

| Nim # | Die Lebel | Europina |
|--|---|--|
| Pin # | Pin Label | Function |
| 0 | | |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | 0 | |
| 10 | 0 | |
| 11 | 0 | |
| 12 | 0 | |
| 13 | 0 | |
| 14 | 0 | |
| 15 | 0 | |
| 16 | 0 | |
| 17 | | |
| 18 | | |
| 19 | | |
| | SDA | |
| | SCL | |
| | | LCD |
| 22 | | LCD screen controls |
| | EN | LCD screen enable, |
| | D4 | D4-D7 = data into the LCD screen |
| | D5 | D4-D7 = data into the LCD screen |
| | D6 | D4-D7 = data into the LCD screen |
| | D7 | D4-D7 = data into the LCD screen |
| 28 | EncoderClk | encoder input for menu screen |
| 29 | EncoderDT | encoder input for menu screen |
| 30 | EncoderSw | button encoder input for menu screen |
| 31 | AC_ID | Connects to input switch and tells mcu whether its switched to HV,MV,LV or AC |
| | LV_ID | Connects to input switch and tells mcu whether its switched to HV,MV,LV or AC |
| | MV ID | Connects to input switch and tells mcu whether its switched to HV,MV,LV or AC |
| | HV ID | Connects to input switch and tells med whether its switched to HV,MV,LV or AC |
| | ModControl | Controls whether the DC output is modulated or not |
| | SafeRelay | Sends a signal to the saftey relay circuit in case of overcurrent, thermal overheat or other failure |
| | TempLED | The LED that turns on when the temperature warning is exceeded |
| | InterlockRelay | The LEB that tains on when the temperature marning is enceced |
| | HW Interlock | |
| | _ | |
| | | |
| | FNC_PIN | Used for AD9833 Waveform Generator |
| 41 | LV_Relay | LV Output Relay Control |
| 41 42 | LV_Relay MV_Relay | LV Output Relay Control MV Output Relay Control |
| 41 42 43 | LV_Relay MV_Relay HV_Relay | LV Output Relay Control MV Output Relay Control HV Output Relay Control |
| 41 42 43 44 | LV_Relay MV_Relay HV_Relay ModLo | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation |
| 41 42 43 44 45 | LV_Relay MV_Relay HV_Relay ModLo ModHi | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 | LV_Relay MV_Relay HV_Relay ModLo ModHi 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 48 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 48 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 48 49 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 48 49 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 48 49 50 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation |
| 41 42 43 44 45 46 47 48 49 50 | LV_Relay MV_Relay HV_Relay ModLo ModHi OS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI |
| 41 42 43 44 45 46 47 48 49 50 51 | LV_Relay MV_Relay HV_Relay ModLo ModHi OS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI |
| 41 42 43 44 45 46 47 48 49 50 51 52 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI |
| 41 42 43 44 45 46 47 48 49 50 51 51 52 53 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI |
| 41 42 43 44 45 46 46 47 48 49 50 51 52 53 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI |
| 41 42 43 44 45 46 47 48 49 51 52 53 54 55 56 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI |
| 41 42 43 44 46 47 48 49 50 51 52 53 54 55 56 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 53 54 55 56 57 57 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd Gnd 9V in | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI SP |
| 41 42 43 45 46 47 48 50 51 52 53 54 55 56 57 58 59 60 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd Gnd 9V in V_out | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI Output Relay Control SPI |
| 41 42 43 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 | LV_Relay MV_Relay HV_Relay ModLo ModHi 0 CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd Gnd 9V in V_out | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI Power into the microcontroller from 9V supply Voltage output of DC sensing op-amp |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C O Gnd Gnd Gnd 9V in V_out O Thermistor | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI Mary Control SPI SPI SPI SPI SPI SPI SPI SPI Mary Control Mary C |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 | LV_Relay MV_Relay HV_Relay HV_Relay MOdLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd Gnd 9V in V_out 0 Thermistor AC_V_Read | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI SP |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64 | LV_Relay MV_Relay HV_Relay MOdLo ModHi OS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C OGnd Gnd Gnd 9V in V_out OThermistor AC_V_Read LV_V_Read | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV |
| 41 42 43 44 45 46 47 48 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C O Gnd Gnd Gnd 9V in V_out O Thermistor AC_V_Read MV_V_Read MV_V_Read MV_V_Read | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI Measures the voltage and calculates the resulting temperature AC voltage reading of LV Voltage reading of TV Voltage reading of mV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C O Gnd Gnd 9V in V_out 0 Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SP |
