J6 - FRONT PANEL

1	AUDIO CH1 SIGNAL	16	0V
2	AUDIO GND	17	SDA
3	AUDIO CH2 SIGNAL	18	0V
4	0V	19	LCD CLOCK
5	SEG. DISP. LATCH	20	KEYPAD ROW 1
6	SEG. DISP. CLOCK	21	LCD DATA / RS
7	SEG. DISP. DATA	22	KEYPAD ROW 2
8	0V	23	LCD ENABLE
9	+5V	24	KEYPAD ROW 3
10	0V	25	PHOTO RESISTOR (-)
11	+12V	26	KEYPAD ROW 4
12	0V	27	KEYPAD COL 4
13	Diag LED (+)	28	KEYPAD COL 1
14	0V	29	KEYPAD COL 3
15	SCL	30	KEYPAD COL 2

J1 - IN-CIRCUIT PROGRAMMING

1	VPP
2	+5V
3	GND
4	PRGM DATA
5	PRGM CLOCK
6	PRGM ENABLE

J1 ISCP, +5V, D1, R66 1k, SW17, J3, R84 100, R100 20k, J6:25 (PHOTO RESISTOR -)

J5 DB9 - RS232

U4 MAX232: C14 1uF, C15 1uF, C16 1uF, C17 1uF, C18 1uF, C19 100nF, +5V, +12V, C1+, C1-, C2+, C2-, T1IN, T2IN, R1OUT, R2OUT, T1OUT, R1IN, T2OUT, R2IN, VS-, VS+, GND, VCC

U1 PIC18F452: C65 18pF, C66 18pF, X3 22.1184MHz, R1 34k, C2 100nF, R46 4.7k, R47 4.7k, SCL, SDA, J8, J9, R120 4.7k, R121 4.7k

U1 RC0/T1OSO/T1CKI: U2:100 (RESET)
U1 RC1/T1OSI/CCP2A: U2:95 (UPDATE)
U1 RC2/CPP1: J6:13 (RX LED +)
U1 RC3/SCK/SCL: SCL
U1 RC4/SDI/SDA: SDA
U1 RD0/PSP0: J6:21 (LCD DATA/RS)
U1 RD1/PSP1: J6:19 (LCD CLOCK)
U1 RD2/PSP2: J6:23 (LCD ENABLE)
U1 RD3/PSP3
U1 RD4/PSP4: U2:96 (DATA IN)
U1 RD5/PSP5: U2:97 (CLOCK)
U1 RD6/PSP6
U1 RD7/PSP7
U1 RE0/RD/AN5: J6:5 (SEG. DISPLAY LATCH)
U1 RE1/WR/AN6: J6:6 (SEG. DISPLAY CLOCK)
U1 RE2/CS/AN7: J6:7 (SEG. DISPLAY DATA)

R102 100 J6:27 (KEYPAD COLUMN 4)
R114 100 J6:29 (KEYPAD COLUMN 3)
R115 100 J6:30 (KEYPAD COLUMN 2)
R116 100 J6:28 (KEYPAD COLUMN 1)
R48 100 D2 1N914 J6:20 (KEYPAD ROW 1)
R49 100 D4 1N914 J6:22 (KEYPAD ROW 2)
R83 100 D5 1N914 J6:24 (KEYPAD ROW 3)
R89 100 D6 1N914 J6:26 (KEYPAD ROW 4)
R97 10k, R98 10k, R99 10k, R101 10k

J6
J6:1 (AUDIO METER CH.1)
J6:2 (AUDIO METER GND)
J6:3 (AUDIO METER CH.2)
J6:5 (SEG. DISPLAY LATCH)
J6:6 (SEG. DISPLAY CLOCK)
J6:7 (SEG. DISPLAY DATA)
+5V, C86 100nF
+12V, C85 100nF
J6:13 (RX LED +)
SCL
SDA
J6:19 (LCD CLOCK)
J6:20 (KEYPAD ROW 1)
J6:21 (LCD DATA/RS)
J6:22 (KEYPAD ROW 2)
J6:23 (LCD ENABLE)
J6:24 (KEYPAD ROW 3)
J6:25 (PHOTO RESISTOR -)
J6:26 (KEYPAD ROW 4)
J6:27 (KEYPAD COLUMN 4)
J6:28 (KEYPAD COLUMN 1)
J6:29 (KEYPAD COLUMN 3)
J6:30 (KEYPAD COLUMN 2)

