

Power and Battery

The diagram illustrates the hardware setup for two sensors on an Arduino Uno. The top section shows the connection for the BME680 sensor, which is configured for I2C communication. It is connected to the Arduino's I2C pins (SDA and SCL) and its power pins (VCC and GND). The bottom section shows the connection for the APDS-9960 gesture sensor, also configured for I2C communication. It is connected to the Arduino's I2C pins (SDA and SCL) and its power pins (VCC and GND). Both sensors are connected to a +3V0 supply and ground.

[illegible]

The diagram illustrates the hardware connection between a Raspberry Pi 4B and an LCD module. The LCD module, labeled 'LCD-RPi' and 'TFT1', is an AO3401A model with a 160x240 pixel display. It is powered by a 3.3V regulator and a 100k pull-up resistor. The data bus (DB0-DB7) is connected to the Raspberry Pi's GPIO pins. The control signals (RS, RW, DC, SDA, SCL) are connected to the Raspberry Pi's I2C pins. The reset signal is connected to the Raspberry Pi's GPIO pin 18. The LCD module is labeled 'LCD-RPi' and 'TFT1'.

Signal	Pin	Component
VCC	1	3.3V
GND	2	GND
DB0	3	GPIO 14
DB1	4	GPIO 15
DB2	5	GPIO 16
DB3	6	GPIO 17
DB4	7	GPIO 18
DB5	8	GPIO 19
DB6	9	GPIO 20
DB7	10	GPIO 21
RS	11	GPIO 22
RW/DC	12	GPIO 23
SDA	13	I2C 0
SCL	14	I2C 1
RESET	15	GPIO 18
LED+	16	3.3V
LED-	17	GND
LCM_RST	18	GPIO 18
TE	19	GPIO 24
CS	20	GPIO 25
RS/CLK	21	GPIO 26
WE/D/C	22	GPIO 27
GND	23	GND
LCD_MOST	24	GPIO 28
LCD_CS	25	GPIO 29
LCD_CLK	26	GPIO 30
LCD_TE	27	GPIO 31

Testpoints

Diagram illustrating the test points (TP) for the STM32L432C8T6 microcontroller, showing connections to various pins and power sources.

Internal Test Points (Left):

- RESET pin connected to TP11
- SWCLK pin connected to TP1
- SWDIO pin connected to TP2
- D+ pin connected to TP3
- D- pin connected to TP4
- IIC_SDA pin connected to TP5
- IIC_SCL pin connected to TP6

External Test Points (Right):

- TP7, TP8, and TP10 are connected to +3V0, VBUS, and +5P respectively.
- TP9 is connected to GND.

LEDs