

SYSTEM INTERFACE MODEL 227

BILL OF MATERIALS REV 2.2

MOTHERBOARD

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
TL071	IC9	1		595-TL071CP
TL072	IC1, IC2, IC3, IC4	4		595-TL072CP
DG202	IC5, IC6, IC7, IC8	4		781-DG202BDJ-E3
L7905	IC10	1		511-L7905ACV
2N3904	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16	16		610-2N3904
2N3906	Q17, Q18	2		610-2N3906

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
47uF	C34, C35, C36, C37, C38	5	ELECTROLYTIC 2.5MM LS	80-ESH476M035AE3AA
2.2nF	C6, C12, C18, C24	4	FILM 5MM LS	871-B32529C122J189
47nF	C2, C3, C8, C9, C14, C15, C20, C21	8	FILM 5MM LS	871-B32529C1473J
1uF	C1, C7, C13, C19, C25, C26, C27, C28, C29, C30, C31, C32	12	FILM 5MM LS	80-R82DC4100AA60J
10pF	C5, C11, C17, C23	4	CERAMIC 5MM LS	581-SA102A100JAC
47pF	C4, C10, C16, C22	4	CERAMIC 5MM LS	581-SA102A100JAC
100pF	C33	1	CERAMIC 5MM LS	581-SA102A101J
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23	23	CERAMIC SMT 0805	GRM21BR71H104KA01L

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1K	R19, R20, R25, R26, R45, R46, R51, R52, R71, R72, R77, R78, R97, R98, R103, R104, R161	17	1/4W 1%	271-1K-RC
2K2	R153	1	1/4W 1%	271-2.2K-RC
2K49	R14, R40, R66, R92, R114, R115, R116, R157	8	1/4W 1%	271-2.49K-RC
4K7	R9, R35, R61, R87, R119, R125, R130, R135, R142, R145, R148, R151	12	1/4W 1%	271-4.7K-RC
4K99	R120, R126, R131, R136, R143, R146, R149, R152	8	1/4W 1%	271-4.99K-RC
12K	R6, R7, R32, R33, R58, R59, R84, R85	8	1/4W 1%	271-12K-RC
15K	R162, R163, R164, R165, R166, R167, R168, R169	8	1/4W 1%	271-15K-RC
22K	R2, R4, R5, R28, R30, R31, R54, R56, R57, R80, R82, R83	12	1/4W 1%	271-22K-RC
24K9	R159	1	1/4W 1%	271-24.9K-RC
33K	R1, R3, R8, R10, R27, R29, R34, R36, R53, R55, R60, R62, R79, R81, R86, R88, R117, R121, R122, R124, R127, R128, R132, R133, R141, R144, R147, R150, R160	29	1/4W 1%	271-33K-RC
47K	R15, R16, R21, R22, R41, R42, R47, R48, R67, R68, R73, R74, R93, R94, R99, R100, R155	17	1/4W 1%	271-47K-RC
68K	R118, R123, R129, R134, R137, R138, R139, R140	8	1/4W 1%	271-68K-RC
91K	R11, R13, R37, R39, R63, R65, R89, R91, R105, R106, R107, R109, R111, R113, R154, R156	16	1/4W 1%	271-91K-RC
150K	R17, R18, R23, R24, R43, R44, R49, R50, R69, R70, R75, R76, R95, R96, R101, R102	16	1/4W 1%	271-150K-RC
820K	R12, R38, R64, R90, R108, R110, R112, R158	8	1/4W 1%	271-820K-RC
100K LIN	POT1, POT3, POT4, POT5, POT6, POT8, POT9, POT10, POT11, POT13, POT14, POT15, POT16, POT18, POT19, POT20	16	9MM	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-9mm-right-angle-pc-mount/
50K LOG	POT2, POT7, POT12, POT17	4	16MM ANGLED	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/
10K-100K LIN	POT21, POT22, POT31, POT32, POT33, POT34	6	16MM ANGLED	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/
50K	POT23, POT24, POT25, POT26, POT27, POT28, POT29, POT30	8	SLIDER	FARNELL/NEWARK: RS4511150K

