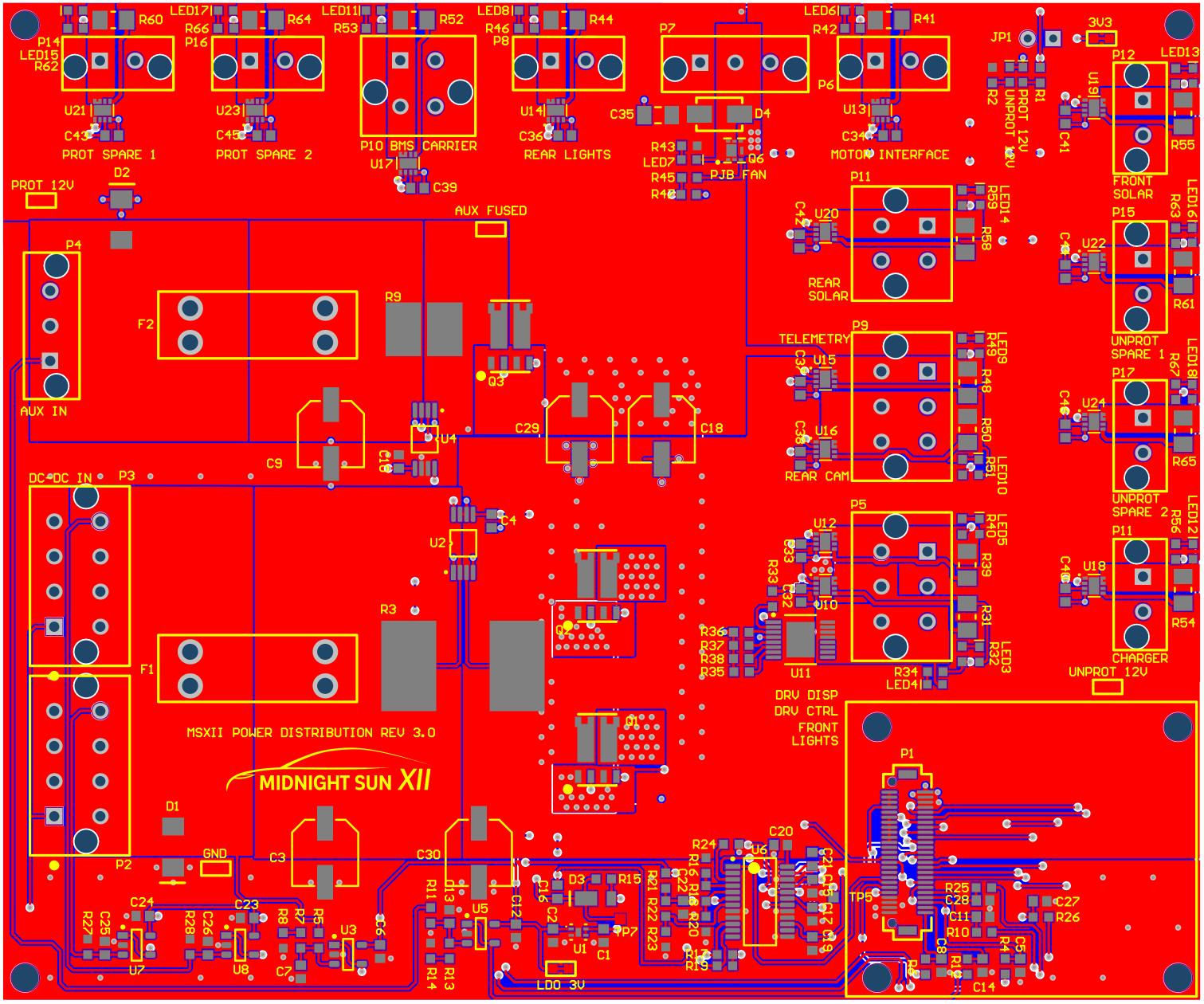
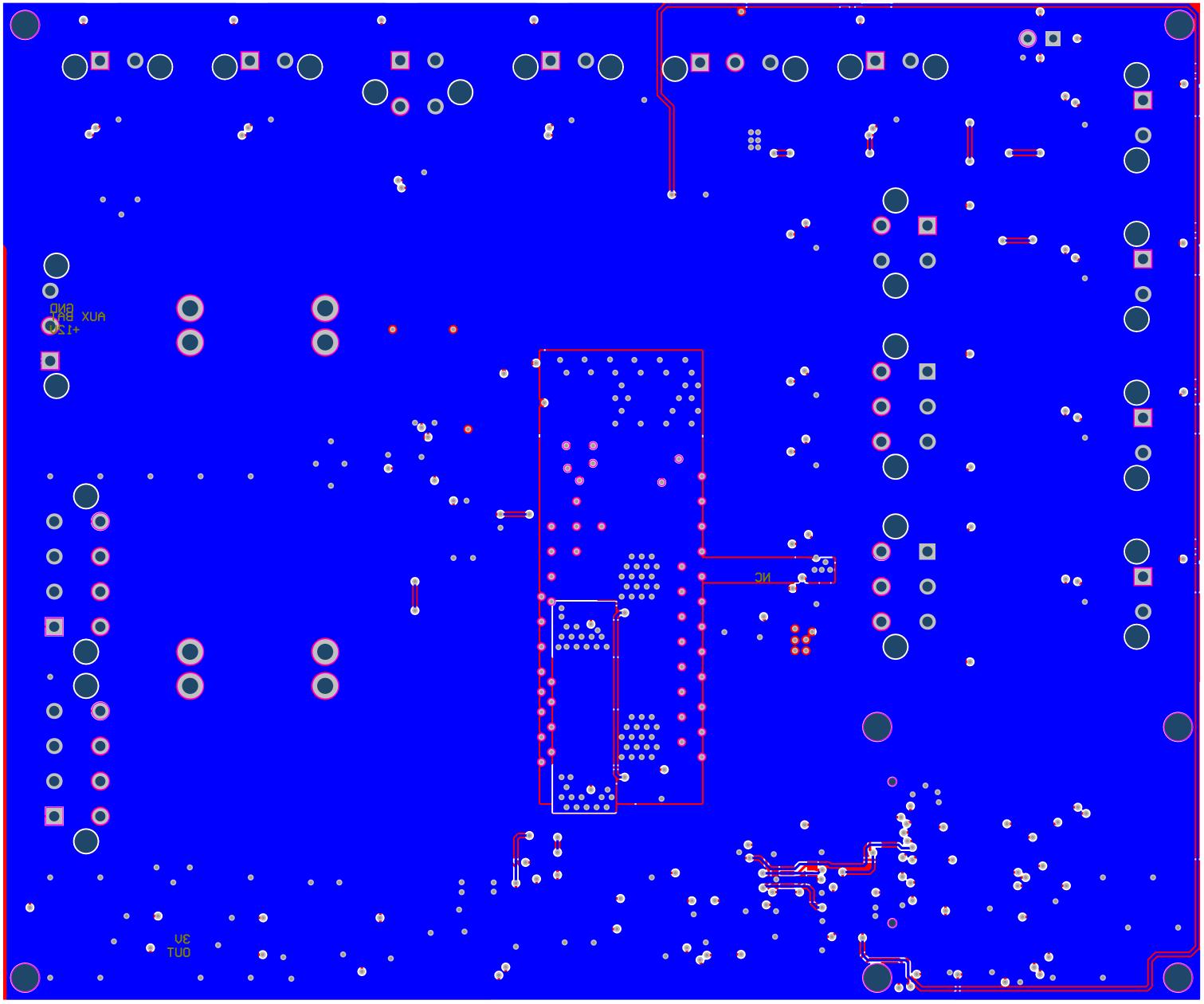


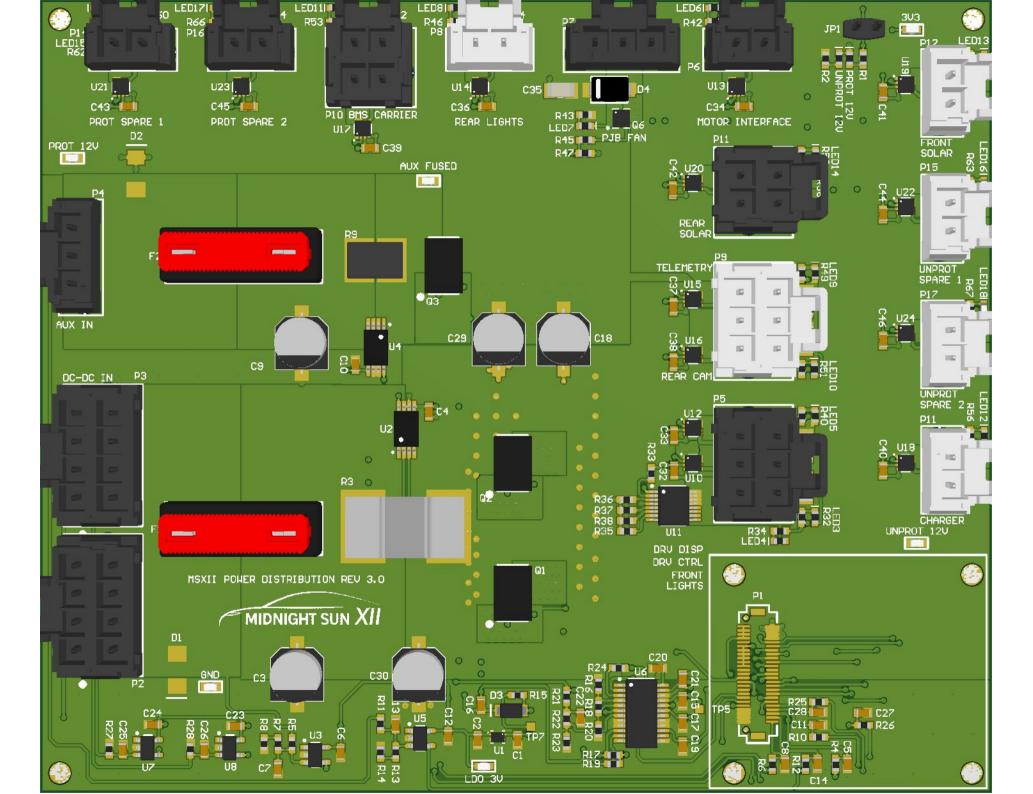
Bill of Materials			
Project:	PowerDistribution.PrjPcb		
Revision:	3.0		
Project Lead:	Taiping Li		
Generated On:	2018-06-22 3:19:53 AM		
Production Quantity:	1		
Currency	CAD		
Total Parts Count:	183		



