







Comment	Description	Designator	Quantit y	Supplier	Manufacturer	ManufacturerP artNo
1nF	Capacitator, 1nF, 50V, 5%, NPO, SMT, 0603	C1	1	LOM-82-06-33;LOM-82-	YAG	CC0603JRNP09
100nF	Capacitator, 100nF, 50V, 10%, X7R, SMT, 0603	C2, C4, C6, C8, C9,	9	09-55; LOM-82-03-47;TME-	YAG	CC0603KRX7R9
22uF	Capacitator, 22uF, 6.3V, 20%, X5R, SMT, 0603	C11, C12, C19, C20 C3	1	CC0603KRX7R9BB104; LOM-82-09-23;TME-	Samsung	CL10A226MQ8
1uF	Capacitator, 1uF, 16V, 10%, X7R, SMT, 0603	C5, C18	2	CL10A226MQ8NRNCI; LOM-82-06-80;TME-	YAG	NRNC CC0603KRX7R7
22pF	Capacitator, 22pF, 50V, 5%, NPO, SMT, 0603	C7, C10	2	CC0603KRX7R7105 LOM-82-02-18	YAG	BB105 CC0603JRNP09
27uF	Electrolytic Capacitors, 27uF, 35V , 20%, THT,	C13		FAR-1895676:	NICHICON	BN220 UPW1V270MD
27UF	6.3x7mm 2.5mm	C13	1	LOM-82-08-66;TME-	NICHICON	D1TD
47uF	Capacitator, 47uF, 6.3V, 20%, X5R, SMT, 0805	C14	1	CL21A476MQYNNNG;F AR-2362109	SAM	CL21A476MQY NNNE
22nF	Capacitator, 22nF, 50V, 10%, X7R, SMT, 0603	C15	1	LOM-82-06-91;	SAMSUNG	CC0603KRX7R9 BB223
220pF	Capacitator, 220pF, 50V, 10%, NPO, SMT, 0603	C16	1	LOM-82-13-70;	SAMSUNG	CL10C221JB8N NND
10uF/16V	Tantalum Capacitors, 10uF, 16V, 10%, 800mOHM, SMT, B	C17	1	TME- T494B106K016AT;FAR- T494B106K010AT;	KEMET	T494B106K016 AT
HL-PST-1608U51GC	LED, Green, SMT, 0603	D1	1	LOM-95-03-80	Hongli Tronic	HL-PST- 1608U51GC
STPS340U	Diode, SMT, DO-214AA	D2, D3	2	FAR-9803548;LOM-83-	STMICORELECT	STPS340U
HL-PST-1608S9AC	LED, Red, SMT, 0603	D6	1	02-19;TME-STPS340U LOM-95-03-78	RONICS Hongli Tronic	HL-PST-
	, .,, ,			LOM-44-03-25;TME-		1608S9AC 1812L110/33M
MF1100mA/33V SLF7045T-330M1R1-	Multifuse, 1100mA, 33V, SMT, 1812	F1	1	1812L110/33MR;MOU- 576-1812L110/33MR LOM-93-04-11:FAR-	Littelfuse	R SI F7045T-
н	Inductor, 33uH, 1A, SMT, 7 x 7 x 4.5mm	L1	1	2215717;	TDK	330M1R1-H
CB05YTYH101	Filter, 3A, SMT, 0805	L2	1	LOM-93-03-09; MOUS-200-	VIKING	CB05YTYH101 SQT-117-01-F-
6QT-117-01-F-D-RA	Connector PCB Receptacle SQT, 2mm, 2x17, 90, THT	P1	1	SQT11701FDRA;	SAMTEC T&T	D-RA
PHSS-40-6/3	Connector Pin Strip, 40/6, 2.54, 180, Male, THT	P3	1	LOM-43-00-73	CONNECTION	PHSS-40-6/3
PHSS-40-6/3	Connector Pin Strip, 40/3, 2.54, 180, Male, THT	P4		LOM-43-00-73	T&T CONNECTION	PHSS-40-6/3
BLZF 3.5/4	Terminal Block, 3.5mm, 4, 180, wire	PW1	1	FAR-1179253; LOM-86-03-40:FAR-	WEIDMULLER	BLZF 3.5/4
Si2307CDS	MOSFET, P, SMD, SOT-23	Q1	1	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-	VIKING	WR06X4700FTI
10K0	Resistor, 10K0, 0.1W, 1%, SMT, 0603	R3, R10, R11, R16	4	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, R12, R13, R18, R24, R26	7	LOM-80-11-80;TME- CRCW06032K20JNTABC	VIKING	
180R	Resistor, 180R, 0.1W, 1%, SMT, 0603	R6, R7	2	; LOM-80-14-36	VIKING	0603 1% CR-
				LOM-80-11-66;TME-	-	03FL7180R CR-03FL73K9
3K90	Resistor, 3K90, 0.125W, 1%, SMT, 0603	R19	1	CRCW06033K90FKTABC	Viking Tech Corp.	0.1W
4K70	Resistor, 4K70, 0.1W, 1%, SMT, 0603	R20	1	LOM-80-11-85;TME- CRCW06034K70FKEA;	ROYAL OHM	CQ0603-4K7- 1%
12K0	Resistor, 12K0, 0.125W, 1%, SMT, 0603	R27	1	LOM-80-19-36; TME-A6H-8101; FAR-	Walsin	Yageo Corp.
A6H-8101	DIP Switch, 8, SPST, 180°, SMT, Custom	SW1	1	8774285;	OMRON	A6H-8101
PHSS-40-6/3	Connector Pin Strip, 40/2, 2.54, 180, Male, THT	SW5	1	LOM-43-00-73	T&T CONNECTION	PHSS-40-6/3
MCP2562-E/SN	Transceiver, CAN, 5V, SMT, SOIC-8	U1		TME-MCP2562- E/SN;MOU-579- MCP2562-E/SN;	MICROCHIP	MCP2562-E/SN
STM32F103C8T6	Processor, ARM Coretex M3, SMT, LQFP48	U2	1	TME-STM32F103C8T6;	ST	STM32F103C8T 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		
TPIC6C596PWR	Shift Register, SMT, TSSOP-16	U6, U7, U8	3	1296592; FAR-3120899;	Texas	TPIC6C596PWF
	1				Instruments	
SL 3.5/4/180G	Terminal Block, 3.5mm, 4, 180°, THT	X1	1	FAR-1121792;	WEIDMULLER	SL 3.5/4/180G

