

Diagram illustrating the connection between two sets of input/output (I/O) blocks, labeled SiPM0 and SiPM1, and a series of output blocks labeled B0 through B7.

SiPM0 and SiPM1 Connections:

- SiPM0:** A vertical column of 32 input/output blocks, labeled A through K, connected to a central block labeled SiPMx16.
- SiPM1:** A vertical column of 32 input/output blocks, labeled A through K, connected to a central block labeled SiPMx16.

Output Blocks (B0-B7):

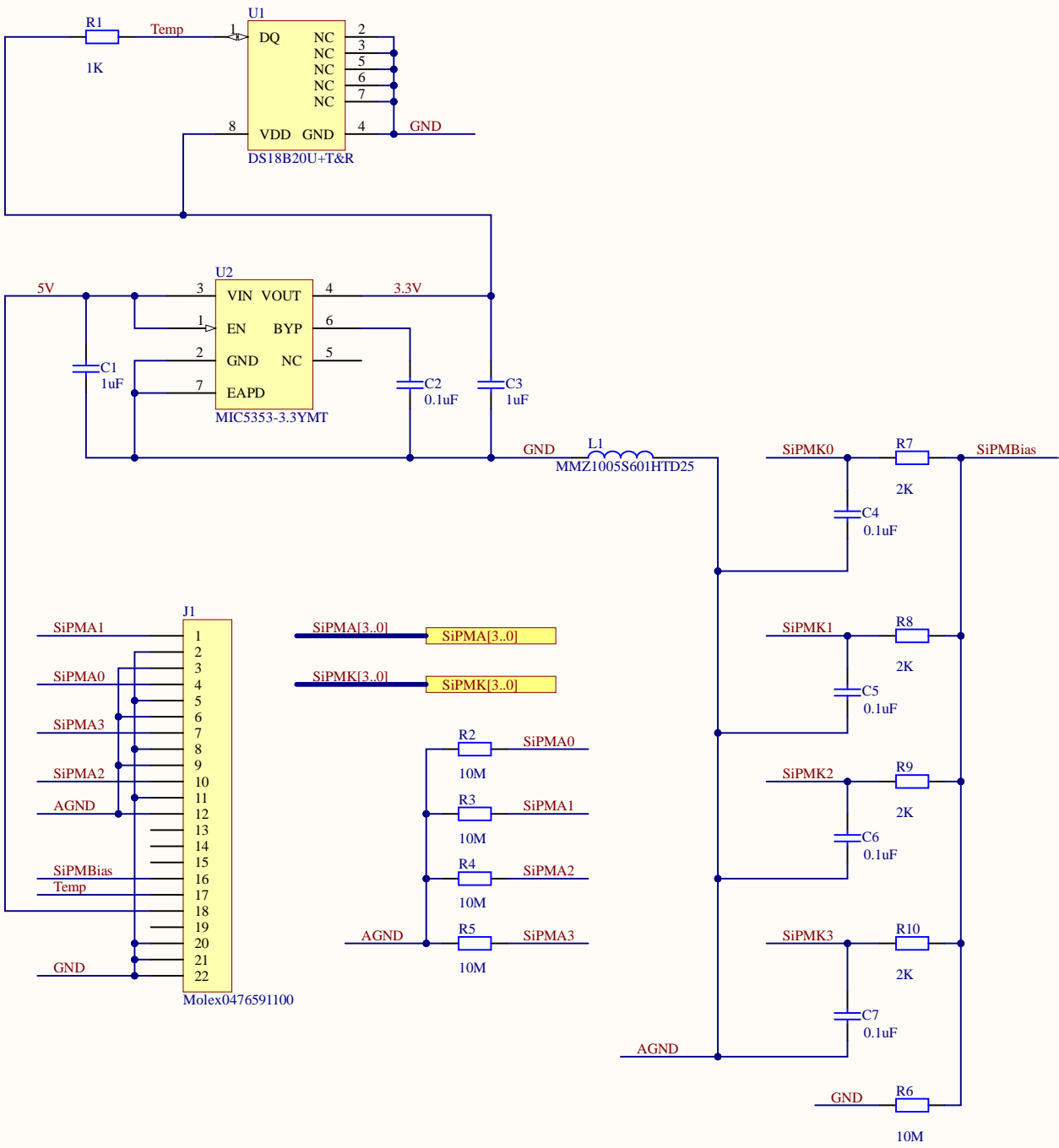
- B0:** CMB_block.SchDoc. Inputs: SiPMA[3..0], SiPMK[3..0].
- B1:** CMB_block.SchDoc. Inputs: SiPMA[7..4], SiPMK[7..4].
- B2:** CMB_block.SchDoc. Inputs: SiPMA[11..8], SiPMK[11..8].
- B3:** CMB_block.SchDoc. Inputs: SiPMA[15..12], SiPMK[15..12].
- B4:** CMB_block.SchDoc. Inputs: SiPMA[19..16], SiPMK[19..16].
- B5:** CMB_block.SchDoc. Inputs: SiPMA[23..20], SiPMK[23..20].
- B6:** CMB_block.SchDoc. Inputs: SiPMA[27..24], SiPMK[27..24].
- B7:** CMB_block.SchDoc. Inputs: SiPMA[31..28], SiPMK[31..28].