U14 PIC12F675: C49 100nF, R2 10k, X1 16 MHz, R12 1.2k, R21 2.2k, RV2 10k, R20 75, C1 1nF

R13 75, R14 75, R15 75, R16 75, R17 75, R18 75, R19 75
AGND, Video Aux. 2, AGND, Video Aux. 1, AGND, Video Input 5, AGND, Video Input 4, AGND, Video Input 3, AGND, Video Input 2, AGND, Video Input 1

U3 MAX456: C4 100nF, C5 100nF, C6 100nF, C7 100nF, C8 100nF
IN0, IN1, IN2, IN3, IN4, IN5, IN6, IN7
LATCH, WR
D0/SER IN, D1/SER OUT, D2, D3, A0, A1, A2
V+, V+, V+, V-, V-
OUT0, OUT1, OUT2, OUT3, OUT4, OUT5, OUT6, OUT7
CE, EDGE/LEVEL, LOAD
AGND, AGND, AGND
DGND, DGND
CE, SER/PAR

U6 MAX497: C69 100nF, C68 100nF, C9 100nF, C10 100nF, C11 100nF, C12 100nF, C67 100nF, C64 100nF
GND, IN0, GND, IN1, GND, IN2, GND, IN3
OUT0, GND, OUT1, VEE, OUT2, VEE, OUT3, VCC
R4 75, R5 75, R6 75, R7 75
Video Output 1, AGND, Video Output 2, AGND, Video Output 3, AGND, Video Output 4, AGND

U7 MAX497: R8 75, R9 75, R10 75, R11 75
J7:2 (VIDEO OUTPUT 5)
J7:1 (AGND)
Video Output Aux. 2, AGND, Video Output Aux. 1, AGND, MONITOR, AGND

R97 10k, R98 10k, R99 10k, R101 10k

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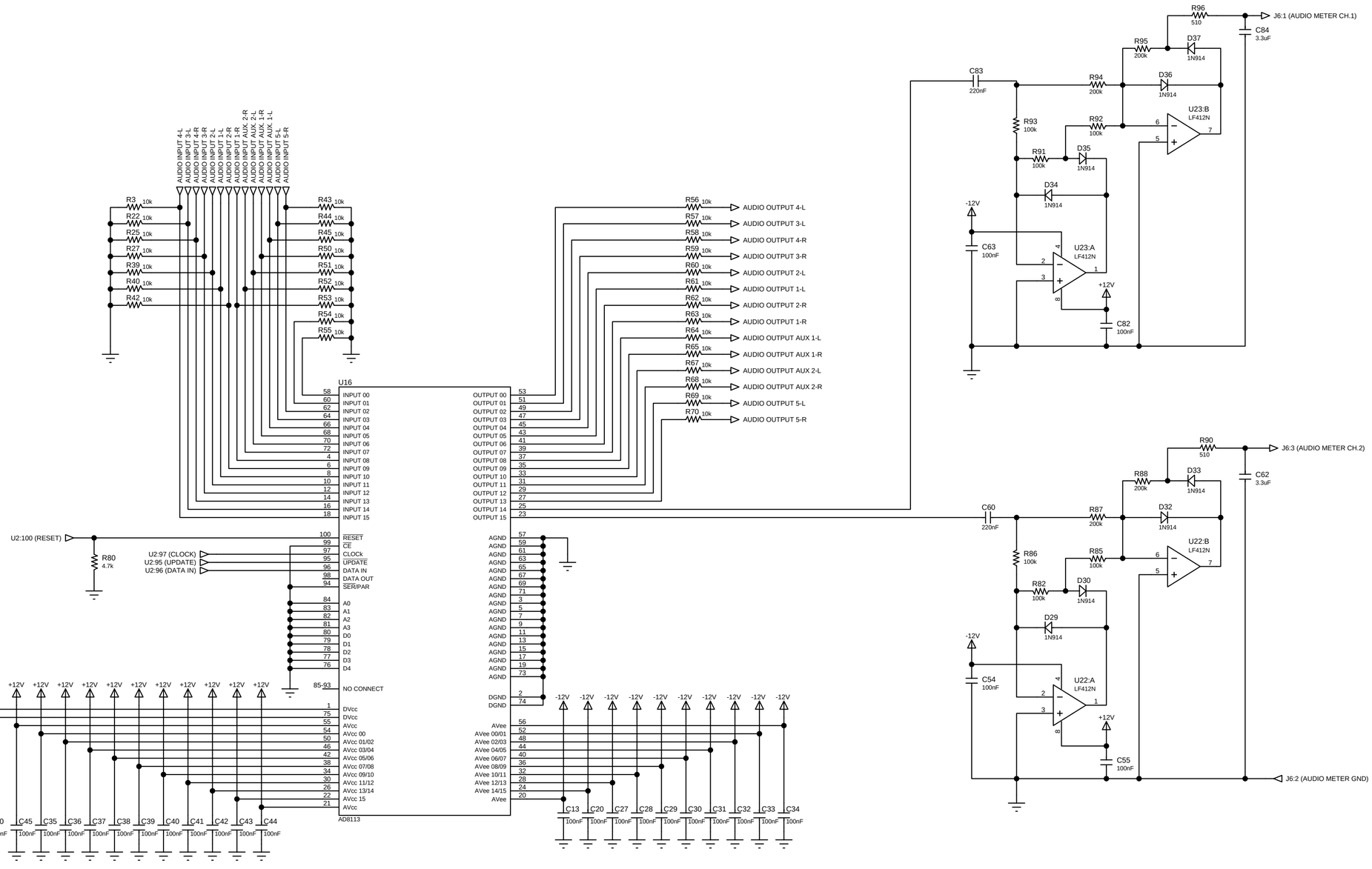
TITLE : VIDEO ROUTING / CPU			DOCUMENT # : AVS50-01
PRODUCT ID : AVS-50	REVISION : A	CREATED ON : 16/02/04	LAST MODIFIED : 07/11/04
DESIGNED BY : BENOIT FRIGON			PAGE : 1 OF 5



