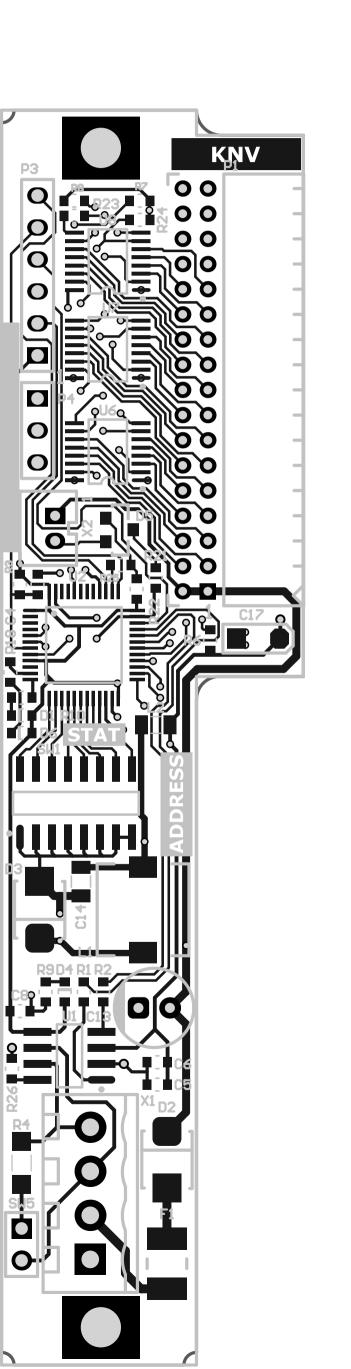
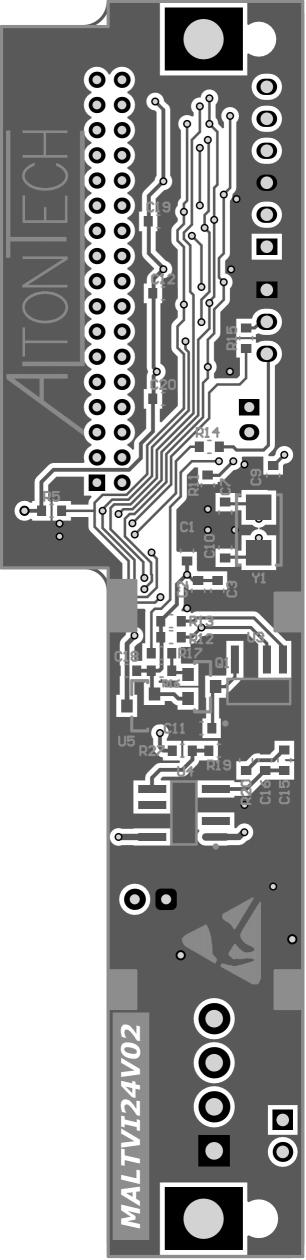


		1	2		3		4		
				l]				
	Date 2021.??.??.	Description First		Modified by					
A	MALT24VIV00			marroo					A
	2021.??.??. MALT24VIV01	 Power LED hozzáadva Föld kitöltés javítva a P4 körül Project név változott 		marrob					
	2021.10.06. MALT24VIV02	- X1 tűkrözési hibája javítva - SOT-23 footprint javítva, kisebb lett - Enable X2 csatlkozó és funkció hozzáadva - Földkitöltés javítva - 10mil-es track több helyen 8-ra változott							
В									В
С									С
D						OHMMETER -	HISTORY (MRES181106)	Konvolúció	D
						Project: MRES181106 Author: Margit Róbert	Variant: [No Variations] Checked by:		-
						Size: A4 Numb Date: 10/12/2021 Time:	er: 1 Revision: 1	Support: marrob50hz@gmail.com	
							MALT191104\MALT24VI\Circuit\MAL	T24VI-History.SchDoc	
		1	2		3		4		





Comment	Description	Designator	Quantit y	Supplier	Manufacturer	ManufacturerF artNo
1nF	Capacitator, 1nF, 50V, 5%, NPO, SMT, 0603	C1	1	LOM-82-06-33;LOM-82- 09-55;	YAG	CC0603JRNP09 BN102
100nF	Capacitator, 100nF, 50V, 10%, X7R, SMT, 0603	C2, C4, C6, C8, C9,	9	LOM-82-03-47;TME-	YAG	CC0603KRX7R
22uF	Capacitator, 22uF, 6.3V, 20%, X5R, SMT, 0603	C11, C12, C19, C20	1	CC0603KRX7R9BB104; LOM-82-09-23;TME-	Samsung	BB104 CL10A226MQ8
			-	CL10A226MQ8NRNCI; LOM-82-06-80;TME-	-	NRNC CC0603KRX7R
1uF	Capacitator, 1uF, 16V, 10%, X7R, SMT, 0603	C5, C18	2	CC0603KRX7R7105	YAG	BB105 CC0603JRNP09
22pF	Capacitator, 22pF, 50V, 5%, NPO, SMT, 0603	C7, C10	2	LOM-82-02-18	YAG	BN220
27uF	Electrolytic Capacitors, 27uF, 35V , 20%, THT, 6.3x7mm 2.5mm	C13	1	FAR-1895676;	NICHICON	UPW1V270MD D1TD
47uF	Capacitator, 47uF, 6.3V, 20%, X5R, SMT, 0805	C14	1	LOM-82-08-66;TME- CL21A476MQYNNNG;F AR-2362109	SAM	CL21A476MQY NNNE
22nF	Capacitator, 22nF, 50V, 10%, X7R, SMT, 0603	C15	1	LOM-82-06-91;	SAMSUNG	CC0603KRX7R
220pF	Capacitator, 220pF, 50V, 10%, NPO, SMT, 0603	C16	1	LOM-82-13-70:	SAMSUNG	CL10C221JB8N
10uF/16V	Tantalum Capacitors, 10uF, 16V, 10%, 3OHM, SMT, A	C17	1	TME- TAJA106K010R;FAR- 1432339RL;RSC-699- 2848;LOM-92-00-77	AVX	NND TAJA106K016F
HL-PST-1608U51GC	LED, Green, SMT, 0603	D1	1	LOM-95-03-80	Hongli Tronic	HL-PST-
STPS340U	Diode, SMT, DO-214AA	D2, D3	2	FAR-9803548;LOM-83-	STMICORELECT	1608U51GC STPS340U
				02-19;TME-STPS340U	RONICS	HL-PST-
