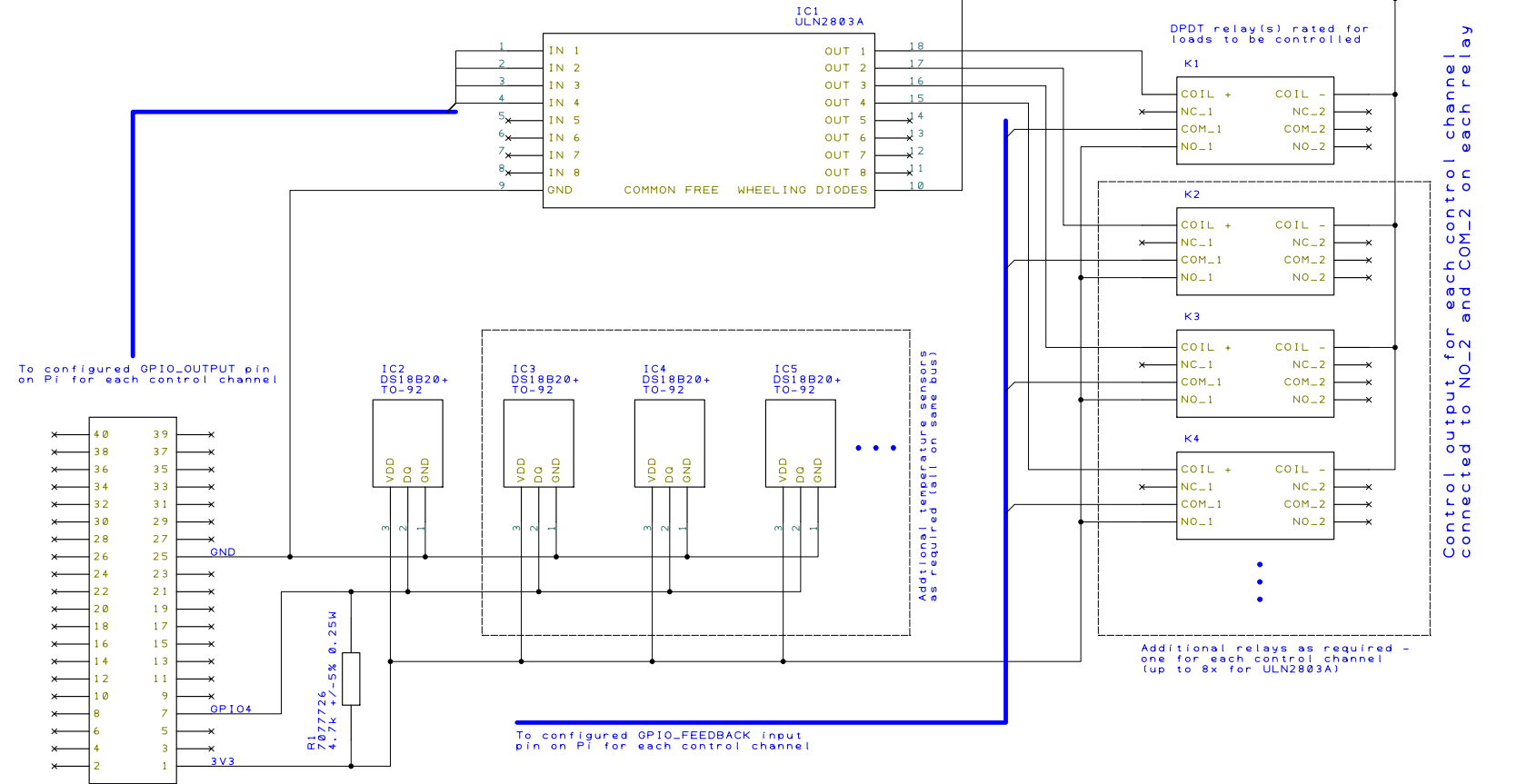


Temperature Controller Schematic - Full/General Version

Aaron Lockton - July 2020 - v1.0



To configured GPIO_OUTPUT pin on Pi for each control channel

IC2 DS18B20+ TO-92

IC3 DS18B20+ TO-92

IC4 DS18B20+ TO-92

IC5 DS18B20+ TO-92

Additional temperature sensors as required (all on same bus)

IC1 ULN2803A

DPDT relay(s) rated for loads to be controlled

K1
COIL + COIL -
NC_1 NC_2
COM_1 COM_2
NO_1 NO_2

K2
COIL + COIL -
NC_1 NC_2
COM_1 COM_2
NO_1 NO_2

K3
COIL + COIL -
NC_1 NC_2
COM_1 COM_2
NO_1 NO_2

K4
COIL + COIL -
NC_1 NC_2
COM_1 COM_2
NO_1 NO_2

Additional relays as required - one for each control channel (up to 8x for ULN2803A)

Control output for each control channel connected to NO_2 and COM_2 on each relay

To configured GPIO_FEEDBACK input pin on Pi for each control channel