Humber College HCS12 Workstation Pinouts

H1 Connector			
Pin #	MCU Board AD9S12DP	Demo Board AD9S12DEMH1	Notes
1	PS4/MISO	LCD DB4	PTS=$248
2	PS5/MOSI	LCD DB5	DDRS=$24A
3	PS6/SCK	LCD DB6	
4	PS7/SS*	LCD DB7	
5	PS1/TXD0	LED D2 GRN	TX LED
6	PT7/IOC7/PAI	S1	PTT=$240
7	PT6/IOC6	S2	DDRT=$242
8	PT5/IOC5	S3	
9	PT4/IOC4	S4	
10	PT3/IOC3	S5	
11	PT2/IOC2	S6	
12	PT1/IOC1	S7	
13	PT0/IOC0	S8	
14	PP7/KWP7/PWM7	SPKR	PTP=$258
15	PP6/KWP6/PWM6	LCD CONTRAST	DDRP=$25A
16	PP5/KWP5/PWM5	VOUT	
17	PP4/KWP4/PWM4	DRIVER1/SEG8	
18	PP3/KWP3/PWM3	DRIVER2/SEG9	
19	PP2/KWP2/PWM2	LCD RS	
20	PP1/KWP1/PWM1	LCD E	
21	PP0/KWP0/PWM0	LCD R/W*	
22	PAD0/AN0		PORTAD0=$8F
23	PAD1/AN1	TEMP	Digital input only
24	PAD2/AN2	POT	ATD0DIEN=$8D
25	PAD3/AN3	LIGHT	0=disable, 1=enable
26	PAD7/AN7	SW5	
27	PAD6/AN6	SW4	
28	PAD5/AN5	SW3	
29	PAD4/AN4	SW2	
30	VRH		
31	VRL	AGND	
32	PS3/TXD1		
33	PE4/ECLK		
34	PS2/RXD1		
35	PH7/KWH7	LED SEG7	PTH=$260
36	PH6/KWH6	LED SEG6	DDRH=$262
37	PH5/KWH5	LED SEG5	
38	PH4/KWH4	LED SEG4	
39	PH3/KWH3	LED SEG3	
40	PH2/KWH2	LED SEG2	
41	PH1/KWH1	LED SEG1	
42	PH0/KWH0	LED SEG0	
43	PE7/NOACC/XCLKS*		
44	RESET*		
45	PE0/XIRQ*		
46	PE1/IRQ*		
47	VCC (+5V)	VCC (+5V)	
48	PS0/RXD0	LED D3 RED	RX LED
49	GROUND	GROUND	
50	GROUND	GROUND	

H2 Connector			
Pin #	MCU Board AD9S12DP	Expansion Board	Notes
1	PA7/ADDR15/DATA15	PORT A-pin8	PORTA=$00
2	PA6/ADDR14/DATA14	PORT A-pin7	DDRA=$02
3	PA5/ADDR13/DATA13	PORT A-pin6	see note 3
4	PA4/ADDR12/DATA12	PORT A-pin5	
5	PA3/ADDR11/DATA11	PORT A-pin4	pins9-16=gnd
6	PA2/ADDR10/DATA10	PORT A-pin3	
7	PA1/ADDR9/DATA9	PORT A-pin2	
8	PA0/ADDR8/DATA8	PORT A-pin1	
9	PB7/ADDR7/DATA7	PORT B-pin8	PORTB=$01
10	PB6/ADDR6/DATA6	PORT B-pin7	DDRB=$03
11	PB5/ADDR5/DATA5	PORT B-pin6	see note 3
12	PB4/ADDR4/DATA4	PORT B-pin5	
13	PB3/ADDR3/DATA3	PORT B-pin4	pins9-16=gnd
14	PB2/ADDR2/DATA2	PORT B-pin3	
15	PB1/ADDR1/DATA1	PORT B-pin2	
16	PB0/ADDR0/DATA0	PORT B-pin1	
17	R/W* PE2		
18	ECLK/PE4		
19	LSTRB*/PE3		
20	IRQ*/PE1		
21	PJ1/KWJ1		
22	PAD08/AN08		PORTAD1=$12F
23	PAD09/AN09		Input only
24	PAD10/AN10		ATD0DIEN=$12D
25	PAD11/AN11		0=disable, 1=enable
26	PAD15/AN15		
27	PAD14/AN14		
28	PAD13/AN13		
29	PAD12/AN12		
30	RxCAN0/PM0	PORT M-pin4	PTM=$250
31	TxCAN0/PM1	PORT M-pin23	DDRM=$252
32	RxCAN1/PM2	PORT M-pin3	
33	TxCAN1/PM3	PORT M-pin24	Port M connector is
34	RxCAN2/PM4	PORT M-pin2	designed to be used
35	TxCAN2/PM5	PORT M-pin25	with the Digital to
36	RxCAN3/PM6	PORT M-pin1	Analog Converter
37	TxCAN3/PM7	PORT M-pin26	Brd.
38	PJ6/SDA		
39	PJ7/SCL		
40	PJ0/KWJ0		
41	PK0/XADDR14		
42	PK1/XADDR15		
43	PK2/XADDR16		
44	PK3/XADDR17		
45	PK4/XADDR18		
46	PK5/XADDR19		
47	PK7/ECS*		
48	PE7/NOACC/XCLKS*		
49	GROUND		
50	VCC (+5VDC)		

Notes:

1 * indicates active low signal
2 Data Direction: 0=Input, 1= Output
3 If pull up resistors required use PUCR=$0C.