

Appendage Touch Ribbon Controller [Bill of Materials for PC board REV. 1.07H]

Fixed Resistors (NOTE: 1% tolerances can only substitute for 5% tolerance values)

REF. DESIG.	QTY.	VALUE	COMMENTS	CATALOG PART NO.
R1-R11	11	100R	100 OHM 1/4W 1% METAL FILM DIGIKEY 100XBK-ND	
R12,R13	2	1.5K	1.50K OHM 1/4W 1% METAL FILM DIGIKEY 1.50KXBK-ND	
R14-R18	5	1.8K	METAL FILM 1.80K OHM 1/4W 1% DIGIKEY P1.80KCACT-ND	
R20-R23	4	10K	10.0K OHM 1/4W 1% METAL FILM DIGIKEY 10.0KXBK-ND	
R24-R38 R40-R44 R47-R51 R53-R60 R62-R64 R66-R68 R70-R85 R87-R89 R103-R105	61	100K	100K OHM 1/4W 1% METAL FILM DIGIKEY 100KXBK-ND	
R61,R65 R69	3	120K	METAL FILM 120K OHM 1/4W 1% DIGIKEY P120KCACT-ND	
R90-R94	5	1.0M	1.0M OHM 1/4W 5% CARBON FILM DIGIKEY 1.0MQBK-ND	
R95,R96	2	1.2M	1.2M OHM 1/4W 5% CARBON FILM DIGIKEY 1.2MQBK-ND	
R97-R99	3	22K	22K OHM 1/4W 5% CARBON FILM DIGIKEY 22KQBK-ND	
R100,R101 R116-R118 R126	6	330K	METAL FILM 330K OHM 1/4W 1% DIGIKEY P330KCACT-ND	
R102	1	560K	560K OHM 1/4W 5% CARBON FILM DIGIKEY 560KQBK-ND	
R106-R109	4	2.2M	2.2M OHM 1/4W 5% CARBON FILM DIGIKEY 2.2MQBK-ND	
R110	1	330R	330 OHM 1/4W 5% CARBON FILM DIGIKEY 330QBK-ND	
R111,R112	2	470R	RES MF 1/4W 470 OHM 1% AXIAL DIGIKEY RNF1/4T1470FRCT-ND	

R113,R114	2	3.0K	METAL FILM 3.00K OHM 1/4W 1% DIGIKEY P3.00KCACT-ND
R119,R120,R19	3	4.7K	METAL FILM 4.70K OHM 1/4W 1% DIGIKEY P4.70KCACT-ND
R121-R125 R130	6	5.6K	5.6K OHM 1/4W 5% CARBON FILM DIGIKEY 5.6KQBK-ND
R127	1	470K	470K OHM 1/4W 5% CARBON FILM DIGIKEY 470KQBK-ND
R128,R129	2	150K	150K OHM 1/4W 1% METAL FILM DIGIKEY 150KXBK-ND
R131	1	220R	220 OHM 1/4W 5% CARBON FILM DIGIKEY 220QBK-ND

Capacitors

REF. DESIG.	QTY.	VALUE	COMMENTS	CATALOG PART NO.
C1,C2	2	47 uF	47UF 35V ELECT AUDIO RAD DIGIKEY 604-1064-ND	
C3-C37	35	100 nF	.10UF 63V METAL POLY DIGIKEY 495-1103-ND or 399-4329-ND	
C38	1	1 nF	CER 1000PF 50V 10% DIGIKEY 478-4492-ND	
C39-C41	3	10 nF	.01UF 50V 10% CER RADIAL DIGIKEY 399-4206-ND	
C42-C44	3	1 uF	POLYFILM BOX 1.0UF 63V 5% DIGIKEY 478-3367-ND or 495-1119-ND	
C45-C49	5	220 pF	220PF 100V 5% CER RADIAL DIGIKEY 399-4163-ND	
C50-C52	3	2 nF	POLYPROPYLENE .0020UF 50V 1% DIGIKEY P3831-ND	
C53	1	33 nF	.033UF 250V METAL FILM BOX DIGIKEY 3010PH-ND	
C54	1	330 nF	.33UF 50V CERAMIC MONO 10% DIGIKEY P4959-ND	
C55-C56	2	4.7 nF	4700PF 50V CERAMIC X7R 10% DIGIKEY BC1093CT-ND	
C57-C60	4	47 nF	.047UF 50V CERAMIC X7R 10% DIGIKEY BC1099CT-ND	

