

Munin2 Part Pick Sheets

Qty	Description	Ref Des	Size
	CAPACITORS		
	Cap sheet with only one part		
15	0.01 uF 50V 5% X7R	C5, C10, C11, C31, C33, C35, C37, C41, C53, C54, C57, C58, C62, C63, C67	0805
13	0.1uF 50volts X7R +/-10%	C6, C19, C24, C30, C32, C34, C36, C40, C43, C46, C59, C61, C64	0805
8	1uF 50volts X7R +/-10%	C44, C45, C47, C48, C49, C52, C60, C65	0805
	Misc Caps sheet		
2	0.015UF 50V X7R	C8, C9	0805
3	100pF 50volts C0G +/-5%	C12, C13, C14	0805
2	1000PF 50V 20% X7R	C15, C16	1206
2	10000pF 10% X7R 50volts	C17, C18	1206
1	200pF 100volts C0G 5%	C20	0805
2	200PF 200V 5% NP0	C25, C26	1206
1	470pF 5% NPO 200V	C27	1206
2	4700pF 100volts C0G 5%	C28, C29	1206
2	100pF C0G 10% 200v	C55, C56	1206
	Insert after all small SMD Parts.		
1	10uF 20% 35V	C50	Radial
2	1000uF 20% 25V	C51, C53	Axial

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Qty	Description	Ref Des	Size
	Resistors		
3	220 ohms 5% Tol 1/4w	R9, R16, R17	1206
4	2.2K ohms 5% Tol 330 mw	R14, R15, R34, R35	1206
6	1K ohms 5% Tol 1/4w	R11, R18, R19, R32, R33, R44	1206
3	100 ohms 5% Tol 330 mw	R12, R13, R21	1206
1	10k ohms 5% Tol 330 mw	R20	1206
4	15 ohms 5% Tol 1/4w	R22, R23, R24, R25	1206
3	22 ohms 5% Tol 330 mw	R30, R31, R41	1206
7	4.7ohms 5% Tol 330 mw	R26, R27, R28, R29, R45, R46, R47	1206
3	Current Sense Resistors - SMD 2W .020 1% 100PPM	R42, R48, R49	2512
2	51 ohms 5% 1/4w	R43, R50	1206
1	270 ohms 5% Tol 1/4w	R52	1206
1	18 ohms 5% Tol 1/4w	R53	1206
2	TRIMMER 5K OHM 0.25W SMD Initially set to have near maximum value when installed on the PCB.	R37 R38	
2	TRIMMER 2K OHM 0.25W SMD Initially set to have near maximum value when installed on the PCB.	R39, R40	

## Munin2 Part Pick Sheets

Semiconductors & Beads			
1	BSS84 MOSFET P-CH 50V 130MA	T6	SOT-23
2	BST82	T7, T8	SOT-23
1	78L08	U1	8SOIC
1	LMC6482 / LM358A	U2	8SOIC
5	BAS16J	D1, D2, D3, D4, D5	0805
1	MBRS2545CT	D6	D2PAK
3	43 SM BEAD Z=95 OHM @100MHz	L7, L9, L10	0805
1	Heatsink drilled and tapped		
1	Heat spreader drill and countersink for #4 Flat head	See pg 4	
2	RD16HHF1 Mount to heatsink see pg 5	T3, T4	TO-220
4	Spacers with additional 0.114"	See pg 4	
	Mount T1 & T2 last		
2	RD100HHF1 see pg 5	T1, T2	
4	<b>0.0431" [1.095mm] thick copper strap that is 15/16" long and 7/32" wide [23.8125mm x 5.5563mm"] to provide ground connection on T1, T2</b>	See pg 5. You must drill a 0.1285" [#30 drill] hole in the center of each strip before assembly to allow mounting to the Source Flange	

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	Transformers and Toroids		
L2	BN-43-302 Primary 4 Turnes of #22 ga Secondary 1 Twisted Bifiliar Turn #22 ga		
L3	FT-82-43 Torrid Primary 8 turn twisted Bifilar .9mm enam [18ga] Feedback 1T #18ga insulated		
L4	BN-61-002 Sec 4 turns #18 Teflon with primary braid covering	See separate assembly instruction sheet	
L5	RF-800-43 1 Turn twisted bifiliar #22ga [0.6mm]		
L8	FT-50-43 Toroid 8 turns 1mm [18ga] enam		
1	Header 2X03P DUAL ROW	J3	
2	SMA VERT	J1, J2	
3	Test Point Bend a small loop in a piece of insulated solid hookup wire	TP1, TP2, TP3	
	<b>Mechanical Assembly</b>		
1	Copper heat spreader	Mount to Heatsink First	
6	#4-40 x 1/2" Screw, Flat head, SST		
A/R	Thermal Grease		
	<b>M1, 2, 3, 4</b>	Mounting Holes	
4	# 4-40 x 1/4", Screw, Phillips, Pan Head, SST		
4	# 4 Lock washer, split ring, SST		
4	# 4 Washer, Flat, SST		
1	PCB		
4	Standoffs Hex Male-Female Male to Female 1/4IN 4-40 1/4 IN Aluminum Iridite	Screw into heatsink before assembling the board and Transistors	
4	Shim about 0.114" thick		
1	Heatsink		

## Munin2 Part Pick Sheets

	T5 Not used no hole		
	<b>MH11, 12 [+/- 13.8V terminals]</b>	Power terminals	
	NOTE: Prior to assembly solder one Brass washer on the bottom of the PCB to each of the MH11 & MH12 Bottom pads. Use a wood dowel [5/32"] or a piece of Teflon insulated wire about 0.165 " diameter to center the washer when soldering. The piece that was removed from the RG58 for the shield on L4 might do.		
2	# 8-32 x 3/4, Slotted round head, Brass	Insert from bottom of the PCB	
2	# 8 Lock washer, Internal tooth, SST		
2	# 8 Washer, Flat, Brass	Solder to PCB before assembly	
	PCB		
2	# 8 Washer, Flat, Brass		
2	# 8 Lock washer, split ring, SST		
2	# 8-32 Nut, Brass		
2	Terminals N/I-RING 12-10 #8 M4+ [TE #31113]	To accommodate 2 #14 ga wires or 1 #10 or #12	
2	# 8 Washer, SST		
2	# 8 Lock washer, split ring, SST		
2	# 8-32 Nut, SST		
	<b>T3,4</b>	<b>RD16HHF1</b>	
2	# 4-40 x 3/8", Socket cap, SST		
2	#4 Lock washer, High Collar, SST		
2	# 4 Washer, Flat, SST		
2	RD16HHF1	The 3 leads must be first bent 90° vertical, away from the heatsink and aligned with the heatsink mounting hole and the PCB Holes	
A/R	Thermal Grease		
	<b>T1, 2</b>	<b>RD100HHF1</b>	
4	# 4-40 x 3/4", Socket cap, SST		
4	#4 Lock washer, High Collar, SST		
4	# 4 Washer, Flat, SST		
4	0.0431" [1.095mm] thick copper strap that is 15/16" long and 7/32" wide [23.8125mm x 5.5563mm"] to provide ground connection on T1, T2	You need to drill a 0.1285" [#30 drill] hole in the center of each strip. After the transistors are mounted both of the Source Contact Strips are soldered to the Munin PCB.	
2	RD100HHF1		
A/R	Thermal Grease		