HL-PST-1608S31YC	LED, Yellow, SMT, 0603	D4	1	LOM-95-03-79	Hongli Tronic	1608S31YC
BAS70-05	Diode, SMT, SOT-23	D5	1	LOM-83-01-24;FAR- 2849621;TME-BAS70- 05;	NXP Semiconductor	BAS70-05
HL-PST-1608S9AC	LED, Red, SMT, 0603	D6	1	LOM-95-03-78	Hongli Tronic	HL-PST- 1608S9AC
MF1100mA/33V	Multifuse, 1100mA, 33V, SMT, 1812	F1	1	LOM-44-03-25;TME- 1812L110/33MR;MOU- 576-1812L110/33MR	Littelfuse	1812L110/33N R
SLF7045T-330M1R1-	Inductor, 33uH, 1A, SMT, 7 x 7 x 4.5mm	L1	1	LOM-93-04-11;FAR-	TDK	SLF7045T-
H CB05YTYH101	Filter, 3A, SMT, 0805	L2	1	2215717; LOM-93-03-09;	VIKING	330M1R1-H CB05YTYH101
SQT-117-01-F-D-RA	Connector PCB Receptacle SQT, 2mm, 2x17, 90, THT	P1	1	MOUS-200- SQT11701FDRA;	SAMTEC	SQT-117-01-F- D-RA
PHSS-40-6/3	Connector Pin Strip, 40/6, 2.54, 180, Male, THT	P3	1	LOM-43-00-73	T&T CONNECTION	PHSS-40-6/3
PHSS-40-6/3	Connector Pin Strip, 40/3, 2.54, 180, Male, THT	P4	1	LOM-43-00-73	T&T	PHSS-40-6/3
SPH-002T-P0.5S	Contact, PH, 2430WG	PC1, PC2	2	LOM-43-00-25;TME-SPH 002T-P0.55;TME-NXG-T		NCT200S- T2430;SPH- 002T-
BLZF 3.5/4	Terminal Block, 3.5mm, 4, 180, wire	PW1	1	FAR-1179253;	WEIDMULLER	P0.5S;NXG-T BLZF 3.5/4
		PW2		LOM-43-17-34;TME-	Gold	NCH200S-
PHR-2	Connector Plug, Female, 1x2Way, 2mm	PW2	1	PHR-2;TME-NXG-02;	Star;JST;NINGI	02;NXG- 02;NXG-02
Si2307CDS	MOSFET, P, SMD, SOT-23	Q1	1	LOM-86-03-40;FAR- 1779262;TME- SI2307CDS-T1-GE3	VISHAY	SI2307CDS
470R	Resistor, 470R, 0.1W, 1%, SMT, 0603	R1, R2, R14, R15, R17, R23	6	LOM-80-31-61;TME- CQ0603-470R-1%;	VIKING	WR06X4700FT
10K0	Resistor, 10K0, 0.1W, 1%, SMT, 0603	R3, R10, R11, R16, R25	5	LOM-80-15-13;TME- CRCW060310K0FKTABC	ASJ	CR16-1002-FK
120R	Resistor, 120R, 0.25W, 1%, SMT, 1206	R4	1	LOM-80-10-15;	Viking Tech	
2K20	Resistor, 2K20, 0.1W, 1%, SMT, 0603	R5, R8, R9, R12, R13, R18, R24, R26	8	LOM-80-11-80;TME- CRCW06032K20JNTABC	VIKING	
				;		0603 1% CR-
180R	Resistor, 180R, 0.1W, 1%, SMT, 0603	R6, R7	2		VIKING	03FL7180R
3K90	Resistor, 3K90, 0.125W, 1%, SMT, 0603	R19	1	LOM-80-11-66;TME- CRCW06033K90FKTABC ;	Viking Tech Corp.	CR-03FL73K 0.1W
4K70	Resistor, 4K70, 0.1W, 1%, SMT, 0603	R20	1	LOM-80-11-85;TME- CRCW06034K70FKEA;	ROYAL OHM	CQ0603-4K7- 1%
12K0 47K0	Resistor, 12K0, 0.125W, 1%, SMT, 0603 Resistor, 47K0, 0.1W, 1%, SMT, 0603	R21, R27 R22	2	LOM-80-19-36; LOM-80-11-72	Walsin VIKING	Yageo Corp.