THE PROFESSION OF THE THE PRESENT OF THE THE PRESENT OF THE PRESENT OF THE THE THE PRESENT OF THE THE THE PRESENT OF THE THE PRESENT OF THE THE THE THE PRESENT OF THE	LibRef	Designator	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Order Qty 1	Supr	olier Subtotal 1
Fig. 20 And Cort Its 1-107 WOOD   Fig. 811   Page										
RES SIGN CHAIN TO FOR WOOD   REST   READ   TO SERVE										
R\$2 DOWN PAY 2001 USE R\$2 STORM PAY 2001 USE R\$3 STORM PAY 2001 USE R\$3 STORM PAY 2001 USE R\$4 STORM PAY 2001 USE R\$5 STORM PAY 2001 USE			- anacomo							
March 20 - 10	RES 255K OHIVI 1% 1/10W 0605		<u>rageo</u>	RC0603FR-07255KL	Digi-Key	311-255KHKC1-ND	0.13			0.13
FEET LINK CHIM PS - 188W 0000	RES 200 OHM 5% 2/3W 1206		Panasonic	ERJ-P08J201V	Digi-Key	P200ALCT-ND	0.18	14	\$	2.55
SESTING CHAIN IS LITERAL WISSON   SERVICE STATES   Pages   P	DEC 400K OUM 50/ 4/0W 0000		V	DC0000 ID 07400KI	Diei Ken	244 400KCDCT ND	0.40	_	•	0.07
RES. BESCH CHAIR 15 (1700) (2003)   RES.   Passander   RES. REPRESSORY   Digitive   15 (1)   1   1   1   1   1   1   1   1   1										
RES OF AN CORP 19, FLOW 00033  RES 1 AN CORP 19, FLOW 00034  RES 1 AN CORP 19, FLOW 00035  RES 1										
RES SECRETARY TO 1000 0003 RES 21 MARCH TO 1000 0005 RES 21 MARCH TO 1										
RES 21 CORD TR. FLYON 00032										
RES INCOMENTS 1,100Y 6000 RES INCOMENTS 1,100Y 6000 RES INCOMENTS 1,100Y 6000 RES INCOMENTS 1,000Y 600Y 600Y 600Y 600Y 600Y 600Y 600Y				ETTO OETT O TOET						
RES TOX CHRI 1% 1700 9000 RES LOX CHRI 1% 17										
RES 10R CHM 1% 1/10W 0903  RES 47K 0RM 1% 1/10W 0903  RES 47K 0RM 1% 1/10W 0903  RES 10K 0RM 1% 1/10W	RES 11.8K OHM 1% 1/10W 0603		<u>Yageo</u>	RC0603FR-0711K8L	Digi-Key	311-11.8KHRCT-ND	0.13	1	\$	0.13
RES 22HC DRIFT 1, 110W 16603 RES MEM DRIFT 1, 110W 16603 R		R34, R36, R37, R38, R40, R42, R43, R46, R47, R49, R51, R53, R56, R57, R59, R62,	<u>Yageo</u>		Digi-Key				\$	
RES IN OHM 19, 11000 6053 RES AND OHM 19, 11000	RES 4.7K OHM 1% 1/10W 0603	R1, R2	Yageo	RC0603FR-074K7L	Digi-Key	311-4.70KHRCT-ND	0.13	2	\$	0.27
RES IX OHM 9% 1107W 9030 R35 Yaged R2502LRG7/TIS, Dgi-Rey 311-10000CF-RO 0.13 1 \$ 0.13 R5 0.015 R5 0.0	RES 2.21K OHM 1% 1/10W 0603	R15	Yageo	AC0603FR-072K21L	Digi-Key	YAG3586CT-ND	0.13	1	\$	0.13
RES 001-00141 S. 7010 6003 RES 0010-00141 S. 7012-0014 S.	RES 1M OHM 1% 1/10W 0603	R16, R21	Yageo	RC0603FR-071ML	Digi-Key	311-1.00MHRCT-ND	0.13	2	\$	0.27
RES 0.016 CMH 19. TW 2818 R3	RES 1K OHM 5% 1/10W 0603	R35	Yageo	RC0603JR-071KL		311-1.0KGRCT-ND	0.13	1	\$	0.13
RES 0.004 OPH MY W 3991   RS	RES 0.015 OHM 1% 7W 2818	R9			J 7					
MOSFET PICH DUAL 307 No. 79 A 2 1W 6-POPK 1020    Dop-Key   STREPPENT LIGHT TO NO. 1			Yageo	PU5931FKMP70R004L	Digi-Kev	YAG4096CT-ND	2.74	1	\$	2.74
MOSPET INCH DURG, 397 MAY PARK SUPER   USAN PA										
LED YELLOW CLEAR 2:10 9630   LED2, LED4, LED5, LED6, LED10, LED14, LED16, LED6   LED14, LED16, LED16   LED14, LED16, LED16   LED14, LED16, LED16   LED14, LED16, LED16   LED14, LED16, LED16, LED16   LED16, LED16, LED16   LED16, LED1	MUSFET P-CH DUAL 30V 60A PPAK SO-8	Q1, Q2, Q3	Vishay Siliconix	SI7997DP-T1-GE3	Digi-Key	ND	3.31	3	\$	9.94
LED (2, LED ) 3, LED ) 4, LED (3, LED ) 4, LED (4, LED ) 8, LED (5, LED ) 5, LED (4, LED ) 6, LED (4, LED ) 6, LED (4, LED ) 6, LED (4, LED ) 7, LED (4, LED )	MOSFET N-CH 30V 8.7A 2.1W 6-PQFN (2x2)		Infineon	IRLHS6342TRPBF	Digi-Key		0.93	1	\$	0.93
C. C. CLORENT AMPLIFER NAZIONAL STREET   U. C. CLORENT AMPLIFER NAZIONAL STREET NAZIONAL STR	LED YELLOW CLEAR 2.1V 0603	LED12, LED13, LED14, LED16, LED18	Wurth Electronics	150060YS75000	Digi-Key	732-4981-1-ND	0.19	11	\$	2.05
IC OP AMP GEN PURPOSE SELECT   U6   Annion Devices / Lineary   Technology   Techn	LED GREEN CLEAR 2V 0603		Wurth Electronics	150060VS75000	Digi-Key	732-4980-1-ND	0.19	7	\$	1.30
24SSOP  10	IC REG LDO 3V 0.2A 4-TDFN	U1	Microchip	MIC94310-PYMT-TR	Digi-Key	576-4761-1-ND	0.39	1	\$	0.39
24SSOP  10			Analog Devices / Linear		,				-	
IC OP AMP GEN PURPOSE RR 10M1Z SDT-225   U.3, U.5, U.7, U.8   Texas Instruments   TLV3160DBVRO1   Digi-Key   266-45323-1-ND   1.13   4   \$ 4.52		U6		LTC4417CGN#PBF	Digi-Key	LTC4417CGN#PBF-ND	9.14	1	\$	9.14
IC LOAD SWITCH ACT-HI 10.5A 8DFN	IC OP AMP GEN PURPOSE RR 10MHZ SOT-23-	U3, U5, U7, U8		TLV316QDBVRQ1	Digi-Key	296-45323-1-ND	1.13	4	\$	4.52
IC DUR HIGH-SIDE 10 H POWERSSO-16   U1   STMLcroelectronics   NA7040AUTR   Digi-Rey   497-15953-1-ND   2.42   1   \$ 2.42   1   \$ 2.42   Texas Instruments   Texas Instruments   NA20A0APWR   Digi-Rey   296-45080-1-ND   3.53   1   \$ 3.53   \$ 3.53   \$ 1   \$ 3.53			ON Semiconductor	NCP45521IMNTWG-H	Digi-Key		1.29	14	\$	17.99
CONPACT   CONP	IC DVR HIGH-SIDE 1CH POWERSSO-16		STMicroelectronics	VN7040A.ITR	Digi-Key		2 42	1	s	2 42
TSSOP					,			<b>+</b>		
CORNEROR AMPLIFER INAZ40 BTSSOP   U2   Teasa Instruments   INAZ40ASPWR   Digi-Key   296-45090-1-ND   3.53   1   \$ 3.53		U4	Texas Instruments	INA240A1PWR	Digi-Key	296-45088-1-ND	3.53	1	\$	3.53
FUSE ATO FUSE HOLDER F1, F2 Keystone Electronics 3557-2 Digi-Key 36-3567-2-ND 1.3 2 \$ 2.51 DIODE TN STSWM 24 AV CD -0244A (SMB) D1, D2		112	Toyor Instruments	INIA 240 A 2 DIA/ D	Digi Koy	206 45000 1 ND	2.52	1	¢	2.52
DIODE TVS 15WM M24 AVC DO-214A4 (SMB)										
DIODE SCHOTTKY 80V 3A SMA   D4   DIODE SCHOTTKY 80V A POWERDITE 3   D3   DIODE SCHOTTKY 80V A POWERDITE 3   DIODE SCHOTTKY 80V AVAILABLE										
Diodes   Diodes   DELS130L-7   Digi-Key										
CONN 5POS Dergstak Plug 0.02* P1 Amphenol FCI 10132797-055100LF Digi-Key										
CONN BPOS ULTRA-FIT 0.138" P2, P3 Molex 1722991108 Digi-Key WM1179-ND 1.92 2 \$ 3.83  CONN 6POS ULTRA-FIT 0.138" P9 Molex 1722991106 Digi-Key WM11799-ND 1.69 1 \$ 1.69  CONN 6POS ULTRA-FIT 0.138" P5 Molex 1722991106 Digi-Key WM11778-ND 1.5 1 \$ 1.50  CONN 4POS 2 ROW ULTRA-FIT 0.138" P10, P11 Molex 1722991104 Digi-Key WM11777-ND 1.5 1 \$ 1.50  CONN 4POS 2 ROW ULTRA-FIT 0.138" P10, P11 Molex 1722991104 Digi-Key WM11777-ND 1.14 2 \$ 2.29  CONN 3POS ULTRA-FIT 0.138" P4, P7 Molex 1722991103 Digi-Key WM11772-ND 1.09 2 \$ 2.18  CONN 2POS ULTRA-FIT 0.138" P4, P7 Molex 1722871103 Digi-Key WM11772-ND 1.09 5 \$ 5.45  CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 172287102 Digi-Key WM11722-ND 1.09 5 \$ 5.45  CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11722-ND 1.09 5 \$ 5.45  CAP CER 6800pF 50V 10% X7R 0603 C16 Samsung CL108682K885FNC Digi-Key 1276-2131-ND 0.13 1 \$ 0.13  CAP CER 10nF 50V 5% X7R 0603 C16 Samsung CL108682K885FNC Digi-Key 1276-21031-ND 0.13 1 \$ 0.13  CAP CER 10nF 50V 10% X7R 1206 C35 Murata GRM31CR72A225MA73L Digi-Key 399-13384-1-ND 0.27 10 \$ 2.71  CAP CER 10nF 50V 10% X7R 0603 C1, C2 C32, C33, C34, C44, C45, C46  CAP CER 0.068UF 10% 50V X7R 0603 C24 S23, C33, C34, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46  CAP CER 0.068UF 10% 50V X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key 490-12773-1-ND 0.15 2 \$ 0.25  CAP CER 0.068UF 10% 50V 10% X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key 490-12773-1-ND 0.15 2 \$ 0.27  CAP CER 0.068UF 10% 50V X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key 490-12773-1-ND 0.15 1 \$ 0.27  CAP CER 0.068UF 10% 50V X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key 490-12773-1-ND 0.17 1 \$ 0.77  CAP CER 0.008UF 10% 50V X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key 490-12773-1-ND 0.17 1 \$ 0.77  CAP CER 0.008UF 10% 50V X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key 490-12773-1-ND 0.17 1 \$ 0.77  CAP CER 0.008UF 10% 50V X7R 0603 C22 Murata GRM31CR72A225MA73L Digi-Key PCE3951CT-ND 0.50 1 \$ 0.59  CAP ALUM 400UF 20% 35V SMD C18 Panasonic EEE-1VA101XP Digi-Key PCE3951CT-N			Biodoo							
