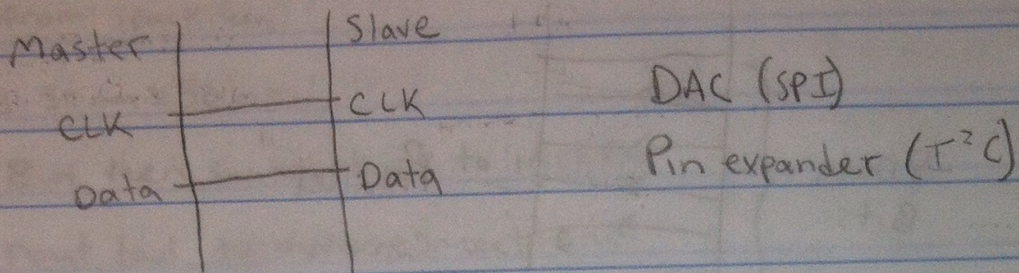
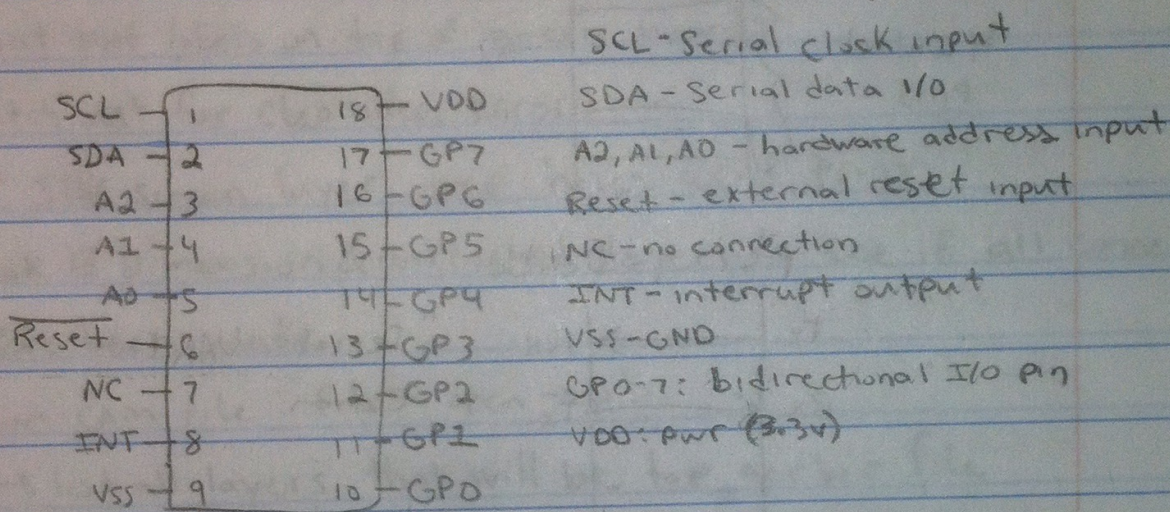


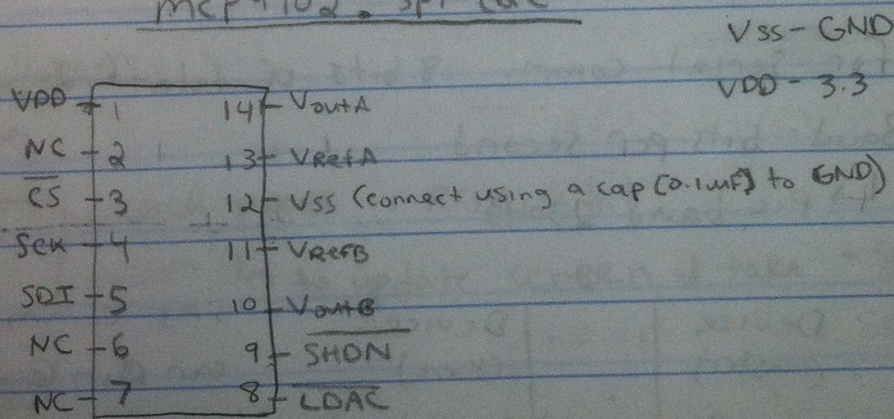
$I^2C \Rightarrow \text{max @ 4MHz}$  (still faster than UART)



