

The diagram illustrates the 40-pin header J1 on a Raspberry Pi, with pins numbered 1 to 40. The connections are as follows:

- Pins 1-5:** 3V3-1, SDA, SCL, Btn, GND-1
- Pins 6-10:** 3V3-2, SPI_MOSI, SPI_MISO, SPI_CLK, GND-2
- Pins 11-15:** Trigger (Ultrasonidos), Echo (Ultrasonidos), 3V3, GPIO10, GPIO9, GPIO11
- Pins 16-20:** RTC_SOUT, PWM_Servo2, PWM_AUDIO, DC_OLED, GND-3
- Pins 21-25:** 3V3, GPIO17, GPIO27, GPIO22, 3V3
- Pins 26-30:** GPIO12, GND, GPIO0, GPIO5
- Pins 31-35:** GPIO6, GPIO13, GPIO19, GPIO26, GND
- Pins 36-40:** 5V-1, 5V-2, GND-4, BT_RX, BT_TX, PWM_Servo1, RSTPD_N, SPI_CS_OLED, GND-5, RST_OLED, P32_INT0, GND-6, GND-7, GND-8, Leds-IN

Pin configuration diagram for the LUMINOSITY module (TSL2561). The module is connected to a 3V3-1 supply and GND-4. The pins are labeled as follows:

- Pin 1: VDD
- Pin 2: ADDR_SEL
- Pin 3: GND
- Pin 4: GND-4
- Pin 6: SDA
- Pin 5: INT
- Pin 4: SCL
- Pin 3: SCL

The SDA and SCL pins are connected to the I2C bus. A red 'X' is marked on the SCL pin 4.

TEMPERATURE
MCP9902T-AE_RW

3V3-1

1 VDD
2 DP1
3 DN1
4 THERM/ADDR
5 GND
6 ALERT/THERM2
7 SMCLK
8 SMDATA

100nF

GND-3

GND-3

GND-3

SCL
SDA

C-DESACOPLO_TEMP

The diagram shows a Bluetooth HC-05 module (labeled HC1) with pins Key, Vcc, GND, TXD, RXD, and State. The TXD pin is connected to a 1k resistor (R2-DIV_BLE) and the RXD pin is connected to a 2k resistor (R1-DIV_BLE). Both resistors are connected to a common point that leads to the BT_TX and BT_RX pins of a transceiver. The transceiver is connected to a GND-5 pin.

The schematic diagram illustrates the internal components and connections of the PN532_C1 module. The central component is the U4 chip, which is a multi-pin integrated circuit. The chip is connected to various external components and power sources:

- Power and Ground Connections:**
 - 3V3-1:** Connected to pins 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.
 - GND-3:** Connected to pins 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41.
- Resistors:**
 - R6 (10k):** Connected between pins 41 and 40.
 - R4 (4.7k):** Connected between pins 30 and 29.
 - R5 (4.7k):** Connected between pins 24 and 23.
- Capacitors:**
 - C10 (100nF):** Connected between pins 1 and 2.
- Other Connections:**
 - SDA:** Connected to pin 27.
 - SCL:** Connected to pin 24.
 - RSTPD_N:** Connected to pin 31.
 - P32_INT0:** Connected to pin 32.
 - P33_INT0:** Connected to pin 33.
 - P34_INT0:** Connected to pin 34.
 - P31_UART_TX:** Connected to pin 31.
 - P30_UART_RX_2:** Connected to pin 30.
 - P30_UART_RX_1:** Connected to pin 29.
 - P30_UART_RX_1:** Connected to pin 28.
 - P30_UART_RX_1:** Connected to pin 27.
 - P30_UART_RX_1:** Connected to pin 26.
 - P30_UART_RX_1:** Connected to pin 25.
 - P30_UART_RX_1:** Connected to pin 24.
 - P30_UART_RX_1:** Connected to pin 23.
 - P30_UART_RX_1:** Connected to pin 22.
 - P30_UART_RX_1:** Connected to pin 21.
 - P30_UART_RX_1:** Connected to pin 20.
 - P30_UART_RX_1:** Connected to pin 19.
 - P30_UART_RX_1:** Connected to pin 18.
 - P30_UART_RX_1:** Connected to pin 17.
 - P30_UART_RX_1:** Connected to pin 16.
 - P30_UART_RX_1:** Connected to pin 15.
 - P30_UART_RX_1:** Connected to pin 14.
 - P30_UART_RX_1:** Connected to pin 13.
 - P30_UART_RX_1:** Connected to pin 12.
 - P30_UART_RX_1:** Connected to pin 11.