CONN 6POS ULTRA-FIT 0.138"   P5   Molex   1722991106   Digi-Key   WM11778-ND   1.69   1   \$   1.69   CONN 6POS ULTRA-FIT 0.138"   P5   Molex   1722991106   Digi-Key   WM11778-ND   1.5   1   \$   1.50   CONN 6POS ULTRA-FIT 0.138"   P10, P11   Molex   1722991104   Digi-Key   WM11777-ND   1.14   2   \$   2.29   CONN 3POS ULTRA-FIT 0.138"   P4, P7   Molex   1722871103   Digi-Key   WM11772-ND   1.14   2   \$   2.29   CONN 3POS ULTRA-FIT 0.138"   P4, P7   Molex   1722871103   Digi-Key   WM11702-ND   1.09   2   \$   2.18   CONN 3POS ULTRA-FIT 0.138"   P8, P11, P12, P15, P17   Molex   1722872102   Digi-Key   WM11702-ND   1.09   5   \$   5.45   CONN 3POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722872102   Digi-Key   WM11702-ND   1.09   5   \$   5.45   CONN 3POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722861302   Digi-Key   WM11702-ND   1.84   3   \$   5.51   CONN 3POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722861302   Digi-Key   WM11673-ND   1.84   3   \$   5.51   CONN 3POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722861302   Digi-Key   WM11673-ND   1.84   3   \$   5.51   CONN 3POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722861302   Digi-Key   WM11673-ND   1.84   3   \$   5.51   CONN 3POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722861302   Digi-Key   WM11673-ND   0.25   1   \$   0.25   CAP CER 6800pF 50V 10% X7R 0603   C5, C7, C8, C11, C13, C14, C25, C26, C27, C28   CAP CER 6800pF 50V 10% X7R 0603   C5, C7, C8, C11, C13, C14, C25, C26, C27, C28   C28   C32, C33, C34, C34, C34, C34, C34, C34, C34										
CONN 6POS ULTRA-FIT 0.138* P5 Molex 1722991108 Dig-Key WM11778-ND 1.5 1 \$ 1.50 CONN 4POS 2 ROW ULTRA-FIT 0.138* P10, P11 Molex 1722991104 Dig-Key WM11777-ND 1.14 2 \$ 2.29 CONN 3POS ULTRA-FIT 0.138* P4, P7 Molex 172297103 Dig-Key WM11777-ND 1.14 2 \$ 2.29 CONN 3POS ULTRA-FIT 0.138* P4, P7 Molex 172297102 Dig-Key WM11702-ND 1.09 2 \$ 2.18 CONN 2POS ULTRA-FIT 0.138* P6, P11, P12, P15, P17 Molex 172297102 Dig-Key WM11702-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 172297102 Dig-Key WM11702-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 172297102 Dig-Key WM11702-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722961302 Dig-Key WM11702-ND 1.84 3 \$ 5.51 CONN 2POS UMPER 0.1* JP1 Omron XG8T-0231 Dig-Key XG8T-0231-ND 0.25 1 \$ 0.25 CAP CER 6800pF 50V 10% X7R 0603 C16 Samsung CL108682KBSFNC Dig-Key U276-210-ND 0.13 1 \$ 0.13 CAP CER 10nF 50V 5% X7R 0603 C5, C7, C8, C11, C13, C14, C25, C26, C27, C28 C28 C29		P2, P3	Molex	1/22991108	Digi-Key	<u>WM11779-ND</u>	1.92	2	\$	3.83
CONN 8POS ULTRA-FIT 0.138* P5 Molex 1722991106 Dig-Key WM11778-ND 1.5 1 \$ 1.50 CONN 4POS 2 ROW ULTRA-FIT 0.138* P10, P11 Molex 1722991104 Dig-Key WM11777-ND 1.14 2 \$ 2.29 CONN 3POS ULTRA-FIT 0.138* P4, P7 Molex 1722991104 Dig-Key WM11772-ND 1.09 2 \$ 2.29 CONN 3POS ULTRA-FIT 0.138* P4, P7 Molex 1722871103 Dig-Key WM11702-ND 1.09 2 \$ 2.18 CONN 2POS ULTRA-FIT NATURAL COLOR 0.138* P8, P11, P12, P15, P17 Molex 1722872102 Dig-Key WM11702-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722872102 Dig-Key WM11722-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722872102 Dig-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138* P11 Dig-Key MM11702-ND 1.09 5 \$ 2.21 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722861302 Dig-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722861302 Dig-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722861302 Dig-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722861302 Dig-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138* P6, P14, P16 Molex 1722861302 Dig-Key WM11673-ND 0.25 1 \$ 0.25 CAP CER 6800pF 50V 10% X7R 0603 C C 16 Samsung CL108682K885FNC Dig-Key WM11673-ND 0.25 1 \$ 0.25 CAP CER 10nF 50V 5% X7R 0603 C C, C		P9	Molex	1722992106	Digi-Kev	WM11799-ND	1.69	1	\$	1.69
CONN 4POS 2 ROW LUTRA-FIT 0.138" P10, P11 Molex 1722991104 Digi-Key WM11777-ND 1.14 2 \$ 2.29 CONN 3POS ULTRA-FIT 0.138" P4, P7 Molex 1722871103 Digi-Key WM11702-ND 1.09 2 \$ 2.18 CONN 2POS ULTRA-FIT NATURAL COLOR 0.138" P8, P11, P12, P15, P17 Molex 1722872102 Digi-Key WM11702-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS JUMPER 0.1" JP1 Omron X63T-0231 Digi-Key X63T-0231-ND 0.25 1 \$ 0.25 CAP CER 6800pF 50V 10% X7R 0603 C16 Samsung CL10B632KB8SFNC Digi-Key 1276-2103-1-ND 0.13 1 \$ 0.13 CAP CER 10nF 50V 5% X7R 0603 C5, C7, C8, C11, C13, C14, C25, C26, C27, C28 Murata GRM31CR72A225MA73L Digi-Key 399-13384-1-ND 0.27 10 \$ 2.71 CAP CER 1.0F 50V 10% X7R 0603 C1, C2 Talyo Yuden JMK107AB7105KA-T Digi-Key 490-12773-1-ND 0.15 24 \$ 0.93 CAP CER 0.0680F 10% 50V 10% X7R 0603 C24, C32, C33, C34, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46 Murata GRM31CR72A225MA73L Digi-Key 490-8027-1-ND 0.15 24 \$ 3.64 CAP CER 0.0680F 10% 50V X7R 0603 C22 Murata GRM18R71H223KA01D Digi-Key 490-8027-1-ND 0.17 1 \$ 0.21 CAP CER 0.0680F 10% 50V X7R 0603 C22 Murata GRM18R71H223KA01D Digi-Key 490-1577-1-ND 0.17 1 \$ 0.21 CAP CAP ALUM 470F 20% 35V SMD C3, C9 Panasonic EEE-1VA470WP Digi-Key PCE3961CT-ND 0.51 2 \$ 1.01		-						<del>                                       </del>		
CONN 3POS ULTRA-FIT 0.138" P4, P7 Molex 1722871103 Digi-Key WM11702-ND 1.09 2 \$ 2.18 CONN 2POS ULTRA-FIT NATURAL COLOR 0.138" P8, P11, P12, P15, P17 Molex 1722872102 Digi-Key WM11722-ND 1.09 5 \$ 5.45 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.25 1 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 0.21 1 \$ 0.21 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 1722861302 Digi-Key PCE3951CT-ND 0.51 2 \$ 0.51 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 1722861302 Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 1722861302 Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 1722861302 Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 1722861302 Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 1722861302 Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01 CONN 2POS ULTRA-FIT 0.138" P6, P16 Molex 172										
