Winlink HF	Simulator	Var 22/2h

Winlink HF Simulator Ver 2a/2b											
Davideo .	QTY	As Built QTY	Value	Nata	Die	N 45	N 45		are priced at 100 e Total	each	
Device	QIT	QIY	value	Note	Pkg	Mfg Part Number	Mfg	Cost (100's)	TOLAT		
C1, C9, C11, C12, C13, C18	6	6	0.1uf	X5R, X7R, 50V	0805	C0805C104M5RACTU	Kemet	0.05	0.30		Substitute parts ok
C14	1	1	.15uf	X5R, X7R, 50V	0805	CC0805KRX7R9BB154	Yageo	0.07	0.07		Substitute parts ok
C3, C4, C5, C6, C7, C8	6	6	.01uf	X5R, X7R, 50V	0805	C0805C103J5RAC7210	Kemet	0.05	0.30		Substitute parts ok
C2, C11, C19, C24, C17	5	3	10uf	X5R, X7R, 16V	0805	C0805C105/3/RAC7210	Kemet	0.07	0.21	C19, C24 Not Installed	Substitute parts ok
C15, C16, C23, C22, C20, C21	6	6	2.2uf	X5R, X7R, 16V	0805	CC0805KRX5R7BB225	Yageo	0.08	0.48	C13, C24 NOT HIStalled	Substitute parts ok
C13, C10, C23, C22, C20, C21	U	U	2.201	A3N, A7N, 10V	0803	CCOBOSKINSIN/BB22S	rageo	0.08	0.00		
									0.00		
R1, R2, R3, R4	4	4	1.2k		0805	RC0805FR-071K2L	Yageo	0.02	0.08		Substitute parts ok
R5, R6	2	2	4.7k		0805	RC0805FR-074K7L	Yageo	0.02	0.04		Substitute parts ok
R7, R8, R9, R10, R11, R12, R13, R14, R22, R37, R29	11	8	10k		0805	RC0805FR-0710KL	Yageo	0.02	0.16	R22, R29, R37 Not Installed	Substitute parts ok
K7, NO, NO, NIO, NII, NIZ, NIO, NI4, NZZ, NO7, NZ		Ü	IOK		0005	NCOODST N O7 TOKE	rugco	0.02	0.10	NZZ, NZS, NS7 Not instance	Substitute parts ok
R20, R30, R31, R15, R16, R17, R18, R19	8	8	120 Ohms		0805	RC0805FR-07120RL	Yageo	0.02	0.16		Substitute parts ok
R23	1	0	240 Ohms		0805	RC0805FR-07240RL	Yageo	0.02	0.00	Not Installed	Substitute parts ok
R21	1	0	470 Ohms		0805	RC0805FR-07470RL	Yageo	0.02	0.00	Not Installed	Substitute parts ok
R27, R35, R25, R28	4	4	100k		0805	RC0805FR-07470KL	Yageo	0.02	0.08	Not installed	Substitute parts ok
R32, R24	2	2	0 Ohms		0805	RC0805FR-070RL	Yageo	0.02	0.04		Substitute parts ok
R26, R34	2	2	1k		0805	RC0805FR-071KL	Yageo	0.02	0.04		Substitute parts ok
K20, K34	2	2	1K		0805	KCU8U5FK-U/IKL	rageo	0.02	0.00		Substitute parts ok
Q1	1	0	IRLML6244TR		SOT-23	IRLML6244TRPBF	Infineon	0.18	0.00	Nat leatelled	alt 2N/7002
ŲΙ	1	U	IKLIVIL62441K		501-23	IKLIVIL62441KPBF	intineon	0.18	0.00	Not Installed	alt part: 2N7002
									0.00		
14.12.12			41/ 0400 1411		0805	DV2425UC402 T	Table Works	0.40		13 13 Not be welled	
L1, L2, L3	3	1	1K @100 MHz		0805	BK2125HS102-T	Taiyo Yuden	0.40	0.40	L2, L3 Not Installed	
									0.00		
U1	1	1	Teensy 4.0	Processor, with pins		DEC44B 4220E C0024	PJRC	22.95	22.95		
U2, U3	2	2	PEC11R-4230F-S0024	Encoder		PEC11R-4230F-S0024	Bourns	1.56	3.12		
