

[illegible]

Wiring diagram for the M1 Arduino-Nano-3.0#ISP. The diagram shows the connection of an ISP programmer to the Arduino Nano. The programmer's pins are connected to the Arduino's pins as follows:

- J1.1 (D1/TX) to 4
- J1.2 (D0/RX) to 5
- J1.3 (RST1) to 1
- J1.4 (GND.1) to GND
- J1.5 (D2) to 2
- J1.6 (D3) to 3
- J1.7 (D4) to 4
- J1.8 (D5) to 5
- J1.9 (D6) to 6
- J1.10 (D7) to 7
- J1.11 (D8) to 8
- J1.12 (D9) to 9
- J1.13 (D10) to 10
- J1.14 (D11/MOSI) to 11
- J1.15 (D12/MISO) to 12

The Arduino's pins are also connected to a 5V supply, GND, and a 3V3 supply. The USB port is connected to the 3V3 supply.

Logic diagram of the CS_3v3_THERMO module. The module consists of two 5V1 logic shifters, U5 and U6.

U5 Logic Shifter:

- Inputs: CS_THERMO4, CS_THERMO3, CS_THERMO2, CS_THERMO1
- Outputs: LV4, LV3, LV2, LV1
- Connections: LV4 is connected to GND, LV3 is connected to +5V1, LV2 is connected to CS_3v3_THERMO2, and LV1 is connected to CS_3v3_THERMO1.

U6 Logic Shifter:

- Inputs: HV4, HV3, HV2, HV1
- Outputs: LV4, LV3, LV2, LV1
- Connections: LV4 is connected to GND, LV3 is connected to +5V1, LV2 is connected to CS_3v3_THERMO2, and LV1 is connected to CS_3v3_THERMO1.

The schematic diagram illustrates the connection of four MAX31855KASA+T modules (U7, U8, U9, U10) to four PCC-SMD-20 modules (J1, J2, J3, J4). Each module has the following pins and connections:

- SCK:** 3V3, connected to pin 5.
- MISO:** connected to pin 7.
- CS:** 3V3_THERMO2, connected to pin 6.
- VCC:** 3V3, connected to pin 4.
- T+:** connected to pin 3.
- T-:** connected to pin 2.
- DNC:** connected to pin 8.
- GND:** connected to pin 1.

Each module is connected to a PCC-SMD-20 module via a 10nF capacitor (C7, C8, C10, C12) and a 0.1uF capacitor (C6, C9, C11, C13). The PCC-SMD-20 modules are labeled J1, J2, J3, and J4, with pins 2 and 1 connected to the modules.

REV: 1.0

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