CONN 2POS ULTRA-FIT NATURAL COLOR 0.138"  P8, P11, P12, P15, P17  Molex  1722872102  Digi-Key  WM11722-ND  1.09  5  \$ 5.45  CONN 2POS ULTRA-FIT 0.138"  P6, P14, P16  Molex  1722861302  Digi-Key  WM11673-ND  1.84  3  \$ 5.51  CONN 2POS JUMPER 0.1"  JP1  Omron  XG8T-0231  Digi-Key  XG8T-0231-ND  0.25  1  \$ 0.25  CAP CER 68000pF 50V 10% X7R 0603  C5, C7, C8, C11, C13, C14, C25, C26, C27, C28  CAP CER 10nF 50V 5% X7R 0603  C5, C7, C8, C11, C13, C14, C25, C26, C27, C28  CAP CER 2.2UF 100V ±20% X7R 1206  CAP CER 10nF 50V 10% X7R 0603  C1, C2  Taiyo Yuden  UMK107AB7105KA-T  Digi-Key  Murata  GRM15CR72A225MA73L  Digi-Key  Murata  O6035C-104KAT2A  Digi-Key  478-5052-1-ND  0.15  Digi-Key  490-8027-1-ND  0.15  Digi-Key  39-8027-1-ND  Digi-Key  490-8027-1-ND  Digi-Key  PCE3951CT-ND  Digi-Key  PCE3951CT-ND  Digi-Key  PCE3951CT-ND  Digi-Key  Digi-Key  PCE3951CT-ND  D										
CONN 2POS ULTRA-FIT 0.138"   P6, P14, P16   Molex   1722861302   Digi-Key   WM11673-ND   1.84   3   \$ 5.45		P4, P7	Molex	<u>1722871103</u>	Digi-Key	<u>WM11702-ND</u>	1.09	2	\$	2.18
CONN 2POS ULTRA-FIT 0.138" P6, P14, P16 Molex 1722861302 Digi-Key WM11673-ND 1.84 3 \$ 5.51 CONN 2POS JUMPER 0.1" JP1 Omron XG8T-0231 Digi-Key XG8T-0231-ND 0.25 1 \$ 0.25 CAP CER 6800PF 50V 10% X7R 0603 C16 Samsung CL108682KB8SFNC Digi-Key 1276-21031-ND 0.13 1 \$ 0.13 CAP CER 10n F 50V 5% X7R 0603 C5, C7, C8, C11, C13, C14, C25, C26, C27, C28 CAP CER 2.2UF 100V ±20% X7R 1206 C35 Murata GRM31CR72A225MA73L Digi-Key 399-13384-1-ND 0.27 10 \$ 2.71 CAP CER 1.UF 50V 10% X7R 0603 C1, C2 Taip Yuden UMK107AB7105KA-T Digi-Key 587-3247-1-ND 0.39 2 \$ 0.77 CAP CER 0.068UF 10% 50V X7R 0603 C1, C2 Taip Yuden UMK107AB7105KA-T Digi-Key 587-3247-1-ND 0.39 2 \$ 0.77 CAP CER 0.068UF 10% 50V X7R 0603 C17 Murata GCM188R71H683KA57D Digi-Key 490-8027-1-ND 0.21 1 \$ 0.21 CAP CER 0.022UF 50V 10% X7R 0603 C22 Murata GRM38R71H683KA57D Digi-Key 490-8027-1-ND 0.17 1 \$ 0.21 CAP CER 0.022UF 50V 10% X7R 0603 C22 Murata GRM38R71H623KA01D Digi-Key 490-1277-ND 0.17 1 \$ 0.17 CAP ALUM 100UF 20% 35V SMD C3, C9 Panasonic EEE-1VA470WP Digi-Key PCE3951CT-ND 0.59 1 \$ 0.59 CAP ALUM 47UF 20% 35V SMD C3, C9 Panasonic EEE-1VA470WP Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01		P8, P11, P12, P15, P17	Molex	1722872102	Digi-Key	WM11722-ND	1.09	5	\$	5.45
CONN 2POS JUMPER 0.1"  CAP CER 6800pF 50V 10% X7R 0603  C5, C7, C8, C11, C13, C14, C25, C26, C27, C28  CAP CER 10nF 50V 5% X7R 0603  CAP CER 10nF 50V 10% X7R 0603  CAP CER 0.0603C103JSJAC7867  Digi-Key  Digi-		P6, P14, P16	Molex	1722861302	Digi-Kev	WM11673-ND	1.84	3	\$	5.51
CAP CER 6800pF 50V 10% X7R 0603  CAP CER 10nF 50V 5% X7R 0603  C5, C7, C8, C11, C13, C14, C25, C26, C27, C28  CAP CER 2.2UF 100V ±20% X7R 1206  CAP CER 1.UF 50V 10% X7R 0603  C4, C6, C10, C12, C15, C19, C20, C21, C23, C24, C32, C33, C34, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46  CAP CER 0.068UF 10% 50V X7R 0603  CAP CER 0.022UF 50V 10% X7R 0603  CAP ALUM 100UF 20% 35V SMD  CAP CER 0.022UF 50V 10% X7R 0603  CAP CER 0.024 X7X 0.025 X7X 0.0			Omron	XG8T-0231		XG8T-0231-ND				0.25
CAP CER 10nF 50V 5% X7R 0603  C5, C7, C8, C11, C13, C14, C25, C26, C27, C28  CAP CER 2.2UF 100V ±20% X7R 1206  CAP CER 2.2UF 100V ±20% X7R 1206  CAP CER 1UF 50V 10% X7R 0603  C1, C2  Taivo Yuden  UMK107AB7105KA-T  Digi-Key  Digi-Key  490-12773-1-ND  0.93  1 \$ 0.93  CAP CER 0.1UF 50V 10% X7R 0603  C1, C2  Taivo Yuden  UMK107AB7105KA-T  Digi-Key										0.13
CAP CER 2.2UF 100V ±20% X7R 1206  CAP CER 1UF 50V 10% X7R 0603  C1, C2  CAP CER 0.1UF 50V 10% X7R 0603  C24, C32, C33, C34, C34, C34, C34, C45, C46  CAP CER 0.08BUF 10% 50V X7R 0603  C17  CAP CER 0.02UF 50V 10% X7R 0603  C17  CAP CER 0.02UF 50V 10% X7R 0603  C17  CAP CER 0.02UF 50V 10% X7R 0603  C17  CAP CER 0.08BUF 10% 50V X7R 0603  C17  CAP CER 0.093 (All C42, C43, C44, C45, C46)  CAP CER 0.08BUF 10% 50V X7R 0603  C17  CAP CER 0.08BUF 10% 50V X7R 0603  C17  CAP CER 0.093 (All C42, C43, C44, C45, C46)  CAP CER 0.08BUF 10% 50V X7R 0603  C17  CAP ALUM 100UF 20% 35V SMD  C3, C9  Panasonic  EEE-1VA470WP  Digi-Key  PCE3961CT-ND  0.93  1 \$ 0.93  1		C5, C7, C8, C11, C13, C14, C25, C26, C27,	KEMET					10	<u> </u>	
CAP CER 1UF 50V 10% X7R 0603  C1, C2  Talyo Yuden  UMK107AB7105KA-T  Digi-Key  587-3247-1-ND  0.39  2 \$ 0.77  CAP CER 0.1UF 50V 10% X7R 0603  C24, C32, C33, C34, C36, C37, C38, C39, C44, C45, C46  CAP CER 0.068UF 10% 50V X7R 0603  C4, C32, C33, C34, C36, C37, C38, C39, C44, C45, C46  CAP CER 0.022UF 50V 10% X7R 0603  C22  Murata  GRM188R71H223KA01D  Digi-Key  478-5052-1-ND  0.15  24  \$ 3.64  C48-5052-1-ND  0.21  1 \$ 0.21  CAP CER 0.022UF 50V 10% X7R 0603  C22  Murata  GRM188R71H223KA01D  Digi-Key  490-8027-1-ND  0.17  1 \$ 0.17  CAP ALUM 100UF 20% 35V SMD  C3, C9  Panasonic  EEE-1VA101XP  Digi-Key  PCE3961CT-ND  0.51  2 \$ 1.01	CAR CER 2 2HE 100V +200V V7R 1000		Murete	CPM21CP72A22FMA72	Digi Vov	400 12772 4 ND	0.03	1	œ.	0.00
CAP CER 0.1UF 50V 10% X7R 0603  C4, C6, C10, C12, C15, C19, C20, C21, C23, C24, C32, C33, C34, C36, C37, C38, C39, C37, C38, C39, C34, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46  CAP CER 0.068UF 10% 50V X7R 0603  C17  Murata  GRM188R71H623KA57D  Digi-Key  478-5052-1-ND  0.15  24  \$ 3.64  0.21  \$ 0.21  CAP CER 0.022UF 50V 10% X7R 0603  C22  Murata  GRM188R71H223KA01D  Digi-Key  490-8027-1-ND  0.17  1 \$ 0.21  CAP ALUM 100UF 20% 35V SMD  C3, C9  Panasonic  EEE-1VA10XIP  Digi-Key  PCE3951CT-ND  0.59  1 \$ 0.59  CAP ALUM 47UF 20% 35V SMD  C3, C9  Panasonic  EEE-1VA10WP  Digi-Key  PCE3951CT-ND  0.51  2 \$ 1.01								· .		
CAP CER 0.068UF 10% 50V X7R 0603 C17 Murata GCM188R71H683KA57D Digi-Key 490-8027-1-ND 0.21 1 \$ 0.21 CAP CER 0.022UF 50V 10% X7R 0603 C22 Murata GRM188R71H223KA01D Digi-Key 490-1517-1-ND 0.17 1 \$ 0.17 CAP ALUM 100UF 20% 35V SMD C18 Panasonic EEE-1VA101XP Digi-Key PCE3951CT-ND 0.59 1 \$ 0.59 CAP ALUM 47UF 20% 35V SMD C3, C9 Panasonic EEE-1VA470WP Digi-Key PCE3951CT-ND 0.51 2 \$ 1.01		C4, C6, C10, C12, C15, C19, C20, C21, C23, C24, C32, C33, C34, C36, C37, C38, C39,								
CAP CER 0.022UF 50V 10% X7R 0603         C22         Murata         GRM188R71H223KA01D         Digi-Key         490-1517-1-ND         0.17         1         \$ 0.17           CAP ALUM 100UF 20% 35V SMD         C18         Panasonic         EEE-1VA101XP         Digi-Key         PCE3951CT-ND         0.59         1         \$ 0.59           CAP ALUM 47UF 20% 35V SMD         C3, C9         Panasonic         EEE-1VA470WP         Digi-Key         PCE3961CT-ND         0.51         2         \$ 1.01	CAP CER 0.068LIE 109/ 50V V7D 0603		Murata	GCM188D71U602KA67D	Digi Kov	400-8027 4 ND	0.24	1	2	0.24
CAP ALUM 100UF 20% 35V SMD         C18         Panasonic         EEE-1VA101XP         Digi-Key         PCE3951CT-ND         0.59         1         \$ 0.59           CAP ALUM 47UF 20% 35V SMD         C3, C9         Panasonic         EEE-1VA470WP         Digi-Key         PCE3961CT-ND         0.51         2         \$ 1.01									-	
CAP ALUM 47UF 20% 35V SMD C3, C9 <u>Panasonic</u> <u>EEE-1VA470WP</u> <u>Digi-Key</u> <u>PCE3961CT-ND</u> 0.51 2 \$ 1.01										
Total: \$ 106.25	CAP ALUM 47UF 20% 35V SMD	C3, C9	Panasonic	EEE-1VA4/0WP	Digi-Key	PCE3961CT-ND	U.51			
				1		1		ı otal:	\$	106.25