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DESIGNED BY : BENOIT FRIGON			PAGE : 2 OF 5

J4 connector pinout

1	AUDIO CH1 SIGNAL	16	0V
2	AUDIO GND	17	SDA
3	AUDIO CH2 SIGNAL	18	0V
4	0V	19	LCD CLOCK
5	SEG. DISP. LATCH	20	KEYPAD ROW 1
6	SEG. DISP. CLOCK	21	LCD DATA / RS
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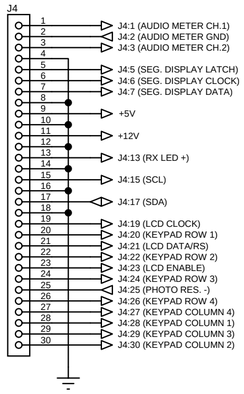
8	0V	23	LCD ENABLE
9	+5V	24	KEYPAD ROW 3
10	0V	25	PHOTO RESISTOR (-)
11	+12V	26	KEYPAD ROW 4
12	0V	27	KEYPAD COL 4
13	Diag LED (+)	28	KEYPAD COL 1
14	0V	29	KEYPAD COL 3
15	SCL	30	KEYPAD COL 2

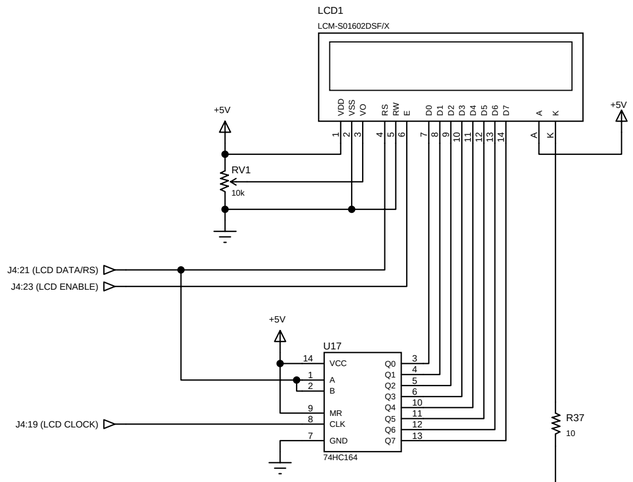
Keypad configuration

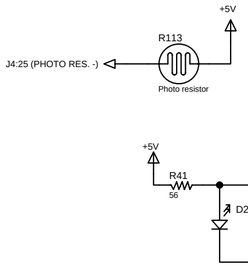
	C1	C2	C3	C4
R1	A/V	N7	N8	N9
R2	CLR	N4	N5	N6
R3	STBY	N1	N2	N3
R4	PST	DST	SET	SRC

