

YUSYNTH FFB

PCB Reference Designator	Value	Qty	Mouser PN	Price	Total	Comments
U1,U2,U3,U4,U5,U6,U7,U8	TL074	8	511-TL074ACN	\$0.95	\$7.60	
RN1,RN2,RN3,RN4	8 x 100K SIP 2% w/ common leg	4	652-4609X-1LF-100K	\$0.38	\$1.52	
R90,R91	10R 1/4w 1%	2	271-10R-RC	\$0.09	\$0.18	replace with 623-2743001112LF ferrite bead
R78a	470R 1/4w 1%	1	271-470-RC	\$0.09	\$0.09	
R80b,R80b	680R 1/4w 1%	2	271-680-RC	\$0.09	\$0.18	
R87,R88,R89	1k 1/4w 1%	3	271-1K-RC	\$0.09	\$0.27	
R2,R5,R8,R11,R14,R17,R20,R23,R26,R29,R32,R35,R38,R41,R44,R47,R50,R53,R56,R59,R62,R65,R68,R71	1.8k 1/4w 1%	24	271-1.8K-RC	\$0.09	\$2.16	
R78a	3.3k 1/4w 1%	1	271-3.3K-RC	\$0.09	\$0.09	
R77	3.9k 1/4w 1%	1	271-3.9K-RC	\$0.09	\$0.09	
R79b	15k 1/4w 1%	1	271-15K-RC	\$0.09	\$0.09	
R1,R4,R7,R10,R13,R16,R19,R22,R25,R28,R31,R34,R37,R40,R43,R46,R49,R52,R55,R58,R61,R64,R67,R70,R80a,R81a	22k 1/4w 1%	26	271-22K-RC	\$0.09	\$2.34	
R83	39k 1/4w 1%	1	271-39K-RC	\$0.09	\$0.09	change to 100K for higher input impedance
R3,R6,R9,R12,R15,R18,R21,R24,R27,R30,R33,R36,R39,R42,R45,R48,R51,R54,R57,R60,R63,R66,R69,R72	47k 1/4w 1%	24	271-47K-RC	\$0.09	\$2.16	
R84,R85,R86	100k 1/4w 1%	3	271-100K-RC	\$0.09	\$0.27	change R84 to 150K for 1.5X gain
R79a	120k 1/4w 1%	1	271-120K-RC	\$0.09	\$0.09	
R73,R74,R75,R76	150k 1/4w 1%	4	271-150K-RC	\$0.09	\$0.36	
R82	390k 1/4w 1%	1	271-390K-RC	\$0.09	\$0.09	not used in single input configuration
C71,C72,C73,C74	22p ceramic	4	581-5AK220KABJI	\$0.15	\$0.60	change C71 to 18 pF for 1.5X gain
C45b,C46b,C47b,C48b,C50a,C50b,C53,C54,C55,C56,C57	1n polyester 5%	11	581-BQ014D0102J	\$0.10	\$1.10	
C37b,C38b,C39b,C40b	1n5 polyester 5%	4	581-BQ014D0152J	\$0.07	\$0.28	
C5b,C6b,C7b,C8b,C21b,C22b,C23b,C24b,C33b,C34b,C35b,C36b,C41a,C42a,C43a,C44a,C41b,C42b,C43b,C44b,C45a,C46a,C47a,C48a,C51b,C52b	2n2 polyester 5%	26	581-BQ014D0222J	\$0.10	\$2.60	
C9b,C10b,C11b,C12b,C17b,C18b,C19b,C20b,C25b,C26b,C27b,C28b,C29b,C30b,C31b,C32b	3n3 polyester 5%	16	581-BQ014D0332J	\$0.10	\$1.60	
C13b,C14b,C15b,C16b,C37a,C38a,C39a,C40a,C49b	4n7 polyester 5%	9	581-BQ014D0472J	\$0.07	\$0.63	
C33a,C34a,C35a,C36a	6n8 polyester 5%	4	581-BQ014D0682J	\$0.07	\$0.28	
C29a,C30a,C31a,C32a,C51a,C52a	10n polyester 5%	6	581-BQ014D0103J	\$0.10	\$0.60	
C25a,C26a,C27a,C28a	15n polyester 5%	4	581-BQ014D0153J	\$0.07	\$0.28	
C21a,C22a,C23a,C24a	22n polyester 5%	4	581-BQ014D0223J	\$0.10	\$0.40	
C17a,C18a,C19a,C20a	33n polyester 5%	4	581-BQ014D0333J	\$0.12	\$0.48	
C1b,C2b,C3b,C4b,C13a,C14a,C15a,C16a	47n polyester 5%	8	581-BQ014D0473J	\$0.07	\$0.56	
C9a,C10a,C11a,C12a,C49a	68n polyester 5%	5	581-BQ014D0683J	\$0.12	\$0.60	
C1a,C2a,C3a,C4a,C5a,C6a,C7a,C8a	100n polyester 5%	8	581-BQ014D0104J	\$0.12	\$0.96	
C61,C62,C63,C64,C65,C66,C67,C68	100nF ceramic	8	147-72-104-RC	\$0.16	\$1.28	axial body style
C59,C60	10µF 35V NP	2	140MLNP35V10-RC	\$0.35	\$0.70	use non-polarized, only 1 required for single input
C69,C70	100µF 35V electrolytic	2	140LLRL35V100-RC	\$0.35	\$0.70	change to 22 uF 140LLRL35V22-RC
Power connector	1x6 0.1" MTA header	1	571-6404546	\$0.22	\$0.22	replace with 571-6404454 MOTM-style power connector
Input connector	1x3 0.1" MTA header	1	571-6404543	\$0.13	\$0.13	
Output connector	1x4 0.1" MTA header	1	571-6404544	\$0.17	\$0.17	
Potentiometer connector	1x6 0.1" MTA header	1	571-6404546	\$0.22	\$0.22	
Potentiometer connector	1x8 0.1" MTA header	1	571-6404548	\$0.24	\$0.24	
Potentiometer wiper connector	2x7 0.1" header	1	649-66506-038LF	\$1.35	\$1.35	
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P1,P2,P3,P4,P5,P6,P7,P8,P9,P10,P11,P12,P13,P14	10K log potentiometer	14				surplus 1/4" mount potentiometer with 1/8" shaft
Potentiometer hardware	1/4-32 nut	28	534-1449	\$0.21	\$5.88	
Frequency knobs	Small knobs	14	506-PKES60B1/8	\$1.86	\$26.04	
JK1,JK2,JK3,JK4,JK5	1/4" jack	5	502-112AX	\$1.62	\$8.10	
Modifications						
Input control	100K potentiometer	1				surplus
Potentiometer hardware	1/4-32 nut	2	534-1449	\$0.21	\$0.42	
Input control knob	Small knob	1	506-PKES60B1/8	\$1.86	\$1.86	
Bypass switch	3PDT switch	1	108-1M31T1B1M1QE-EVX	\$4.32	\$4.32	non-bat handle
				Total	\$80.27	