# **Electrical Rules Check Report**

Class	Document	Message
Error	Power Distribution - Misc	Duplicate Component Designators P11 at 5450mil,2200mil and 10490mil,5150mil
	Boards.SchDoc	
Error	Power Distribution - Misc	Duplicate Component Designators P11 at 10490mil,5150mil and 5450mil,2200mil
	Boards.SchDoc	
Warning	Power Distribution - DC-DC.SchDoc	Net NetC3_1 has no driving source (Pin C3-1,Pin F1-2,Pin F1-4,Pin R3-1,Pin U2-2)
Warning	Power Distribution - DC-DC.SchDoc	Net NetC7_1 has no driving source (Pin C7-1,Pin R5-2,Pin R7-1,Pin U3-3)
Warning	Power Distribution - Aux	Net NetC9_1 has no driving source (Pin C9-1,Pin F2-2,Pin F2-4,Pin R9-1,Pin U4-2)
	Battery.SchDoc	
Warning	Power Distribution - Aux	Net NetC13_1 has no driving source (Pin C13-1,Pin R11-2,Pin R13-1,Pin U5-3)
	Battery.SchDoc	
Error	Power Distribution - Misc	Net NetU19_2 contains multiple Input Ports (Port PB13_SOLAR_SENSE_EN,Port
	Boards.SchDoc	PB13_SOLAR_SENSE_EN)
Warning	Controller_Board_Interface.SchDoc	Net PA15/LED_RED has only one pin (Pin P1-39)
Warning	Controller_Board_Interface.SchDoc	Net PB3/LED_GREEN has only one pin (Pin P1-38)
Warning	Power Distribution - Power	Net PB8/EN has no driving source (Pin P1-32,Pin U6-1)
	Path.SchDoc	
Error	Power Distribution - PJB.SchDoc	Net PB9_PJB_FAN_PWM contains multiple Input Ports (Port PB9_PJB_FAN_PWM,Port
		PB9_PJB_FAN_PWM)
Error	Power Distribution - Misc	Net PB13_SOLAR_SENSE_EN contains multiple Input Ports (Port
	Boards.SchDoc	PB13_SOLAR_SENSE_EN,Port PB13_SOLAR_SENSE_EN)
Error	Power Distribution - Spare	Net PC13_UNPROT_SPARE2_EN contains multiple Input Ports (Port
	Outputs.SchDoc	PC13_UNPROT_SPARE2_EN,Port PC13_UNPROT_SPARE2_EN)
Warning	Controller_Board_Interface.SchDoc	Nets Wire PA8/S\H\D\N\ has multiple names (Net Label PA8/S\H\D\NNet Label
		PA8_S\HIDINI)
Warning	Controller_Board_Interface.SchDoc	Nets Wire PB8/EN has multiple names (Net Label PB8/EN,Net Label PB8_EN)
Warning	Power Distribution - Spare	Net UNPROT_12V has no driving source (Pin C20-1,Pin C30-1,Pin Q1-7,Pin Q1-8,Pin
	Outputs.SchDoc	Q2-7,Pin Q2-8,Pin R2-1,Pin R3-2,Pin R16-1,Pin TP3-1,Pin U2-3,Pin U6-24,Pin U11-17,Pin
	•	U12-1,Pin U12-9,Pin U13-1,Pin U13-9,Pin U16-1,Pin U16-9,Pin U18-1,Pin U18-9,Pin
		U19-1,Pin U19-9,Pin U20-1,Pin U20-9,Pin U22-1,Pin U22-9,Pin U24-1,Pin U24-9)

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# **Design Rules Verification Report**

Filename: C:\Users\Taiping\Documents\MidnightSun\hardware\MSXII\_PowerDistribution\F Warnings 0 Rule Violations 420

## Warnings Total

Rule Violations	
Clearance Constraint (Gap=0.152mm) (All),(All)	0
Clearance Constraint (Gap=0.127mm) (IsStitchingVia and InNet('UNPROT_12V')),((IsVia and (Not IsStitchingVia)) Or	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Un-Routed Net Constraint ( (All) )	1
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Width Constraint (Min=0.254mm) (Max=1.27mm) (Preferred=0.254mm) (All)	0
Power Plane Connect Rule(Direct Connect ) (Expansion=0.508mm) (Conductor Width=0.254mm) (Air Gap=0.254mm)	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=2.54mm) (All)	7
Hole To Hole Clearance (Gap=0.254mm) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)	81
Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)	264
Silk to Silk (Clearance=0.254mm) (All),(All)	64
Net Antennae (Tolerance=0mm) (All)	0
Board Clearance Constraint (Gap=0mm) (All)	3
Height Constraint (Min=0mm) (Max=25.4mm) (Prefered=12.7mm) (All)	0
Total	420

Un-Routed Net Constraint ( (All) ) Isolated copper: Split Plane (GND) on Ground. Dead copper detected. Copper area is : 0.416 sq. mm

Hole Size Constraint (Min=0.025mm) (Max=2.54mm) (All)
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(117.5mm,2.5mm) on Multi-Layer Actual Hole Size = 2.7mm
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(117.5mm,27.5mm) on Multi-Layer Actual Hole Size = 2.7mm
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(117.65mm,97.5mm) on Multi-Layer Actual Hole Size = 2.7mm
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(2.5mm,2.5mm) on Multi-Layer Actual Hole Size = 2.7mm
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(2.5mm,97.5mm) on Multi-Layer Actual Hole Size = 2.7mm
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(87.5mm,2.5mm) on Multi-Layer Actual Hole Size = 2.7mm
Hole Size Constraint: (2.7mm > 2.54mm) Pad Free-(87.5mm,27.5mm) on Multi-Layer Actual Hole Size = 2.7mm