### MCP23008 (PDIP/SOIC) I2C-expander



### MCP4902: Spi-dac



SCK - a clock, controlled by Master

NC - no connection

SDI - data input to the master

SDO - data output from the Master (VoutA-B)

SS - chip select output from the Master (CS)



|    |           |    |
|----|-----------|----|
| 1  |           | 28 |
| 2  |           | 27 |
| 3  | PIC       | 26 |
| 4  | (SCK)     | 25 |
| 5  | (RB13)    | 24 |
| 6  | (SDA2)    | 23 |
| 7  | (SCL2)    | 22 |
| 8  |           | 21 |
| 9  |           | 20 |
| 10 |           | 19 |
| 11 |           | 18 |
| 12 | in (RB8)  | 17 |
| 13 | out (RB7) | 16 |
| 14 |           | 15 |

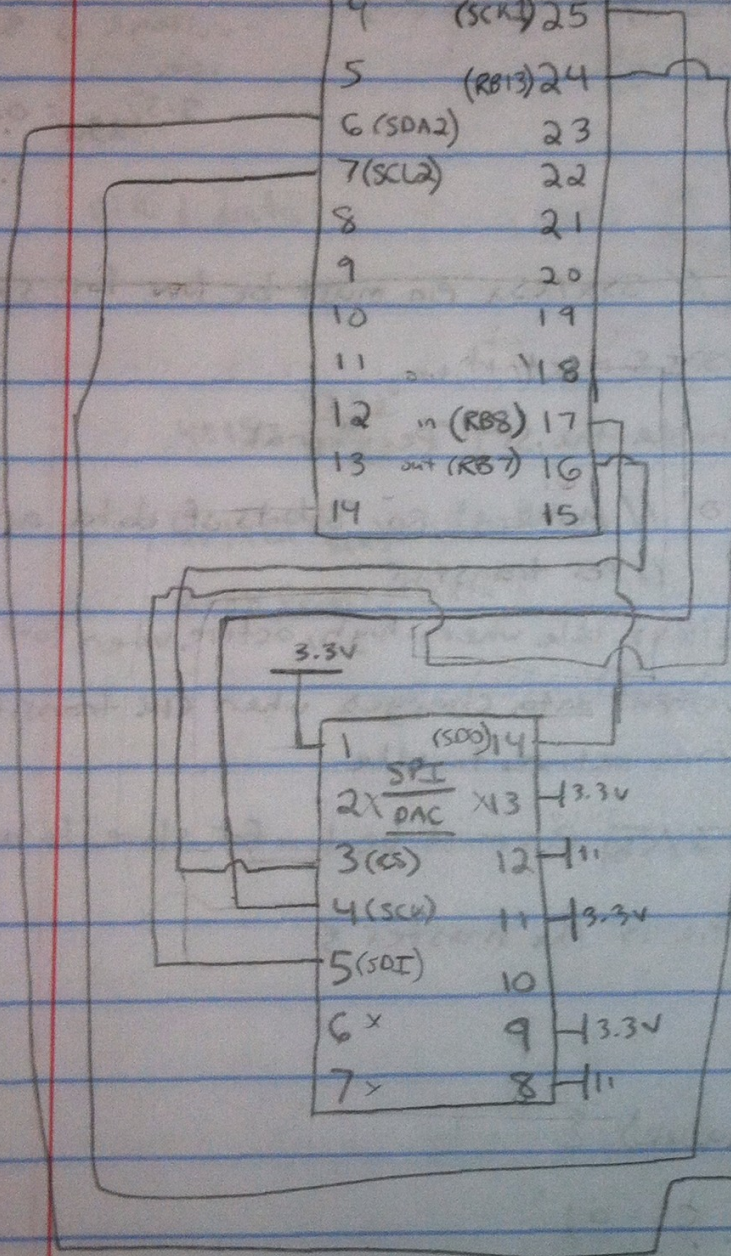
SPI1 Pins: 10, 17, 24, 25

I2C2 Pins: 6, 7

RB7: CS1 LAT&TRIS B7

RPB8: SDI1 SDIRB.15 = 0100

RB13: SDO1 RPB13RB.15 = 0011



|             |    |
|-------------|----|
| 1 (SCL)     | 18 |
| 2 (SDA) I2C | 17 |
| 3           | 16 |
| 4           | 15 |
| 5           | 14 |
| 6           | 13 |
| 7           | 12 |
| 8           | 11 |
| 9           | 10 |