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
		1	1/4" STEREO JACK	502-N112BX
	B1, B2, B3, B4, B5, B6, B7, B8	8	BANANA JACK BLACK	530-108-0903-1
TINI-JAX	J1, J2, J3, J4, J14, J15, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J32, J33, J34, J35, J36, J37	28	TINI/JAX	502-41
TINI-JAX NORM	J5, J6, J7, J8, J9, J10, J11, J12	8	TINI/JAX NORMALIZED	502-42A
	LED1-LED25	25	RED 3MM LED	630-HLMP-K101
SPDT ON-ON	SW1, SW2, SW3, SW5, SW6, SW7, SW8	7	TOGGLE SWITCH	633-M201201
DPDT ON-ON	SW4	1	TOGGLE SWITCH	633-M202201
DPDT ON-OFF-ON	SW9	1	TOGGLE SWITCH	633-M202301
		23	6 PIN STRAIGHT MALE	538-26-48-1061
		1	EDAC 44 PIN BLUE	eBay item # 311191470074
		1	EDAC 44 PIN BLUE	eBay item # 120770588359
2S-AVU-000-AV-U	4 VU-METER	4	VU-METER	http://www.jewellinstruments.com
1BC2E		1	SPRING REVERB TANK	http://www.belton.co.kr
		1	POWER CONNECTOR	587-306-50-010
		12	NUT FOR 16MM POT	http://smallbear-electronics.mybigcommerce.com/nut-for-
		8	BLUE SWITCH CAP	
		4	RED SWITCH CAP	
		1	YELLOW SWITCH CAP	

CARD1-4

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
ATTINY84A	IC1	4		556-ATTINY84A-PU
MAX534	IC2	4		700-MAX534ACPE
TL074	IC3, IC5	8		595-TL074CN
V2164	IC4, IC6	8		http://smallbear-electronics.mybigcommerce.com/ic-v2164d/

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
100pF	C4, C6, C7, C8, C12, C14, C15, C16	32	CERAMIC 5MM LS	581-SA102A101J
560pF	C3, C5, C9, C10, C11, C13, C17, C18	32	CERAMIC 5MM LS	810-FK28C0G2A561J
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14	56	CERAMIC SMT 0805	GRM21BR71H104KA01L
2.2uF	C1, C2	8	CERAMIC 5MM LS	FG28X5R1E225KRT06

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
499R	R13, R14, R24, R26, R28, R29, R39, R41	32	1/4W 1%	271-499-RC
6K8	R18, R21, R33, R35	16	1/4W 1%	271-6.8K-RC
7K5	R19, R36	8	1/4W 1%	271-7.5K-RC
10K	R3, R4	8	1/4W 1%	271-10K-RC
30K	R12, R15, R16, R17, R20, R22, R23, R25, R27, R30, R31, R32, R34, R37, R38, R40	64	1/4W 1%	271-30K-RC
47K	R1, R2, R42, R43	16	1/4W 1%	271-47K-RC
100K	R5, R6, R7, R8, R9, R10, R11	28	1/4W 1%	271-100K-RC

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
		12	6 PIN ANGLED FEMALE	538-09-52-1066
		4	DIP SWITCH	611-BD01

CARD5

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
TL074	IC1, IC2, IC4	3		595-TL074CN
V2164	IC3, IC5	2		http://smallbear-electronics.mybigcommerce.com/ic-v2164d/

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
10pF	C1, C2, C3, C4	4	CERAMIC 5MM LS	581-SA102A100JAC
100pF	C6, C8, C9, C10, C14, C16, C17, C18	8	CERAMIC 5MM LS	581-SA102A101J
560pF	C5, C7, C11, C12, C13, C15, C19, C20	8	CERAMIC 5MM LS	810-FK28C0G2A561J
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10	10	CERAMIC SMT 0805	GRM21BR71H104KA01L