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Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)
Minimum Solder Mask Sliver Constraint: (0.097mm < 0.254mm) Between Pad C18-2(66mm,54.225mm) on Component Side And Via (66mm,51.9mm) from
Minimum Solder Mask Sliver Constraint: (0.186mm < 0.254mm) Between Pad C28-1(97.375mm,10.211mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.186mm < 0.254mm) Between Pad C28-2(98.725mm,10.211mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.075mm < 0.254mm) Between Pad C29-2(57.826mm,54.225mm) on Component Side And Via
Minimum Solder Mask Sliver Constraint: (0.034mm < 0.254mm) Between Pad C29-2(57.826mm,54.225mm) on Component Side And Via
Minimum Solder Mask Sliver Constraint: (0.052mm < 0.254mm) Between Pad C29-2(57.826mm,54.225mm) on Component Side And Via
Minimum Solder Mask Sliver Constraint: (0.208mm < 0.254mm) Between Pad C30-2(47.749mm,12mm) on Component Side And Via
Minimum Solder Mask Sliver Constraint: (0.208mm < 0.254mm) Between Pad C30-2(47.749mm,12mm) on Component Side And Via (49.235mm,12mm)
Minimum Solder Mask Sliver Constraint: (0.247mm < 0.254mm) Between Pad LED4-1(93.98mm,31.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.247mm < 0.254mm) Between Pad LED4-2(92.48mm,31.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.201mm < 0.254mm) Between Pad LED6-1(85.75mm,98.952mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad LED9-1(97.7mm,64.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.105mm < 0.254mm) Between Pad P1-(89mm,22.05mm) on Multi-Layer And Pad P1-(90.5mm,22.8mm) on
Minimum Solder Mask Sliver Constraint: (0.105mm < 0.254mm) Between Pad P1-(89mm,7.95mm) on Multi-Layer And Pad P1-(90.5mm,7.2mm) on
Minimum Solder Mask Sliver Constraint: (0.047mm < 0.254mm) Between Pad Q6-1(72.6mm,84.061mm) on Component Side And Pad
Minimum Solder Wask Sliver Constraint: (0.047mm < 0.254mm) Between Pad Q6-2(73.25mm,84.061mm) on Component Side And Pad
Minimum Solder Wask Sliver Constraint: (0.047mm < 0.254mm) Between Pad Q6-3(73.9mm,84.061mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.202mm < 0.254mm) Between Pad Q6-3(73.9mm,84.061mm) on Component Side And Pad
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Minimum Solder Mask Sliver Constraint: (0.047mm < 0.254mm) Between Pad Q6-4(73.9mm,85.911mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.047mm < 0.254mm) Between Pad Q6-4(73.9mm,85.911mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.202mm < 0.254mm) Between Pad Q6-4(73.9mm,85.911mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.047mm < 0.254mm) Between Pad Q6-5(73.25mm,85.911mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.187mm < 0.254mm) Between Pad Q6-7(72.95mm,84.986mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.191mm < 0.254mm) Between Pad R16-2(70.39mm,12.915mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.072mm < 0.254mm) Between Pad R17-1(73.065mm, 4.825mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.072mm < 0.254mm) Between Pad R17-2(71.515mm,4.825mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.178mm < 0.254mm) Between Pad R21-2(66.377mm,11.404mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.231mm < 0.254mm) Between Pad R31-2(96.474mm,37.155mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.214mm < 0.254mm) Between Pad R3-2(51.557mm,33.59mm) on Component Side And Via (55mm,30mm) from
Minimum Solder Mask Sliver Constraint: (0.214mm < 0.254mm) Between Pad R3-2(51.557mm,33.59mm) on Component Side And Via (55mm,32mm) from
Minimum Solder Mask Sliver Constraint: (0.253mm < 0.254mm) Between Pad R35-1(74.74mm,33mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.253mm < 0.254mm) Between Pad R35-2(73.19mm,33mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.126mm < 0.254mm) Between Pad R41-1(87.304mm,98mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.122mm < 0.254mm) Between Pad R48-1(96.5mm,63.2mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.242mm < 0.254mm) Between Pad R55-1(118mm,90mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.18mm < 0.254mm) Between Pad R61-1(118mm,74.167mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.212mm < 0.254mm) Between Pad R64-1(24.89mm,98mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U10-6(83.206mm,41.33mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U10-8(83.056mm,42.08mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U1-1(56.974mm,7.35mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.012mm < 0.254mm) Between Pad U1-1(56.974mm,7.35mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.012mm < 0.254mm) Between Pad U1-2(56.974mm,6.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U12-6(83.206mm,45.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U12-8(83.056mm,46.5mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U1-3(58.414mm,6.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.022mm < 0.254mm) Between Pad U1-3(58.414mm,6.75mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U13-6(88.054mm,89.87mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U13-8(87.304mm,89.72mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.022mm < 0.254mm) Between Pad U1-4(58.414mm,7.35mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U14-6(55.664mm,89.87mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U14-8(54.914mm,89.72mm) on Component Side And Pad
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U15-6(83.206mm,61.95mm) on Component Side And Pad
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Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U15-8(83.056mm,62.7mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U16-6(83.206mm,54.95mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U16-8(83.056mm,55.7mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U17-6(40.946mm,84.607mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U17-8(40.196mm,84.457mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U18-6(110mm,41.33mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U18-8(109.85mm,42.08mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U19-6(110mm,89mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U19-8(109.85mm,89.75mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U20-6(83.206mm,76.625mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U20-8(83.056mm,77.375mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U21-6(10.464mm,89.87mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U21-8(9.714mm,89.72mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U22-6(110mm,73.605mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U22-8(109.85mm,74.355mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U23-6(25.664mm,89.87mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U23-8(24.914mm,89.72mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.098mm < 0.254mm) Between Pad U24-6(110mm,57.688mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.048mm < 0.254mm) Between Pad U24-8(109.85mm,58.438mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U3-1(33.339mm,5.775mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U3-2(33.339mm,4.825mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U5-1(46.575mm,7.85mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U5-2(46.575mm,6.9mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U7-1(12.25mm,6.7mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U7-2(12.25mm,5.75mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U8-1(22.582mm,6.7mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U8-2(22.582mm,5.75mm) on Component Side And Pad	
Minimum Solder Mask Sliver Constraint: (0.188mm < 0.254mm) Between Via (46.04mm,11.03mm) from Component Side to Solder Side And Via	
Minimum Solder Mask Sliver Constraint: (0.12mm < 0.254mm) Between Via (49.235mm,11.076mm) from Component Side to Solder Side And Via	

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Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (107.65mm,42.68mm) on Top Overlay And Pad U18-1(108.2mm,42.33mm)
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (107.65mm,59.038mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (107.65mm,74.955mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (107.65mm,90.35mm) on Top Overlay And Pad U19-1(108.2mm,90mm) on
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (24.314mm,87.52mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (39.596mm,82.257mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (54.314mm,87.52mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.188mm < 0.254mm) Between Arc (56.466mm,7.604mm) on Top Overlay And Pad U1-1(56.974mm,7.35mm)
Silk To Solder Mask Clearance Constraint: (0.141mm < 0.254mm) Between Arc (77.139mm,38.684mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (80.856mm, 42.68mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (80.856mm,47.1mm) on Top Overlay And Pad U12-1(81.406mm,46.75mm)
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (80.856mm, 56.3mm) on Top Overlay And Pad U16-1(81.406mm, 55.95mm)
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (80.856mm,63.3mm) on Top Overlay And Pad U15-1(81.406mm,62.95mm)
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (80.856mm,77.975mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (86.704mm,87.52mm) on Top Overlay And Pad
Silk To Solder Mask Clearance Constraint: (0.214mm < 0.254mm) Between Arc (9.114mm.87.52mm) on Top Overlay And Pad U21-1(9.464mm.88.07mm)
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad 3V3-1(109.1mm,96.151mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad 3V3-1(109.1mm,96.151mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad 3V3-1(109.1mm,96.151mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad 3V3-1(110.65mm,96.151mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad 3V3-1(110.65mm,96.151mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad 3V3-1(110.65mm,96.151mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad AUX FUSED-1(48.185mm, 77.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad AUX FUSED-1(48.185mm,77.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad AUX FUSED-1(48.185mm, 77.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad AUX FUSED-1(49.735mm,77.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad AUX FUSED-1(49.735mm,77.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad AUX FUSED-1(49.735mm, 77.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C18-1(66mm,60.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C18-1(66mm,60.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C18-2(66mm,54.225mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C18-2(66mm,54.225mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.248mm < 0.254mm) Between Pad C20-2(77.175mm,15.75mm) on Component Side And Text "U6"
Silk To Solder Mask Clearance Constraint: (0.252mm < 0.254mm) Between Pad C2-1(55.164mm.7.35mm) on Component Side And Text "C2"
Silk To Solder Mask Clearance Constraint: (0.077mm < 0.254mm) Between Pad C22-1(68.137mm,10.173mm) on Component Side And Text "R18"
Silk To Solder Mask Clearance Constraint: (0.077mm < 0.254mm) Between Pad C22-2(68.137mm,8.823mm) on Component Side And Text "R20"
Silk To Solder Mask Clearance Constraint: (0.217mm < 0.254mm) Between Pad C25-2(10.464mm,6.15mm) on Component Side And Text "C25"
Silk To Solder Mask Clearance Constraint: (0.208mm < 0.254mm) Between Pad C26-2(20.75mm,6.15mm) on Component Side And Text "C26"
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C29-1(57.826mm,60.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C29-1(57.826mm,60.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C29-2(57.826mm.54.225mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C29-2(57.826mm,54.225mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C30-1(47.749mm,17.9mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C30-1(47.749mm.17.9mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C30-2(47.749mm,12mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C30-2(47.749mm,12mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C3-1(32.427mm,17.9mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C3-1(32.427mm,17.9mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C3-2(32.427mm,12mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C3-2(32.427mm,12mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad C33-1(79.902mm.45.75mm) on Component Side And Text "C33"
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad C33-2(79.902mm,44.4mm) on Component Side And Text "C33"
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Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)
Silk To Solder Mask Clearance Constraint: (0.15mm < 0.254mm) Between Pad C38-2(79.839mm,53.6mm) on Component Side And Text "REAR CAM"
Silk To Solder Mask Clearance Constraint: (0.118mm < 0.254mm) Between Pad C8-1(93.894mm,4.375mm) on Component Side And Text "C8"
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C9-1(33mm,59.65mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C9-1(33mm,59.65mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C9-2(33mm,53.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad C9-2(33mm,53.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.166mm < 0.254mm) Between Pad D4-1(73.773mm,88.595mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.166mm < 0.254mm) Between Pad D4-1(73.773mm,88.595mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.166mm < 0.254mm) Between Pad D4-2(69.773mm,88.595mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.166mm < 0.254mm) Between Pad D4-2(69.773mm,88.595mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.238mm < 0.254mm) Between Pad F1-3(18.957mm,31.6mm) on Multi-Layer And Track
Silk To Solder Mask Clearance Constraint: (0.238mm < 0.254mm) Between Pad F1-4(32.427mm,31.6mm) on Multi-Layer And Track
Silk To Solder Mask Clearance Constraint: (0.238mm < 0.254mm) Between Pad F2-3(18.957mm,65.849mm) on Multi-Layer And Track
Silk To Solder Mask Clearance Constraint: (0.238mm < 0.254mm) Between Pad F2-4(32.427mm,65.849mm) on Multi-Layer And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad GND-1(20.75mm,13.391mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad GND-1(20.75mm,13.391mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad GND-1(20.75mm,13.391mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad GND-1(22.3mm,13.391mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad GND-1(22.3mm,13.391mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad GND-1(22.3mm,13.391mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad LDO 3V-1(55.164mm,3.397mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad LDO 3V-1(55.164mm,3.397mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad LDO 3V-1(55.164mm,3.397mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad LDO 3V-1(56.714mm,3.397mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad LDO 3V-1(56.714mm,3.397mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad LDO 3V-1(56.714mm,3.397mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED10-2(97.597mm,54.15mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED11-2(36.5mm,98.952mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED1-2(102.026mm,93.28mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED12-2(119mm,45.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED13-2(119mm,93.17mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED14-2(97.75mm,81.05mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.209mm < 0.254mm) Between Pad LED15-2(6.768mm,98.925mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.209mm < 0.254mm) Between Pad LED16-2(118.925mm,77.275mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.209mm < 0.254mm) Between Pad LED17-2(21.75mm,98.925mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.209mm < 0.254mm) Between Pad LED18-2(118.925mm,61.675mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED2-2(100.7mm,93.28mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED3-2(97.674mm,35.5mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED4-2(92.48mm,31.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED5-2(97.7mm,48.25mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED6-2(84.25mm,98.952mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED7-2(69.473mm,84.061mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED8-2(51.75mm,98.952mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.165mm < 0.254mm) Between Pad LED9-2(97.7mm,66.25mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.223mm < 0.254mm) Between Pad P1-1(92.3mm,21mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.223mm < 0.254mm) Between Pad P1-25(92.3mm,9mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.239mm < 0.254mm) Between Pad P1-26(88.7mm,9mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.239mm < 0.254mm) Between Pad P1-50(88.7mm,21mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.051mm < 0.254mm) Between Pad P4-2(5mm,67.5mm) on Multi-Layer And Text "AUX BAT

