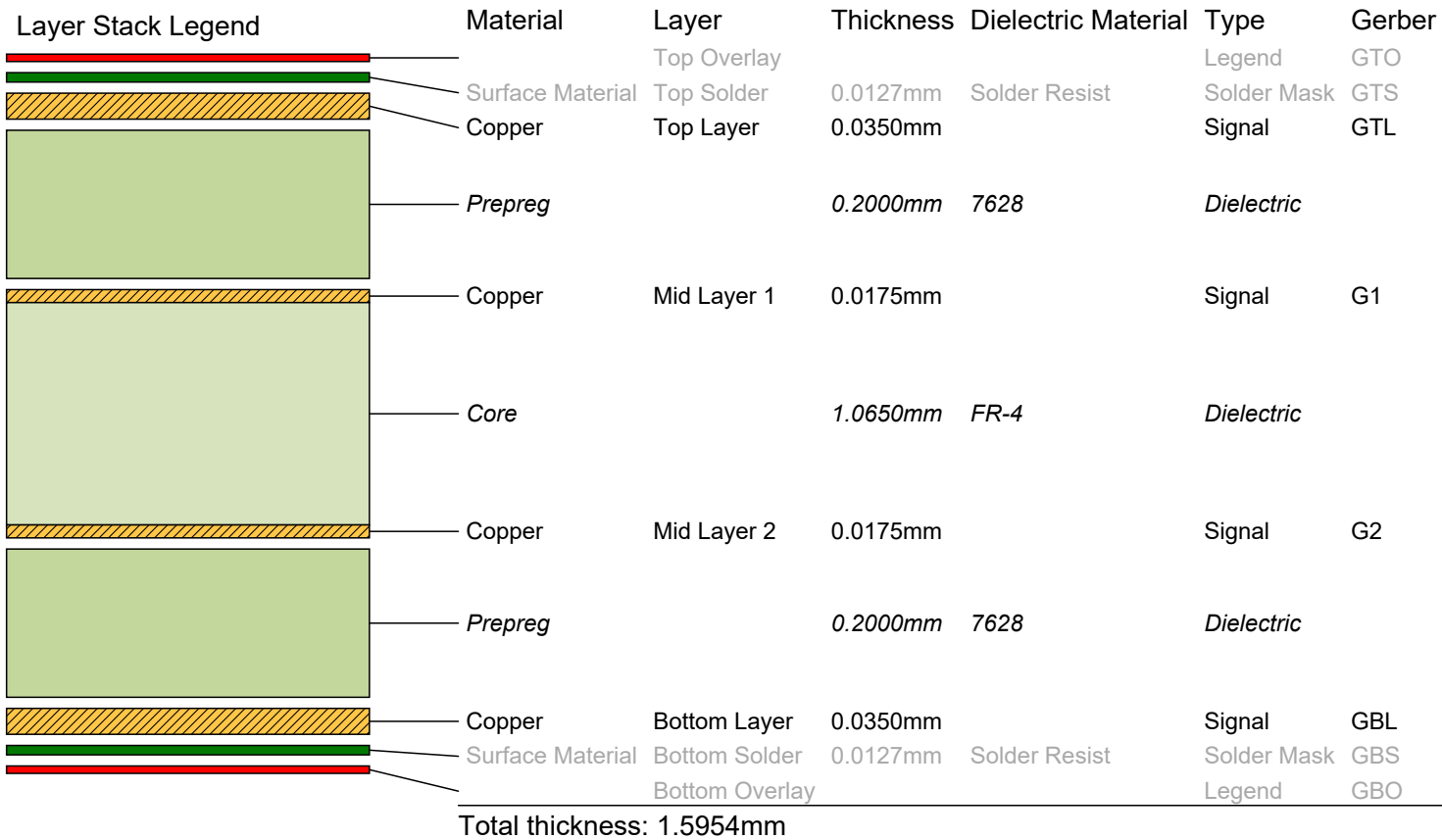
DATE 18/07/2023

SIZE A4

SCALE 3:2



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Dual PMT Controller

VARIANT [No Variations]

FILE Fabrication.PCBDwf

APPR \*

PROJECT Dual PMT Controller

REVISION 1

SHEET 1 / 2

SIZE A4

SCALE 5:2

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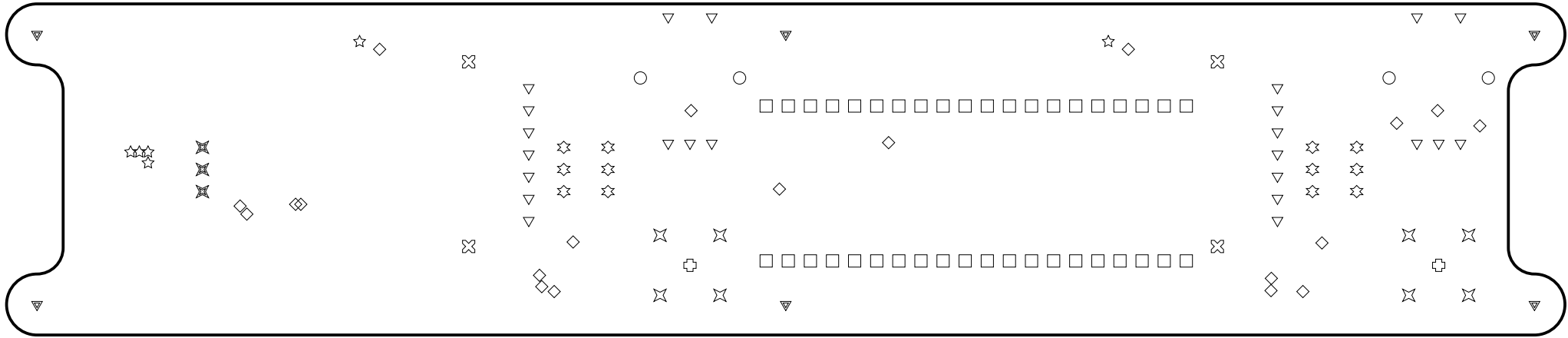



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Drill Table (Top - Bot)

Symbol	Count	Hole Size	Plated	Hole Tolerance
◇	20	0.3000mm	Plated	
☆	6	0.4000mm	Plated	
✕	3	0.8500mm	Plated	
⊕	2	0.9906mm	Plated	
▽	24	1.0000mm	Plated	
□	40	1.0400mm	Plated	
☆	12	1.0900mm	Plated	
✕	8	1.4986mm	Plated	
✕	4	2.5000mm	Non-Plated	
▽	6	3.1000mm	Non-Plated	
○	4	3.5000mm	Plated	
	129 Total			

Drill Drawing View (Top - Bot)



Dual PMT Controller			 <b>Sainsbury Wellcome Centre</b>
VARIANT [No Variations]		REVISION 1	
FILE Fabrication.PCBDwf		SHEET 2 / 2	
APPR *	DATE 18/07/2023	SIZE A4	
PROJECT Dual PMT Controller		SCALE 3:2	