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
499R	R15, R16, R25, R27, R29, R30, R39, R42	8	1/4W 1%	271-499-RC
3K3	R2, R5, R8, R11	4	1/4W 1%	271-3.3K-RC
4K7	R3, R6, R9, R12	4	1/4W 1%	271-4.7K-RC
6K8	R20, R22, R34, R36	4	1/4W 1%	271-6.8K-RC
7K5	R13, R41	2	1/4W 1%	271-7.5K-RC
30K	R14, R17, R18, R19, R21, R23, R24, R26, R28, R31, R32, R33, R35, R37, R38, R40	16	1/4W 1%	271-30K-RC
39K	R1, R4, R7, R10	4	1/4W 1%	271-39K-RC

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
		3	6 PIN ANGLED FEMALE	538-09-52-1066

CARD6

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
TL074	IC1, IC2, IC4, IC6	4		595-TL074CN
DG202	IC3	1		781-DG202BDJ-E3
V2164	IC5, IC7	2		http://smallbear-electronics.mybigcommerce.com/ic-v2164d/

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
100pF	C10, C12, C13, C14, C18, C20, C21, C22	8	CERAMIC 5MM LS	581-SA102A101J
220pF	C1, C4, C6, C8	4	CERAMIC 5MM LS	581-SA101A221JAR
470pF	C2, C3, C5, C7	4	CERAMIC 5MM LS	581-SA101A471JAR
560pF	C9, C11, C15, C16, C17, C19, C23, C24	8	CERAMIC 5MM LS	810-FK28C0G2A561J
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14	14	CERAMIC SMT 0805	GRM21BR71H104KA01L

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
220R	R4, R11, R18, R25	4	1/4W 1%	271-220-RC
499R	R30, R31, R38, R40, R43, R44, R52, R54	8	1/4W 1%	271-499-RC
4K7	R5, R6, R7, R12, R13, R14, R19, R20, R21, R26, R27, R28	12	1/4W 1%	271-4.7K-RC
6K8	R2, R8, R15, R22	4	1/4W 1%	271-6.8K-RC
7K5	R41, R48	2	1/4W 1%	271-7.5K-RC
10K	R55, R56, R57, R58	4	1/4W 1%	271-10K-RC
12K	R1, R9, R16, R23	4	1/4W 1%	271-12K-RC
30K	R29, R32, R33, R34, R35, R36, R37, R39, R42, R45, R46, R47, R49, R50, R51, R53	16	1/4W 1%	271-30K-RC
39K	R3, R10, R17, R24	4	1/4W 1%	271-39K-RC

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
		3	6 PIN ANGLED FEMALE	538-09-52-1066
		1	IDC-10 THRUHOLE HEADER	571-5103308-1

CARD7

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D1, D2, D3, D4	4		512-1N457
TL074	IC1, IC2, IC3, IC4, IC6, IC8	6		595-TL074CN
V2164	IC5, IC7	2		http://smallbear-electronics.mybigcommerce.com/ic-v2164d/

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
47pF	C5, C7, C9, C11	4	CERAMIC 5MM LS	581-SA102A470J
100pF	C6, C8, C10, C12, C14, C16, C17, C18, C22, C24, C25, C26	12	CERAMIC 5MM LS	581-SA102A101J
560pF	C13, C15, C19, C20, C21, C23, C27, C28	8	CERAMIC 5MM LS	810-FK28C0G2A561J
0.01uF	C1, C2, C3, C4	4	CERAMIC SMT 0805	80-C0805Y103K1RAUTO
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16	16	CERAMIC SMT 0805	GRM21BR71H104KA01L

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
220R	R24, R31, R38, R45	4	1/4W 1%	271-220-RC
499R	R50, R51, R61, R63, R65, R66, R76, R78	8	1/4W 1%	271-499-RC
4K7	R27, R34, R41, R48	4	1/4W 1%	271-4.7K-RC
7K5	R56, R71	2	1/4W 1%	271-7.5K-RC
10K	R1, R2, R3, R4, R5, R6, R7, R8, R25, R32, R39, R46, R55, R58, R70, R73	16	1/4W 1%	271-10K-RC
12K	R23, R30, R37, R44			