

Notes on miniDSP 8x8 v1.4

ANALOGUE AUDIO INPUTS/OUTPUTS	SigmaStudio ADC input	SigmaStudio DAC output
1	6	16
2	7	17
3	2	0
4	3	1
5	4	2
6	5	3
7	0	4
8	1	5

Multipurpose I/O:

MP0/ADC0	100 series resistor	J13/2	J13/1 = 3.3V	J13/3 = Gnd
MP1/ADC1	100 series resistor	J14/2	J14/1 = 3.3V	J14/3 = Gnd
MP2/ADC2	100 series resistor	J15/2	J15/1 = 3.3V	J15/3 = Gnd
MP3/ADC3	100 series resistor	J16/2	J16/1 = 3.3V	J16/3 = Gnd
MP4	10K pull-up resistor to 3.3V	J17/1	J17/2 = 3.3V	
MP5	10K pull-up resistor to 3.3V	J17/3	J17/4 = 3.3V	
MP6	10K pull-up resistor to 3.3V	J17/5	J17/6 = 3.3V	
MP7	10K pull-up resistor to 3.3V	J17/7	J17/8 = 3.3V	
MP8	10K pull-up resistor to 3.3V	J17/9	J17/10 = 3.3V	
MP9	10K pull-up resistor to 3.3V	J17/11	J17/12 = 3.3V	
MP10	10K pull-up resistor to 3.3V	J17/13	J17/14 = 3.3V	
MP11	10K pull-up resistor to 3.3V	J17/15	J17/16 = 3.3V	

To hold on-board PIC microcontroller in reset mode connect pins 1 (/MCLR) and 3 (Gnd) of J18 together
5V pick-up point on J19 pin 1.

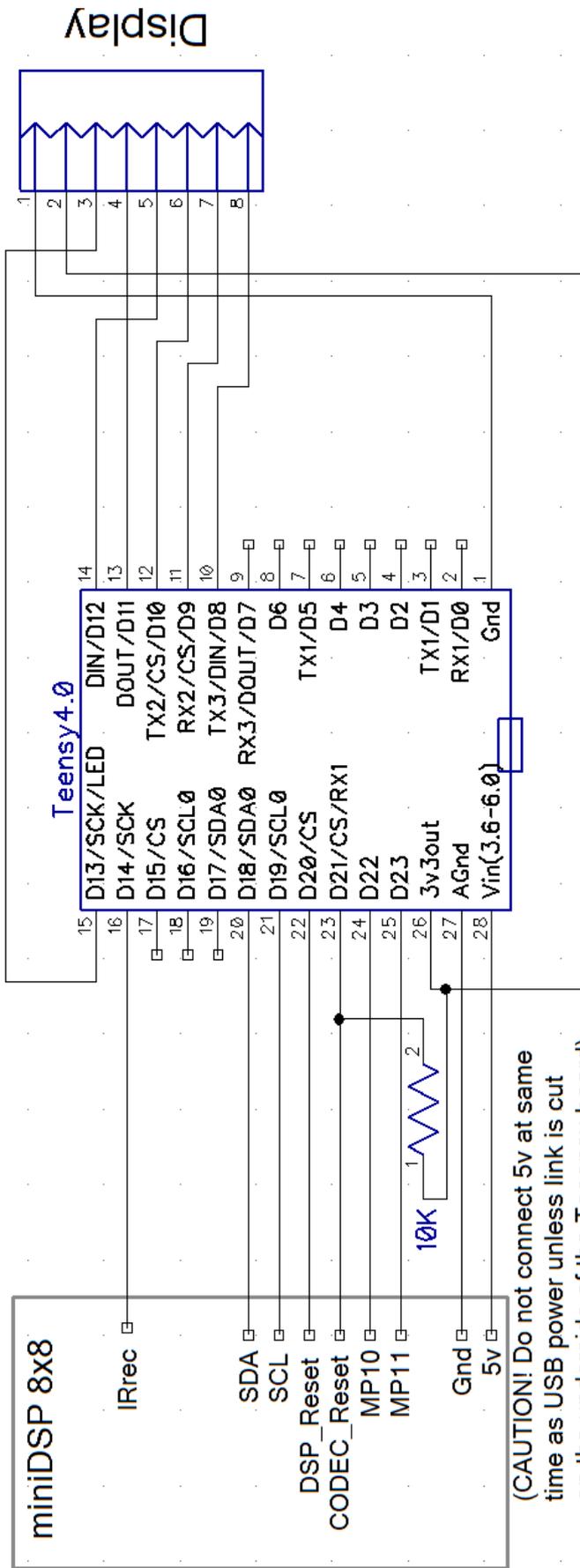
Connections for external programming and setup control:

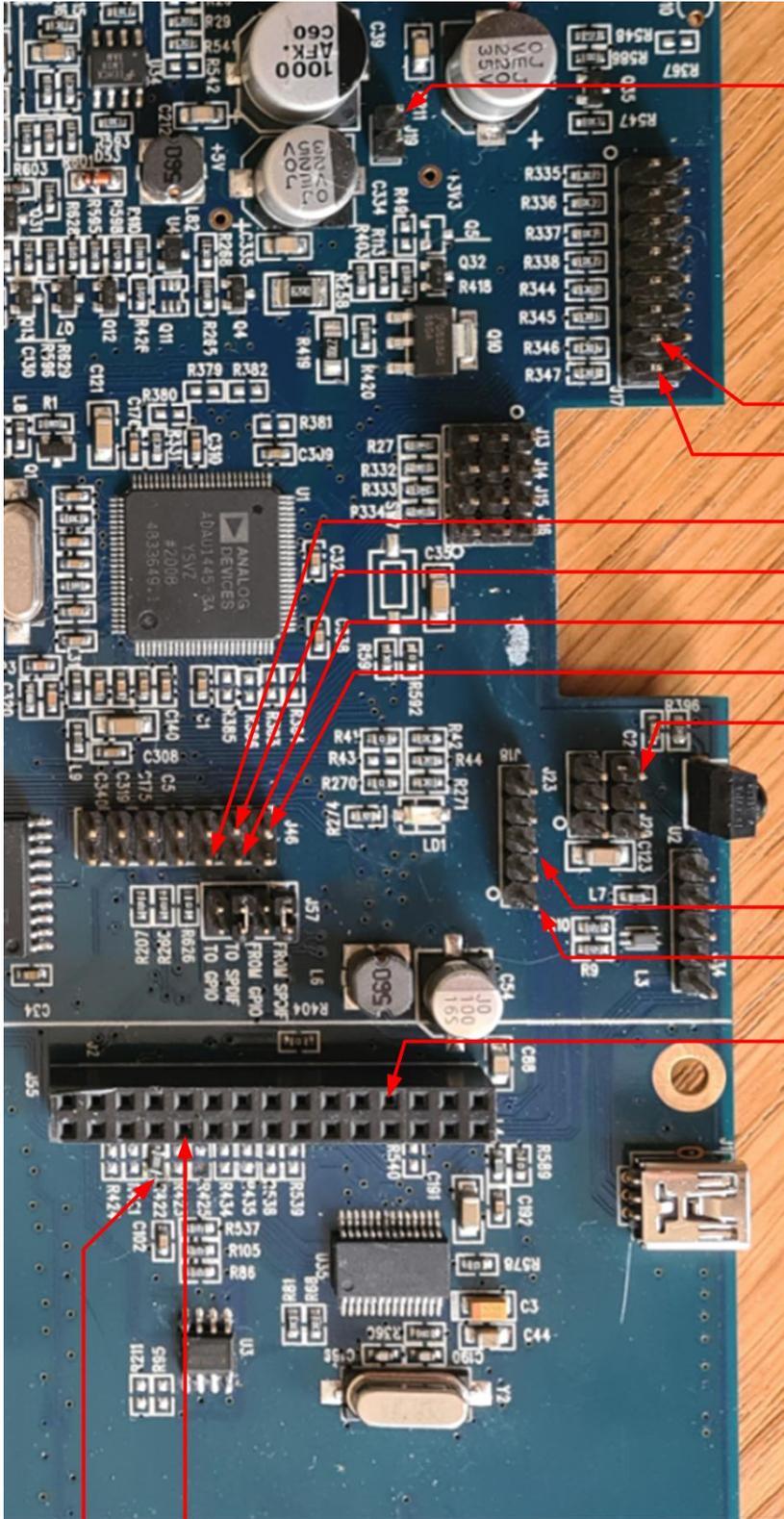
I2C Clock	J46/12	
I2C Data	J46/9	
DSP /reset	J46/11	
Gnd	J46/14	
CODEC /reset	J2/7*	External 10k pullup to 3.3V required

*Access to the CODEC /reset line is required. Easiest way to do this is to solder a 100 ohm 0805 smt resistor into the empty R422 position which will then allow access to the reset line via J2 pin 7. (Note that J55 is just a two pin header on the end of J2 – looks like a later extension to J2 was required)

Output from the I/R receiver can be picked up on J20 pin 3

Connections for Teensy and LCD Display





Add 100 resistor (or link)
In position R422

CODEC_Reset

5V

MP10

MP11

SDA

SCL

DSP_Reset

Gnd

IRec

Gnd

Gnd

/MCLR

Gnd

Gnd