# +12V" (10.598mm,64.651mm) on Bottom Overlay [Bottom Overlay] to [Bottom Solder] clearance [0.051mm]

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Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad PROT 12V-1(3.339mm,80mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad PROT 12V-1(3.339mm,80mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad PROT 12V-1(3.339mm,80mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad PROT 12V-1(4.889mm,80mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad PROT 12V-1(4.889mm,80mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad PROT 12V-1(4.889mm,80mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q1-1(57.664mm,22.554mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q1-2(58.934mm,22.554mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q1-3(60.204mm,22.554mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q1-4(61.474mm,22.554mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q1-5(61.474mm,28.019mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q1-6(60.204mm,28.019mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q1-7(58.934mm,28.019mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q1-8(57.664mm,28.019mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q2-1(57.664mm,38.89mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q2-2(58.934mm,38.89mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q2-3(60.204mm,38.89mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q2-4(61.474mm,38.89mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q2-5(61.474mm,44.355mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q2-6(60.204mm,44.355mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q2-7(58.934mm,44.355mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q2-8(57.664mm,44.355mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q3-1(48.985mm,63.784mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q3-2(50.255mm,63.784mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q3-3(51.525mm,63.784mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.127mm < 0.254mm) Between Pad Q3-4(52.795mm,63.784mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q3-5(52.795mm,69.249mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q3-6(51.525mm,69.249mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q3-7(50.255mm,69.249mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.121mm < 0.254mm) Between Pad Q3-8(48.985mm,69.249mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.05mm < 0.254mm) Between Pad Q6-1(72.6mm,84.061mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.112mm < 0.254mm) Between Pad Q6-2(73.25mm,84.061mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.112mm < 0.254mm) Between Pad Q6-2(73.25mm,84.061mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.05mm < 0.254mm) Between Pad Q6-3(73.9mm,84.061mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.05mm < 0.254mm) Between Pad Q6-4(73.9mm,85.911mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.112mm < 0.254mm) Between Pad Q6-5(73.25mm,85.911mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.112mm < 0.254mm) Between Pad Q6-5(73.25mm,85.911mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.05mm < 0.254mm) Between Pad Q6-6(72.6mm,85.911mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.238mm < 0.254mm) Between Pad R12-1(96.482mm, 2.825mm) on Component Side And Text "R12"
Silk To Solder Mask Clearance Constraint: (0.238mm < 0.254mm) Between Pad R12-2(96.482mm,4.375mm) on Component Side And Text "R12"
Silk To Solder Mask Clearance Constraint: (0.042mm < 0.254mm) Between Pad R27-2(8.75mm,6.35mm) on Component Side And Text "R27"
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad R28-2(18.957mm,6.35mm) on Component Side And Text "R28"
Silk To Solder Mask Clearance Constraint: (0.19mm < 0.254mm) Between Pad R31-2(96.474mm,37.155mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.218mm < 0.254mm) Between Pad R47-1(67.923mm,80.584mm) on Component Side And Text "R47"
Silk To Solder Mask Clearance Constraint: (0.23mm < 0.254mm) Between Pad R50-2(96.5mm,55.845mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.233mm < 0.254mm) Between Pad R53-1(36.5mm,97.175mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.228mm < 0.254mm) Between Pad R53-1(36.5mm,97.175mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.228mm < 0.254mm) Between Pad R53-2(38.05mm,97.175mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad R9-1(40.247mm,67.144mm) on Component Side And Text "R9"
Silk To Solder Mask Clearance Constraint: (Collision < 0.254mm) Between Pad TP5-TP(83.11mm,10.544mm) on Component Side And Text "C15"
Silk To Solder Mask Clearance Constraint: (0.059mm < 0.254mm) Between Pad TP5-TP(83.11mm,10.544mm) on Component Side And Text "C17"
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U10-1(81.406mm,42.33mm) on Component Side And Track

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Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U10-4(81.406mm,40.83mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U10-5(83.206mm,40.83mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U10-8(83.056mm,42.08mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U10-8(83.206mm,42.33mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U10-9(82.306mm,41.58mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U10-9(82.306mm,41.58mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U1-1(56.974mm,7.35mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U1-2(56.974mm,6.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U12-1(81.406mm,46.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U12-4(81.406mm,45.25mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U12-5(83.206mm,45.25mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U12-8(83.056mm,46.5mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U12-8(83.206mm,46.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U12-9(82.306mm,46mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U12-9(82.306mm,46mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U1-3(58.414mm,6.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U13-1(87.054mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U13-4(88.554mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U13-5(88.554mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U13-8(87.054mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U13-8(87.304mm,89.72mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U13-9(87.804mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U13-9(87.804mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U1-4(58.414mm,7.35mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U14-1(54.664mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U14-4(56.164mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U14-5(56.164mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U14-8(54.664mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U14-8(54.914mm,89.72mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U14-9(55.414mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U14-9(55.414mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U15-1(81.406mm,62.95mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U15-4(81.406mm,61.45mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U15-5(83.206mm,61.45mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U15-8(83.056mm,62.7mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U15-8(83.206mm,62.95mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U15-9(82.306mm,62.2mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U15-9(82.306mm,62.2mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U16-1(81.406mm,55.95mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U16-4(81.406mm,54.45mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U16-5(83.206mm,54.45mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U16-8(83.056mm,55.7mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U16-8(83.206mm,55.95mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U16-9(82.306mm,55.2mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U16-9(82.306mm,55.2mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U17-1(39.946mm,82.807mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U17-4(41.446mm,82.807mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.248mm < 0.254mm) Between Pad U17-5(41.446mm,84.607mm) on Component Side And Text "BMS
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U17-5(41.446mm,84.607mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.137mm < 0.254mm) Between Pad U17-6(40.946mm,84.607mm) on Component Side And Text "BMS
Silk To Solder Mask Clearance Constraint: (0.137mm < 0.254mm) Between Pad U17-7(40.446mm,84.607mm) on Component Side And Text "BMS
Silk To Solder Mask Clearance Constraint: (0.137mm < 0.254mm) Between Pad U17-8(39.946mm,84.607mm) on Component Side And Text "BMS

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Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U17-8(39.946mm,84.607mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U17-8(40.196mm,84.457mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U17-9(40.696mm,83.707mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U17-9(40.696mm,83.707mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U18-1(108.2mm,42.33mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U18-4(108.2mm,40.83mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U18-5(110mm,40.83mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U18-8(109.85mm,42.08mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U18-8(110mm, 42.33mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U18-9(109.1mm,41.58mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U18-9(109.1mm,41.58mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U19-1(108.2mm,90mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U19-4(108.2mm,88.5mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U19-5(110mm,88.5mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U19-8(109.85mm,89.75mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U19-8(110mm,90mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U19-9(109.1mm,89.25mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U19-9(109.1mm,89.25mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U20-1(81.406mm,77.625mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U20-4(81.406mm,76.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U20-5(83.206mm,76.125mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U20-8(83.056mm,77.375mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U20-8(83.206mm,77.625mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U20-9(82.306mm,76.875mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U20-9(82.306mm,76.875mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U21-1(9.464mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U21-4(10.964mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U21-5(10.964mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U21-8(9.464mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U21-8(9.714mm,89.72mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U21-9(10.214mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U21-9(10.214mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U22-1(108.2mm,74.605mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U22-4(108.2mm,73.105mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U22-5(110mm,73.105mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U22-8(109.85mm,74.355mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U22-8(110mm,74.605mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U22-9(109.1mm,73.855mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0:775mm < 0.254mm) Between Pad U22-9(109.1mm,73.855mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Pad U23-1(24.664mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.139mm < 0.254mm) Between Pad U23-4(26.164mm,88.07mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.131mm < 0.254mm) Between Pad U23-5(26.164mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U23-8(24.664mm,89.87mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U23-8(24.914mm,89.72mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.135mm < 0.254mm) Between Pad U23-9(25.414mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.254mm) Between Pad U23-9(25.414mm,88.97mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad U24-1(108.2mm,58.688mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.102mm < 0.254mm) Between Pad U24-4(108.2mm,57.188mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.134mm) Between Pad U24-5(110mm,57.188mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U24-8(109.85mm,58.438mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U24-8(109.85mm) on Component Side And Track  Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U24-8(110mm,58.688mm) on Component Side And Track
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad U24-9(109.1mm,57.938mm) on Component Side And Track
Jaik 10 John Mask Gearance Constraint. (0.17 Jillin > 0.20411111) Detween Fau 024-7 (107. 111111,37. 93011111) UII Component Side And Mack

