

Controller Board

Part #	Component	Digi-Key #	Mouser #
U1 processor	PIC24HJ32GP202		From WA6UFQ
U2 EEPROM	24FC256	24FC256-I/P-ND	579-24FC256-I/P
U3 3.3V regulator	LP2950 Regulator	LP2950CZ3.3-ND	852-PQ033ES1MXPQ
U4 5v regulator	MC7805 Regulator	LM7805CT-ND	512-MC7805ECT
SE1	Fine Shaft Encoder	CT3001-ND	Digi-Key only
SE2	Course Shaft Encoder	CT3000-ND	Digi-Key only
PS1	piezo sounder		From BGMicro #AUD1082
LCD1 2X16 w/backlight	LCD Display		From BGMicro #LCD1031
Q1 Q2 Q3 Q4	2N7000	2N7000FS-ND	512-2N7000
J1 DDS Board Connector	8 pin SIP connector	929974E-01-36-ND	517-974-01-36(cut to size)
J3 SI570 Board Connector	10 pin SIP connector	see above, cut to size	see above, cut to size
J2 Programming Connector	10 pin DIP connector		571-5-146254-5
J6 LCD Display Connector	16 pin connector	A33163-ND	571-5103308-3
J5 DDS Output Connector	3 pin SIP header		538-22-23-2031
J7 SI570 Output Connector	3 pin Sip header		538-22-23-2031
P5 P7	3 pin Conn housing		538-22-01-2037
6 ea	crimp terminals		538-08-50-0114
J4 Fine Shaft Encoder Header	3 pin SIP header		Use 571-9-146280-0 (40 pin)
J8 Course Shaft Encoder Header	5 pin SIP header		cut to size
J9 Backlight Switch Header	2 pin SIP header		cut to size
J10 Piezo Sounder Header	2 pin SIP header		cut to size
J11 Board Power Header	4 pin SIP header		cut to size
P4 Fine Shaft Encoder Connector	3 pin Conn housing		649-65039-034LF
P8 Course Shaft Encoder Connector	5 pin Conn housing		649-65039-032LF
P9 Backlight Switch Connector (optional)	2 pin Conn housing		649-65039-035LF
P10 Piezo Sounder Connector	2 pin Conn housing		649-65039-035LF
P11 Board Power Connector	4 pin Conn housing		649-65039-033LF
Contacts for connectors above	Connector contacts		649-48245-000LF
SK1	8 pin DIP socket	ED3108-ND	575-144308
SK2	28 pin Dip socket	ED3128-ND	575-11043328
X1	10 mhz xtal	631-1101-ND	559-FOXS100-20-LF
SW2	on/off switch		Radio Shack, etc.
SW1	reset switch		101-0161-EV
HS1	heat sink		532-507302B00
Ribbon cable connector, 16 pos		AKC16H-ND	571-1658621-3
Shunt or switch for the backlight (goes on J9)			
Length of ribbon cable, 16 conductors			
R1	10k 1206 SMD		263-10K-RC
R2 R3 R4 R5 R6	4.7K 1206 SMD		263-4.7K-RC
R7-R12	10K resistor array		652-4607X-1LF-10K
R13 R14	2.2K 1206 SMD		263-2.2K-RC
R15 R16 R17	1.2K 1206 SMD		263-1.2K-RC
R18	10K potentiometer	3386P-103TLF-ND	594-63P103

R19	10 ohm .5 watt	660-CF1/2CT52A100J
R20 R21	51 ohm 1206 SMD	263-51
C1 C12 C15 C19	10mf 16v tantalum SMD	74-293D106X9016B2TE3
C2-C6 C9-C11 C13 C14 C16-C18	.1mf 1206 SMD	80-C1206C104J5R
C7 C8	22 pf SMD	81-GRM426C220J50D
	399-1248-1-ND	

Si570 Board

U1	Si570	
U2 3.3V regulator	LD1117-3.3	511-LD1117S33
R1 R2	1K 1206 SMD	263-1K-RC
C1 C2 C3 C5	.1mf 1206 SMD	80-C1206C104J5R
C4	10mf 16v tantalum SMD	74-293D106X9016B2TE3
J1	10 pin rt angle header	571-16404530