| 41 42 43 44 45 46 47 48 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 | LV_Relay MV_Relay HV_Relay MOdLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI SP |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 53 54 55 56 60 61 62 63 64 65 66 67 68 | LV_Relay MV_Relay HV_Relay HV_Relay MOdLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI Measures the voltage and calculates the resulting temperature AC voltage reading of LV Voltage reading of MV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 66 66 67 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd Grid 9V in V_out 0 Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read 0 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI Measures the voltage and calculates the resulting temperature AC voltage reading of LV Voltage reading of MV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 53 54 55 56 60 61 62 63 64 65 66 67 68 | LV_Relay MV_Relay HV_Relay MV_Relay MOdLo ModHi OCS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C OGnd Gnd Gnd 9V in V_out OThermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read HV_V_Read OO | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI SP |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64 65 66 66 66 67 68 | LV_Relay MV_Relay HV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C O Gnd Gnd 9V in V_out O Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI SP |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 66 61 62 63 64 64 65 66 67 68 69 70 | LV_Relay MV_Relay HV_Relay MOdLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read 0 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI Modulation Power into the microcontroller from 9V supply Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading of LV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 68 69 71 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read 0 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI March and the microcontroller from 9V supply Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of MV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 68 69 70 71 72 73 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read HV_V_Read O O O O O O O O O O O O O | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 71 72 73 74 | LV_Relay MV_Relay HV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C O Gnd Gnd Gnd 9V in V_out O Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read HV_V_Read O O O O O O O O O O O O O O O O O O | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI Modulation Power into the microcontroller from 9V supply Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of HV Voltage reading of HV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 | LV_Relay MV_Relay HV_Relay MV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd 9V in V_out 0 Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read HV_V_Read O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI Modulation Power into the microcontroller from 9V supply Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of HV Voltage reading of HV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 66 67 68 69 70 71 72 73 76 | LV_Relay MV_Relay HV_Relay MV_Relay HV_Relay Modulo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read O O O O O O O O O O O O O | LV Output Relay Control MV Output Relay Control HV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI SVI SPI Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading of LV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 70 71 72 73 74 76 77 | LV_Relay MV_Relay HV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C 0 Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read O 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SVI SPI SVI SVI SVI SVI SVI SVI SVI SVI SVI SV |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 77 78 | LV_Relay MV_Relay HV_Relay MOdLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read MV_V_Read HV_V_Read HV_V_Read HV_V_Read O O O O O O O O O O O O O | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of mV Voltage reading of HV |
| 41 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 75 76 77 78 | LV_Relay MV_Relay HV_Relay ModLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd Gnd 9V in V_out 0 Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read HV_V_Read HV_V_Read O 0 0 0 0 0 0 0 0 0 0 0 0 | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI Woltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of MV Voltage reading of HV |
| 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 77 78 | LV_Relay MV_Relay HV_Relay MOdLo ModHi CS_PIN Up/Down Control Pin for Digital Potentiometer Increment Control for Digital Potentiometer MISO MOSI SCK SS N/C Gnd Gnd 9V in V_out Thermistor AC_V_Read LV_V_Read HV_V_Read HV_V_Read HV_V_Read HV_V_Read O O O O O O O O O O O O O | LV Output Relay Control MV Output Relay Control Low side gate driver for DC modulation High side gate driver for DC modulation SPI SPI SPI SPI SPI SPI SPI SPI SPI Voltage output of DC sensing op-amp Measures the voltage and calculates the resulting temperature AC voltage reading after voltage divider Voltage reading of LV Voltage reading of HV Voltage reading of HV |