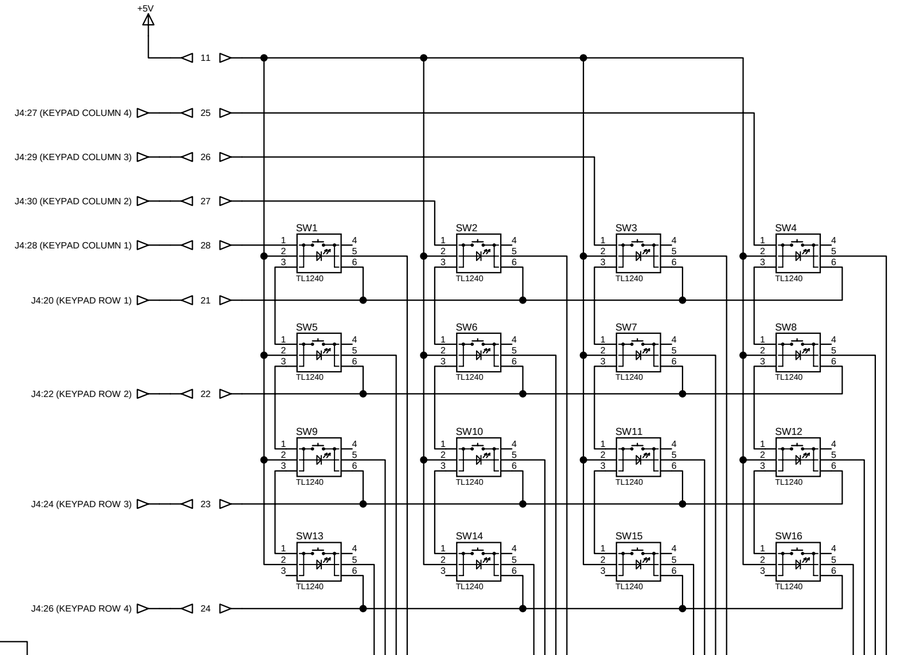
Keypad module pinout

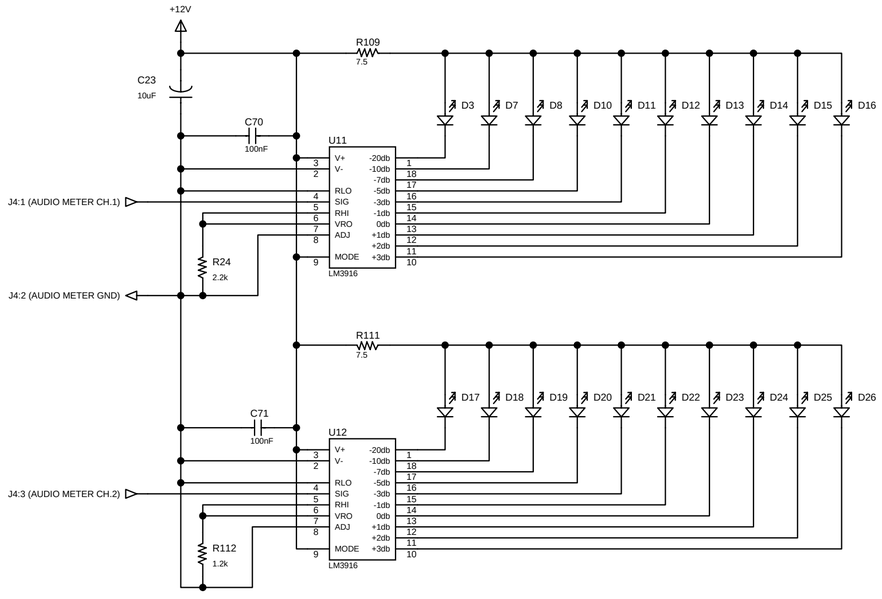
1	0V	11	+5V	21	ROW 1
2	0V	12	DST LED (-)	22	ROW 2
3	PWR LED (+)	13	N4 LED (-)	23	ROW 3
4	STBY LED (-)	14	N5 LED (-)	24	ROW 4
5	N1 LED (-)	15	N7 LED (-)	25	COLUMN 4
6	PST LED (-)	16	CLR LED (-)	26	COLUMN 3
7	N2 LED (-)	17	N8 LED (-)	27	COLUMN 2
8	SRC LED (-)	18	A/V LED (-)	28	COLUMN 1
9	N3 LED (-)	19	N6 LED (-)		
10	SET LED (-)	20	N9 LED (-)		