U4	1	1	AP7313-18SRG	1.8v LDO	SOT-23	AP7313-18SAG-7	Diode Inc	0.19	0.19		
U5	1	1	SGTL5000	Audio Codex	QFN32	SGTL5000XNAA3	NXP	3.03	3.03	No. to a land	
U6	1	0	PVT312LSPBF	SS Relay	6-SMD	PVT312LSPBF	NXP	2.84	0.00	Not Installed	
U7	1	1	OPA2322AID	Dual Op-Amp	8-MSOP	OPA2322AID	TI	1.49	1.49		
14	1	0	P02EK381V2	W		00251/2041/2	Waldana	0.49	0.00	No. to a land	
J1	2	2		Wire Connector, 2 pin		P02EK381V2	Kobiconn	0.49	0.00	Not Installed	
J2, J3	2	2	STX-3120-3B	1/8 in Stero Audio Jack		STX-3120-3B	Kycon	0.49	0.98		
D4		0	4 -1 - 41 - 84 -1 - 81	Adulu Birr	2.54			0.00	0.00	No. to a land	120 0
P1	1 1	-	4 pin, .1in Male Pins	Male Pins	2.54mm 2.54mm	FCW 114 22 L C	C	0.68	0.00	Not Installed	I2C Connector
P2 P3	1	1 0	14 pin, .1in header	13.59mm tall 13.59mm tall		ESW-114-23-L-S ESW-109-23-L-S	Samtec Samtec	2.46 1.24	2.46 0.00	Nat leatelled	Fan 3 3in diamla
P4	1	1	9 pin, .1in header	13.59mm tall		ESW-105-23-L-S		1.05	1.05	Not Installed	For 2.2in display
r4	1	1	5 pin, .1in header	13.59mm tan	2.5411111	ESW-105-23-L-S	Samtec	1.05			
HA Cool of Coo Towns A O		•	A A of the African design	0.5	2.54	DDDC4 441 EDNI DC	6.111	0.00	0.00		
U1 Socket for Teensy 4.0	2	0 2	14 pin, .1in header	8.5mm tall	2.54mm 2.54mm		Sullins FCI	0.68 1.40	0.00	Desferred and Australian	
U1 Socket for Teensy 4.0	2	2	14 pin, .1in header	7 mm tall	2.5411111	/0341-314LF	FU	1.40	2.80	Prefered part, 4-point contact	
D1, D2, D4	3	0	LED Amber		0805	LTST-C171AKT	Lite-On	0.08	0.00	Not Installed	
	1	0									
D3	1	U	Led Green		0805	LTST-C171KGKT	Lite-On	0.08	0.00	Not Installed	
	2	2	V 250 Ch-ft	Disale		4200C2D14	APEM	2.01	0.00		
	0	0	Knob, .250 Shaft	Black		420063B14		2.81	5.62	ARCEL Cassial Restaurahas	ahina and sillanana
			Case, Poly	Case, Gray		JG-22450A*01	PolyCase	0.00	0.00	ARSFI, Special Part number, ma	achine and slikscreen
	1 4	1	Case, Poly	Case, Gray		DC-45PMBYT*01	PolyCase	22.00	22.00	Un-Machine case	
	4	4	Case PCB, Screws	4/24, 3/8 in				0.02	0.08		
PCB	1	1	Circuit Board					3.00	3.00		
LCD	1	1	2.8in TFT LCD	220-240 No Touch 2:!		MSP2806	China	6.00			Alt Parts MSP2807 with Touch
PCB Assembly	1	1		320x240, No Touch Panel		IVIOPZOUD	Crima	0.00	6.00 0.00		MIL PAILS INSP2807 WITH TOUCH
•	1		PCB Assembly								
Shipping Cost, Misc	1	1 1						0.00	0.00		
Duty	1	1						0.00	0.00		
								Tatali	77.13		
								Total:	//.13		

Alt Parts

 C16, C23, C20, C21
 47uf 10v 0805 X5R
 GRM21BR61A476ME15L
 Murata
 0.37

 C16, C23, C20, C21
 22uf 10v 0805 X5R
 GRM21BR61A226ME51L
 Murata
 0.15