Temperature Logger Concept with Maker Pi Pico
Rob Probin, Dec 2022

To PC

Indicates activity

Data storage on SD Card

Real time clock (RTC) HW-689 (uses PCF8563)
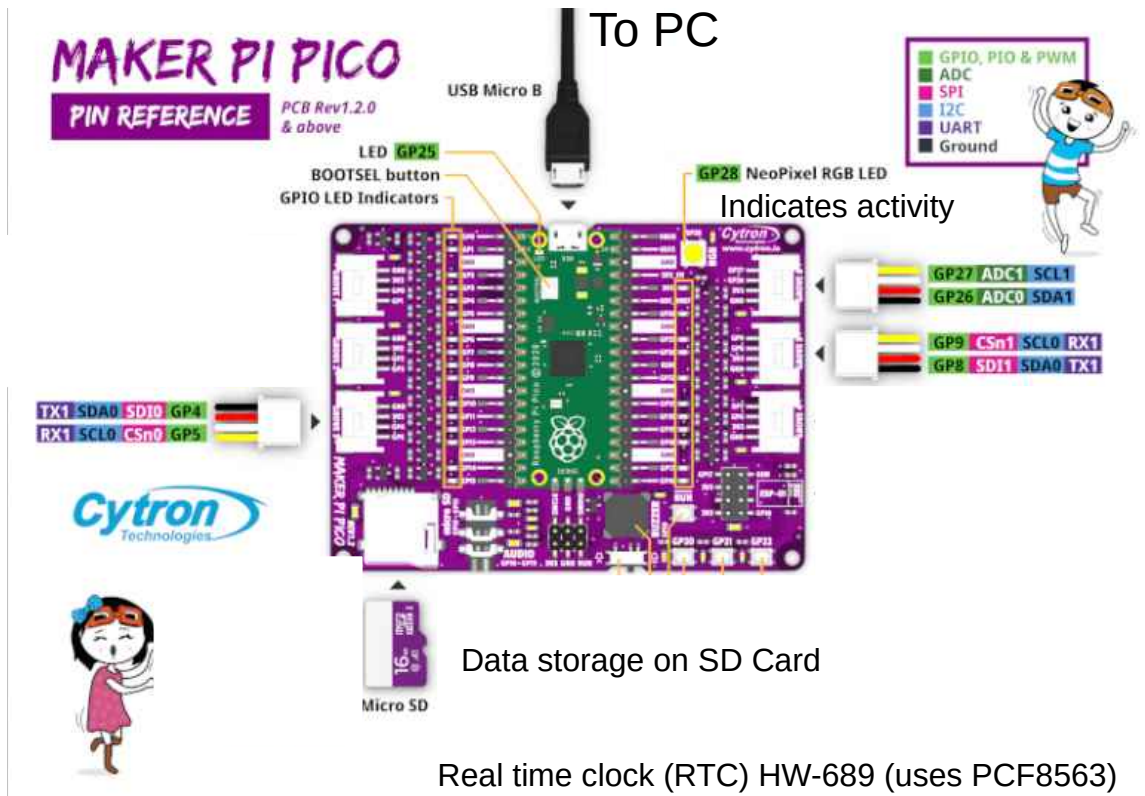
SCL to GP5
SDA to GP4
GND to GND
Vcc to 3v3

8 inputs:
100 ohm input (between terminal and 4051)
22K pull up to 3v3 (between terminal and 3v3)

3 x 3.3v from Maker Pi

CHANNEL IN/OUT { A4 [1]   [16] V_CC
                 A6 [2]   [15] A2 }
COM OUT/IN   A [3]   [14] A1   CHANNEL IN/OUT
CHANNEL IN/OUT { A7 [4]   [13] A0 }
                 A5 [5]   [12] A3 }
                  E [6]   [11] S0
               V_EE [7]   [10] S1   ADDRESS SELECT
                GND [8]   [9] S2

Analog out
GP26 / ADC0
100nF to GND

100nF   100nF

S2 = GP27
S1 = GP9
S0 = GP8

GND   74HC4051

3 x GND from Maker Pi
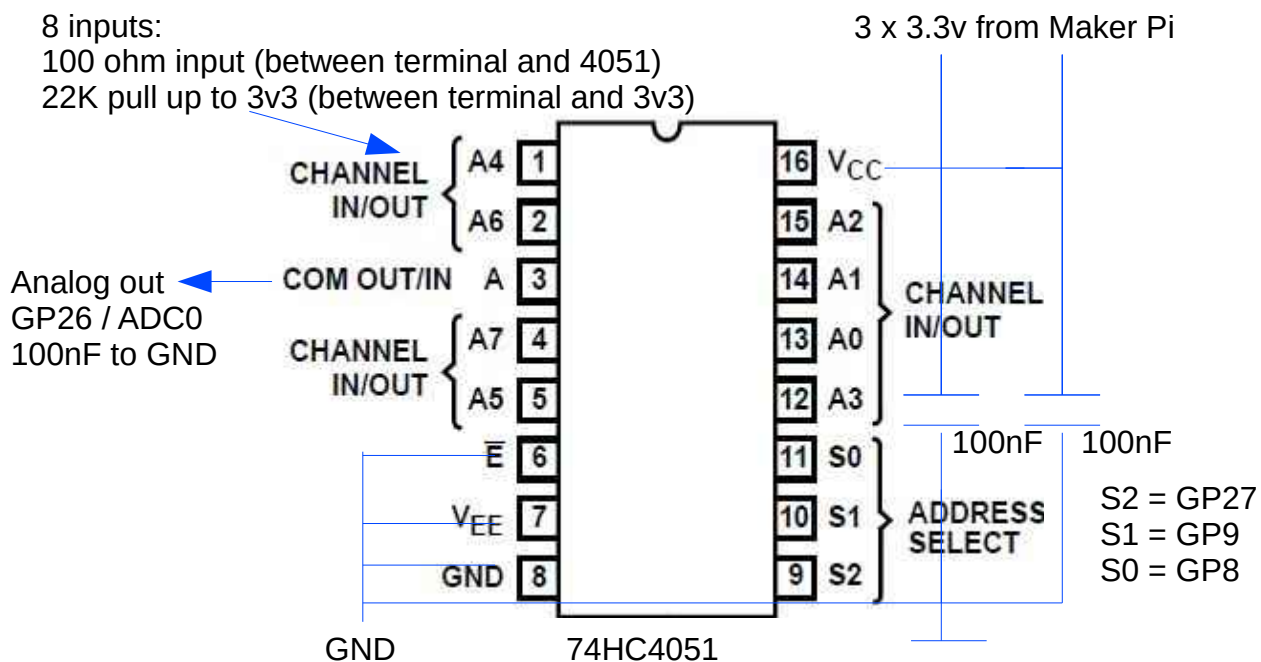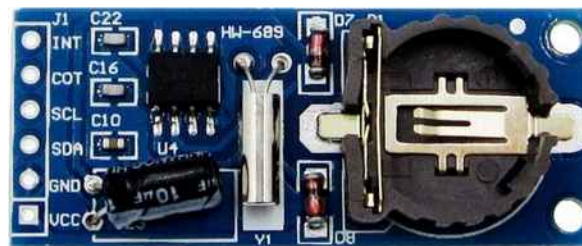
Terminal blocks:
2 inputs to 1 shared GND
20K NTC Thermocouples go between input and ground.