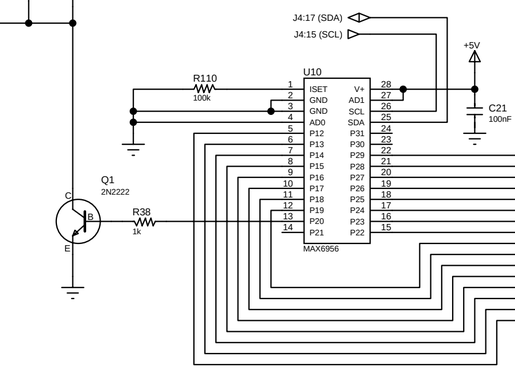


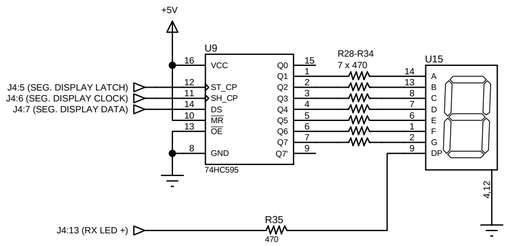


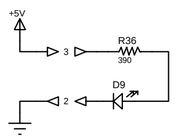












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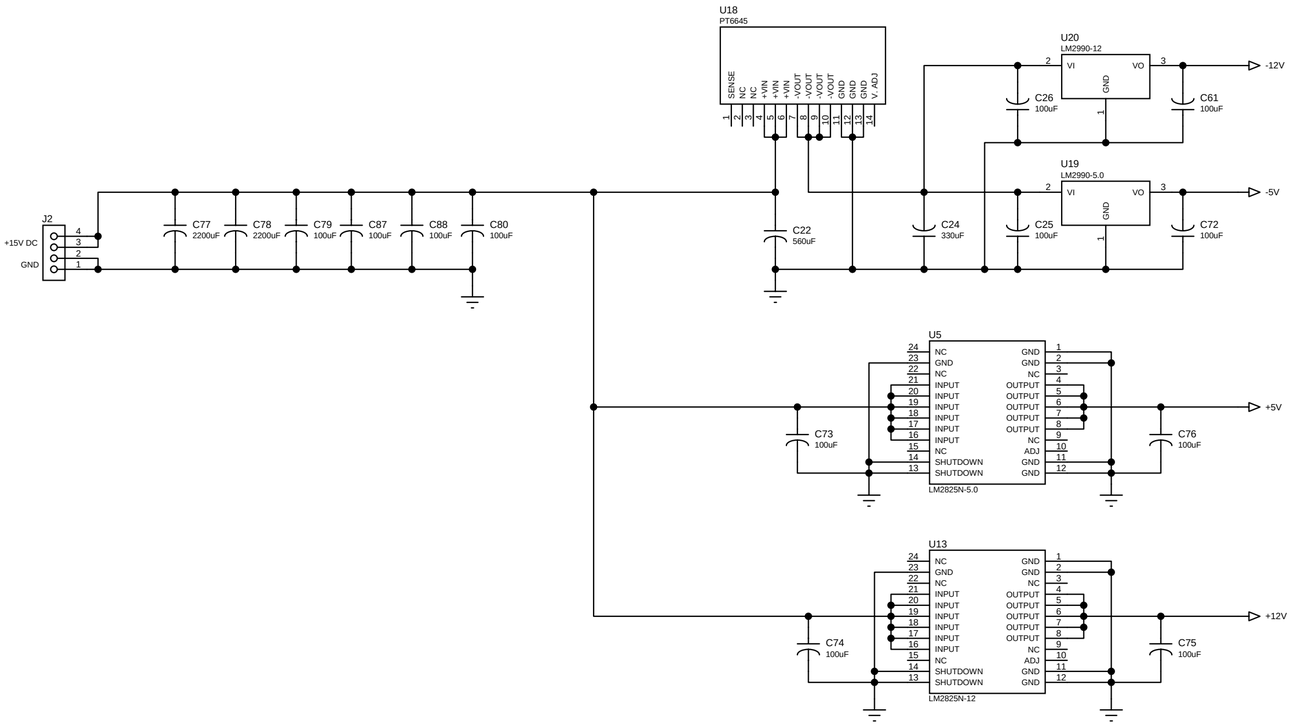

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