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#### Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)

Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U24-9(109.1mm,57.938mm) on Component Side And Track

Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad UNPROT 12V-1(109.7mm,31.5mm) on Component Side And Track

Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad UNPROT 12V-1(109.7mm,31.5mm) on Component Side And Track

Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad UNPROT 12V-1(109.7mm,31.5mm) on Component Side And Track

Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad UNPROT 12V-1(111.25mm,31.5mm) on Component Side And Track

Silk To Solder Mask Clearance Constraint: (0.148mm < 0.254mm) Between Pad UNPROT 12V-1(111.25mm,31.5mm) on Component Side And Track

Silk To Solder Mask Clearance Constraint: (0.123mm < 0.254mm) Between Pad UNPROT 12V-1(111.25mm,31.5mm) on Component Side And Track

#### Silk to Silk (Clearance=0.254mm) (All),(All)

Silk To Silk Clearance Constraint: (Collision < 0.254mm) Between Arc (56.648mm, 37.62mm) on Top Overlay And Text "Q2" (55.526mm, 36.787mm) on Top Silk To Silk Clearance Constraint: (Collision < 0.254mm) Between Text "AUX BAT

### +12V" (10.598mm,64.651mm) on Bottom Overlay And Text "GND" (7.378mm,68.715mm) on Bottom Overlay Silk Text to 5

#### Silk to Silk (Clearance=0.254mm) (All),(All)

Silk To Silk Clearance Constraint: (Collision < 0.254mm) Between Text "C13" (44.425mm,12.179mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (Collision < 0.254mm) Between Text "C13" (44.425mm,12.179mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (0.156mm < 0.254mm) Between Text "C22" (67.684mm,13.281mm) on Top Overlay And Text "R16"

Silk To Silk Clearance Constraint: (0.16mm < 0.254mm) Between Text "C22" (67.684mm,13.281mm) on Top Overlay And Text "R18" (68.79mm,11.762mm)

Silk To Silk Clearance Constraint: (0.211mm < 0.254mm) Between Text "CHARGER" (110.913mm,33.827mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (0.191mm < 0.254mm) Between Text "CHARGER" (110.913mm,33.827mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (0.206mm < 0.254mm) Between Text "CHARGER" (110.913mm,33.827mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (0.242mm < 0.254mm) Between Text "DC-DC IN" (3.02mm,51.942mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (0.24mm < 0.254mm) Between Text "DC-DC IN" (3.02mm,51.942mm) on Top Overlay And Track

Silk To Silk Clearance Constraint: (0.107mm < 0.254mm) Between Text "FRONT

#### SOLAR" (111mm,80.102mm) on Top Overlay And Track (111.07mm,82.67mm)(111.07mm,93.745mm) on Top Overlay Silk

#### Silk to Silk (Clearance=0.254mm) (All),(All)

Silk To Silk Clearance Constraint: (0.097mm < 0.254mm) Between Text "FRONT

SOLAR" (111mm,80.102mm) on Top Overlay And Track (111.07mm,82.67mm)(116.37mm,82.67mm) on Top Overlay Silk

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Silk to Silk (Clearance=0.254mm) (AII),(AII)
Silk To Silk Clearance Constraint: (0.207mm < 0.254mm) Between Text "GND" (20.371mm,14.5mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.23mm < 0.254mm) Between Text "LED10" (99.577mm,54.379mm) on Top Overlay And Text "R51"
Silk To Silk Clearance Constraint: (0.15mm < 0.254mm) Between Text "LED11" (32.227mm,98.552mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.157mm < 0.254mm) Between Text "LED15" (2.108mm,94.119mm) on Top Overlay And Text "R62"
Silk To Silk Clearance Constraint: (0.216mm < 0.254mm) Between Text "LED17" (17.101mm,98.552mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.034mm < 0.254mm) Between Text "LED18" (118.541mm,66.141mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.247mm < 0.254mm) Between Text "LED3" (99.961mm,35.922mm) on Top Overlay And Text "R32"
Silk To Silk Clearance Constraint: (0.238mm < 0.254mm) Between Text "LED4" (88.52mm,31.35mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.166mm < 0.254mm) Between Text "LED5" (99.577mm,48.638mm) on Top Overlay And Text "R40"
Silk To Silk Clearance Constraint: (0.191mm < 0.254mm) Between Text "LED6" (80.336mm,98.552mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.118mm < 0.254mm) Between Text "LED9" (99.577mm,66.764mm) on Top Overlay And Text "R49"
Silk To Silk Clearance Constraint: (0.25mm < 0.254mm) Between Text "P11" (111.07mm,46.697mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.25mm < 0.254mm) Between Text "P11" (111.07mm,46.697mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.199mm < 0.254mm) Between Text "P12" (111.07mm,94.146mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.199mm < 0.254mm) Between Text "P12" (111.07mm,94.146mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.123mm < 0.254mm) Between Text "P14" (3.895mm,95.405mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.17mm < 0.254mm) Between Text "P17" (111.07mm,62.45mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.17mm < 0.254mm) Between Text "P17" (111.07mm,62.45mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.168mm < 0.254mm) Between Text "P4" (6.706mm,75.17mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.169mm < 0.254mm) Between Text "P4" (6.706mm,75.17mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.198mm < 0.254mm) Between Text "P5" (84.97mm,49.3mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.198mm < 0.254mm) Between Text "P5" (84.97mm,49.3mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.214mm < 0.254mm) Between Text "P7" (65.925mm,96.775mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.203mm < 0.254mm) Between Text "P7" (65.925mm,96.775mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.14mm < 0.254mm) Between Text "P9" (85.144mm,67.144mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.092mm < 0.254mm) Between Text "P9" (85.144mm,67.144mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.247mm < 0.254mm) Between Text "PROT 12V" (1.25mm,81.141mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.239mm < 0.254mm) Between Text "PROT 12V" (1.25mm,81.141mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.242mm < 0.254mm) Between Text "PROT 12V" (1.25mm,81.141mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.226mm < 0.254mm) Between Text "R17" (68.51mm,4.471mm) on Top Overlay And Text "R19" (68.51mm,3.295mm)
Silk To Silk Clearance Constraint: (0.216mm < 0.254mm) Between Text "R42" (81.223mm,96.675mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.216mm < 0.254mm) Between Text "R42" (81.223mm,96.675mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.198mm < 0.254mm) Between Text "REAR CAM" (78.289mm,51.975mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.205mm < 0.254mm) Between Text "REAR CAM" (78.289mm,51.975mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.073mm < 0.254mm) Between Text "TELEMETRY" (77.614mm,65.665mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.16mm < 0.254mm) Between Text "TELEMETRY" (77.614mm,65.665mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.173mm < 0.254mm) Between Text "TP5" (84.764mm,10.148mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.233mm < 0.254mm) Between Text "U10" (81.423mm,39.298mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.169mm < 0.254mm) Between Text "U12" (81.283mm,47.444mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.092mm < 0.254mm) Between Text "U14" (52.047mm,88.531mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.189mm < 0.254mm) Between Text "U16" (81.423mm,56.664mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.178mm < 0.254mm) Between Text "U19" (108.661mm,92.703mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.164mm < 0.254mm) Between Text "U20" (81.391mm,78.314mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.223mm < 0.254mm) Between Text "U22" (108.055mm,75.353mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.22mm < 0.254mm) Between Text "U24" (108.06mm,59.433mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.236mm < 0.254mm) Between Text "UNPROT 12V" (106.73mm,32.625mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.223mm < 0.254mm) Between Text "UNPROT 12V" (106.73mm,32.625mm) on Top Overlay And Track
Silk To Silk Clearance Constraint: (0.233mm < 0.254mm) Between Text "UNPROT

# SPARE 1" (110.791mm,64.152mm) on Top Overlay And Track (111.07mm,66.837mm)(111.07mm,77.911mm) on Top Over

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#### Silk to Silk (Clearance=0.254mm) (All),(All)

Silk To Silk Clearance Constraint: (0.213mm < 0.254mm) Between Text "UNPROT

SPARE 1" (110.791mm,64.152mm) on Top Overlay And Track (111.07mm,66.837mm)(116.37mm,66.837mm) on Top Over

#### Silk to Silk (Clearance=0.254mm) (All),(All)

Silk To Silk Clearance Constraint: (0.117mm < 0.254mm) Between Text "UNPROT

SPARE 2" (110.913mm, 48.415mm) on Top Overlay And Track (111.07mm, 51.004mm) (111.07mm, 62.078mm) on Top Over

## Silk to Silk (Clearance=0.254mm) (All),(All)

Silk To Silk Clearance Constraint: (0.117mm < 0.254mm) Between Text "UNPROT

SPARE 2" (110.913mm,48.415mm) on Top Overlay And Track (111.07mm,51.004mm)(116.37mm,51.004mm) on Top Over

#### Board Clearance Constraint (Gap=0mm) (All)

Board Outline Clearance(Outline Edge): (0.256mm < 0.3mm) Between Board Edge And Text "CHARGER" (110.913mm,33.827mm) on Top Overlay Board Outline Clearance(Outline Edge): (0.169mm < 0.3mm) Between Board Edge And Text "FRONT

SOLAR" (111mm,80.102mm) on Top Overlay

#### Board Clearance Constraint (Gap=0mm) (All)

Board Outline Clearance(Outline Edge): (0.256mm < 0.3mm) Between Board Edge And Text "UNPROT

SPARE 2" (110.913mm,48.415mm) on Top Overlay

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