Design Rules Verification Report
Filename: D:\@@@!ProjectS\MALT191104\MALTVI24\Circuit\MALTVI24V00.PcbDo

Warnings 0 Rule Violations 0

Warnings	
Total	0

Dula Violation a	
Rule Violations Clearance Constraint (Gap=7mil) (All),(All)	0
	0
Clearance Constraint (Gap=8mil) (HasFootprint("VSSOP-10")),(All)	0
Clearance Constraint (Gap=8mil) (HasFootprint("SSOP-28")),(All)	0
Clearance Constraint (Gap=8mil) (HasFootprint('DCK')),(All)	0
Clearance Constraint (Gap=8mil) (InNetClass('HV')),(All)	0
Clearance Constraint (Gap=8mil) (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=8mil) (Max=50mil) (Preferred=10mil) (All)	0
Power Plane Connect Rule(Direct Connect)(Expansion=20mil) (Conductor Width=10mil) (Air Gap=10mil) (Entries=4)	0
Hole Size Constraint (Min=1mil) (Max=2362.205mil) (All)	0
Hole To Hole Clearance (Gap=10mil) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('DCK')),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('LQFP-48')),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('TQFP64-E0.5')),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('VSSOP-10')),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('SOT-23-5')),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint/'MSOP-12')),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('C1206 - 4W')),(All)	0
Minimum Solder Mask Sliver (Gap=5mil) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.5mil) (HasFootprint('SSOP-28')),(All)	0
Silk To Solder Mask (Clearance=5mil) (IsPad),(All)	0
Silk to Silk (Clearance=4mil) (All),(All)	0
Net Antennae (Tolerance=0mil) (All)	0
Height Constraint (Min=0mil) (Max=3937.008mil) (Prefered=500mil) (All)	0
Total	0
	-

Page 1 of 1 Sunday 16 May 2021 7:43:55 PM