Legend:

- SiPMA: Input/output block (yellow).
- SiPMK: Input/output block (yellow).
- SiPMx16: Central input/output block (yellow).
- B0-B7: Output blocks (green).

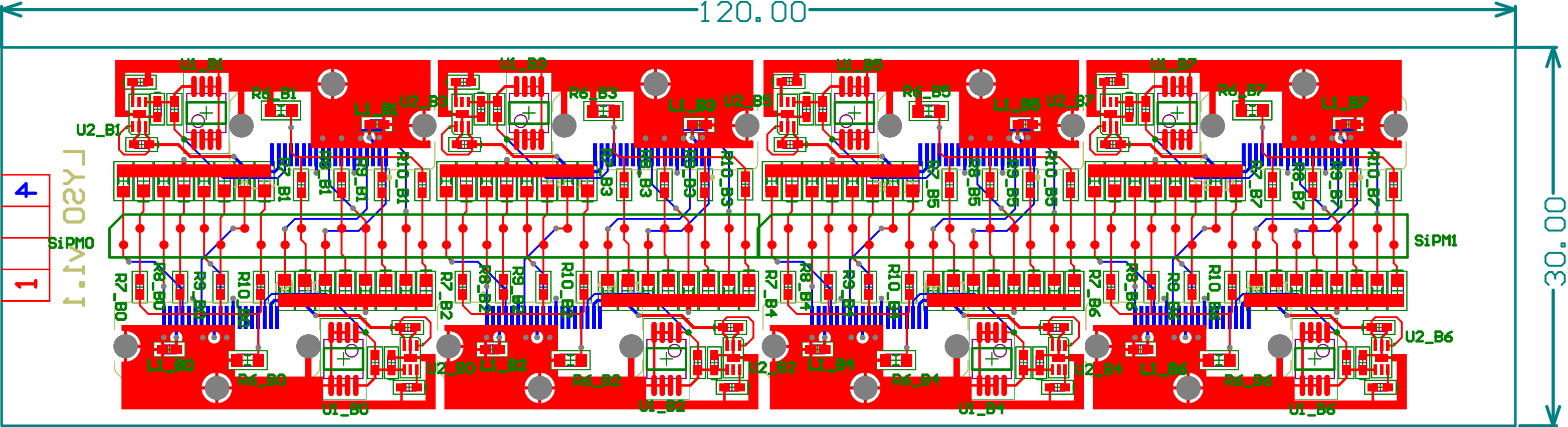
Metadata:

Title			
LYSO			
Size	Number	Revision	
B		v1.1	
Date:	2/27/2022	Sheet 2 of	2
File:	D:\projects\LYSO\LYSO.SchDoc		Drawn By:
















Title		
CMB_block		
Size	Number	Revision
B		v1.1
Date:	2/27/2022	Sheet bf 2
File:	D:\projects\LYSO\CMB_block.SchDoc	Drawn By:

Comment	Value	Description	Designator	Footprint	LibRef	Quantity
1uF	1uF	Capacitor	C1_B0, C1_B1, C1_B2, C1_B3, C1_B4, C1_B5, C1_B6, C1_B7, C3_B0, C3_B1, C3_B2, C3_B3, C3_B4, C3_B5, C3_B6, C3_B7	capc1005n	Cap	16
0.1uF	0.1uF	Capacitor	C2_B0, C2_B1, C2_B2, C2_B3, C2_B4, C2_B5, C2_B6, C2_B7	capc1005n	Cap	8
GRM188R72A104KA35D	0.1uF	Capacitor	C4_B0, C4_B1, C4_B2, C4_B3, C4_B4, C4_B5, C4_B6, C4_B7, C5_B0, C5_B1, C5_B2, C5_B3, C5_B4, C5_B5, C5_B6, C5_B7, C6_B0, C6_B1, C6_B2, C6_B3, C6_B4, C6_B5, C6_B6, C6_B7, C7_B0, C7_B1, C7_B2, C7_B3, C7_B4, C7_B5, C7_B6, C7_B7	capc1608n	Cap	32
Molex0476591100		Header, 22-Pin	J1_B0, J1_B1, J1_B2, J1_B3, J1_B4, J1_B5, J1_B6, J1_B7	MOLEX_HDMI_19P_SMD_VERT	Header 22	8
MMZ1005S601HTD25		FERRITE BEAD INDUCTOR	L1_B0, L1_B1, L1_B2, L1_B3, L1_B4, L1_B5, L1_B6, L1_B7	INDC1005N	FBEAD	8
1K	1K	Resistor	R1_B0, R1_B1, R1_B2, R1_B3, R1_B4, R1_B5, R1_B6, R1_B7	RESC1005N	Res2	8
CRCW060310M0FKEAC	10M	Resistor	R2_B0, R2_B1, R2_B2, R2_B3, R2_B4, R2_B5, R2_B6, R2_B7, R3_B0, R3_B1, R3_B2, R3_B3, R3_B4, R3_B5, R3_B6, R3_B7, R4_B0, R4_B1, R4_B2, R4_B3, R4_B4, R4_B5, R4_B6, R4_B7, R5_B0, R5_B1, R5_B2, R5_B3, R5_B4, R5_B5, R5_B6, R5_B7, R6_B0, R6_B1, R6_B2, R6_B3, R6_B4, R6_B5, R6_B6, R6_B7	resc1608n	Res2	40
2K	2K	Resistor	R7_B0, R7_B1, R7_B2, R7_B3, R7_B4, R7_B5, R7_B6, R7_B7, R8_B0, R8_B1, R8_B2, R8_B3, R8_B4, R8_B5, R8_B6, R8_B7, R9_B0, R9_B1, R9_B2, R9_B3, R9_B4, R9_B5, R9_B6, R9_B7, R10_B0, R10_B1, R10_B2, R10_B3, R10_B4, R10_B5, R10_B6, R10_B7	RESC1005N	Res2	32
SiPMx16			SiPM0, SiPM1	SiPMx16	SiPMx16	2
DS18B20U+T&R		High-Precision 1-Wire Digital Thermometer, -55 to 125 degC, 8-Pin SOP (U8+1), Pb-Free, Tape and Reel	U1_B0, U1_B1, U1_B2, U1_B3, U1_B4, U1_B5, U1_B6, U1_B7	MAXM-U8+1_N	DS18B20U+T&R	8
MIC5353-3.3YMT		LDO	U2_B0, U2_B1, U2_B2, U2_B3, U2_B4, U2_B5, U2_B6, U2_B7	6-TMLF_EP	MIC5353-3.3	8



Board Stack Report

Stack Up		Layer Stack			
Layer	Board Layer Stack	Name	Material	Thickness	Constant
1		Top Paste			
2		Top Overlay			
3		Top Solder	Solder Resist	0.40mil	3.5
4		Top Layer	Copper	1.40mil	
5		Dielectric 2	PP-006	15.00mil	4.1
6		internal plane 1	Copper	1.38mil	
7		Dielectric 1	FR-4	40.00mil	4.8
8		internal plane 2	Copper	1.38mil	
9		Dielectric 3	PP-006	15.00mil	4.1
10		Bottom Layer	Copper	1.40mil	
11		Bottom Solder	Solder Resist	0.40mil	3.5
12		Bottom Overlay			
13		Bottom Paste			
	Height : 76.36mil				