A6H-8101	DIP Switch, 8, SPST, 180°, SMT, Custom	SW1	1	TME-A6H-8101; FAR-	OMRON	A6H-8101
PHSS-40-6/3	Connector Pin Strip, 40/2, 2.54, 180, Male, THT	SW5	1	8774285; LOM-43-00-73	T&T	PHSS-40-6/3
MCP2562-E/SN	Transceiver, CAN, 5V, SMT, SOIC-8	U1	1	TME-MCP2562- E/SN;MOU-579-	CONNECTION	MCP2562-E/SI
				MCP2562-E/SN;		STM32F103C8
STM32F103C8T6	Processor, ARM Coretex M3, SMT, LQFP48	U2	1	TME-STM32F103C8T6;	ST	6
FM24W256-GTR	EEPROM, I2C, 256Kbit 32Kx8byte, SMT, SOIC-8	U3	1	FAR-2772912;TME- FM24W256-GTR;	CYPRESS SEMICONDUCT OR	FM24W256- GTR
L5970D	DC/DC, SMT, SOIC-8	U4	1	TME-L5970D;FAR- 1077141;	STMicroelectro nics	L5970D
MCP1700T3302ETT	LDO, SMT, SOT-23	U5	1	TME- MCP1700T3302ETT; FAR- 1296592;		
TPIC6C596PWR	Shift Register, SMT, TSSOP-16	U6, U7, U8	3	1296592; FAR-3120899;	Texas	TPIC6C596PW
SL 3.5/4/180G	Terminal Block, 3.5mm, 4, 180°, THT	X1	1	FAR-1121792;	Instruments WEIDMULLER	SL 3.5/4/180G
B2B-PH-K-S	Connector Socket, Male, 1x2Way, 2mm, 180°, THT	X2	1	LOM-43-17-35;TME-B2B PH-K-S;NXW-02;		NCW200S-02S ;B2B-PH-K- S;NXW-02
8MHz QC5CB	Crystal Clock Oscillator, SMT, 5x3.2mm	Y1	1	FAR- 2508596;	QANTEK TECHNOLOGY CORPORATION	QC5CB8.00000 F18B23M

Design Rules Verification Report
Filename: D:\@@@!ProjectS\MALT191104\MALT24VI\Circuit\MALT24VIV02.PcbDo

Warnings 0 Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.178mm) (All),(All)	0
Clearance Constraint (Gap=0.203mm) (HasFootprint('VSSOP-10')),(All)	0
Clearance Constraint (Gap=0.203mm) (HasFootprint('SSOP-28')),(All)	0
Clearance Constraint (Gap=0.203mm) (HasFootprint('DCK')),(All)	0
Clearance Constraint (Gap=0.203mm) (InNetClass('HV')),(All)	0
Clearance Constraint (Gap=0.203mm) (HasFootprint('LQFP-48')),(All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Un-Routed Net Constraint ((All))	0
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Width Constraint (Min=0.203mm) (Max=1.27mm) (Preferred=0.203mm) (All)	0
Power Plane Connect Rule(Direct Connect)(Expansion=0.508mm) (Conductor Width=0.254mm) (Air Gap=0.254mm)	0
Hole Size Constraint (Min=0.025mm) (Max=60mm) (All)	0
Hole To Hole Clearance (Gap=0.254mm) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('DCK')),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('LQFP-48')),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('TQFP64-E0.5')),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('VSSOP-10')),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('SOT-23-5')),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('MSOP-12')),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('C1206 - 4W')),(All)	0
Minimum Solder Mask Sliver (Gap=0.127mm) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.013mm) (HasFootprint('SSOP-28')),(All)	0
Silk To Solder Mask (Clearance=0.127mm) (IsPad),(All)	0
Silk to Silk (Clearance=0.102mm) (All),(All)	0
Net Antennae (Tolerance=0mm) (All)	0
Height Constraint (Min=0mm) (Max=100mm) (Prefered=12.7mm) (All)	0
Total	0