Semiconductors

REF. DESIG.	QTY.	VALUE	COMMENTS	CATALOG PART NO.
U1	1	CD4017	DECADE COUNTER	DIGIKEY 296-2037-5-ND
U2,U3	2	CD40106	HEX SCHMITT TRIGGER	DIGIKEY 296-3503-5-ND
U4	1	CD4081	2-IN AND GATE QUAD	DIGIKEY 296-2066-5-ND
U5	1	CD4013	DUAL D-TYPE FLIP-FLOP	DIGIKEY 296-2033-5-ND
U6	1	TS556	TIMER DUAL LOW POWER	DIGIKEY 497-7680-5-ND
U7-U11	5	LF398	MONO SAMPLE & HOLD	DIGIKEY LF398N-ND
U12	1	LM358	OPAMP DUAL 8-DIP	DIGIKEY LM358ANFS-ND
U13-U20	8	TL074	QUAD JFET-INPUT OPAMP	DIGIKEY 296-1777-5-ND
U21	1	CD4053	MUX/DEMUX TRI ANA 2CH	DIGIKEY CD4053BCN-ND
U22	1	78L10	REG 0.1A 10V	DIGIKEY 296-1996-ND
U23	1	LM334Z	CURRENT SOURCE ADJ TO-92	DIGIKEY LM334ZNS-ND Or Jameco PN 23739
D1-15	15	1N4148	DIODE SGL JUNC 100V 4.0NS D0-35	DIGIKEY 1N4148FS-ND
D16	1	1N457	DIODE SS 70V 200MA DO35	DIGIKEY 1N457CT-ND
D17-D24	8	BAT85	DIODE SCHOTTKY 30V 200MA DO34	DIGIKEY 568-1617-1-ND
Q1-Q5	5	2N3904	TRANSISTOR NPN GP 200MA TO-92	DIGIKEY 2N3904FS-ND
Q6	1	MPF102	JFET AMP N-CH RF SS TO-92	DIGIKEY MPF102-ND FUTURLEC MPF102

Multi-Turn Trimmer Potentiometers

REF. DESIG.	QTY.	VALUE	COMMENTS	CATALOG PART NO.
VR1-VR10	10	100K	25 TURN, TOP ADJ	DIGIKEY 490-2876-ND
VR11	1	200K	POT 200K OHM 1/4" SQ CERM SL MT	DIGIKEY 3266W-204LF-ND
VR12	1	10K	POT CERM 10K OHM 25TRN TOP	DIGIKEY 490-2875-ND

Connector Hardware

REF. DESIG.	QTY.	VALUE	COMMENTS	CATALOG PART NO.
J1,J9	2	MOLEX 22-23-2041	CONN HEADER 4POS .100 VERT TIN	DIGIKEY WM4202-ND FUTURLEC POLHDR4
J2	1		16 PIN .100" MALE DOUBLE HEADERS	FUTURLEC HEADD16
J3	1	TYCO 644752-4	CONN HEADER VERT 4POS .156 TIN	DIGIKEY A24166-ND
J4	1	TYCO 640456-6	CONN HEADER VERT 6POS .100 TIN	DIGIKEY A1923-ND FUTURLEC POLHDR6
J5	1		20 PIN SHROUDED MALE HEADERS	FUTURLEC IDCMH20 DIGIKEY A33055-ND
J6	1	MOLEX 22-23-2051	CONN HEADER 5POS .100 VERT TIN	DIGIKEY WM4203-ND FUTURLEC POLHDR5
J7,J8,J10	3	MOLEX 22-23-2121	CONN HEADER 12POS .100 VERT TIN	DIGIKEY WM4210-ND FUTURLEC POLHDR12

Crimp Terminals & Misc. Hardware

REF. DESIG.	QTY.	VALUE	COMMENTS	CATALOG PART NO.
NA	53		CRIMP TERM.	DIGIKEY WM1114-ND
			QTY [6] PK of 10	FUTURLEC PLHDPIN
TP1-TP9	9	5010	TEST POINT PC MULTI PURPOSE RED	DIGIKEY 5010K-ND
TB1	1		TYCO 796949-3 TERMINAL BLOCK 3 POS.	MOUSER 571-7969493

Sockets

REF. DESIG.	QTY.	VALUE	COMMENTS	DIGIKEY PART NO.
X7-X12	6		SOCKET IC OPEN FRAME 8POS .3"	DIGIKEY 3M5461-ND
X2-X6 X13-X20	13		SOCKET IC OPEN FRAME 14POS .3"	DIGIKEY 3M5462-ND
X1,X21	2		SOCKET IC OPEN FRAME 16POS .3"	DIGIKEY 3M5463-ND