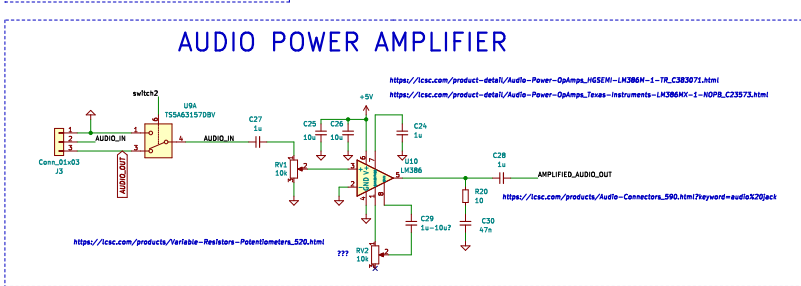
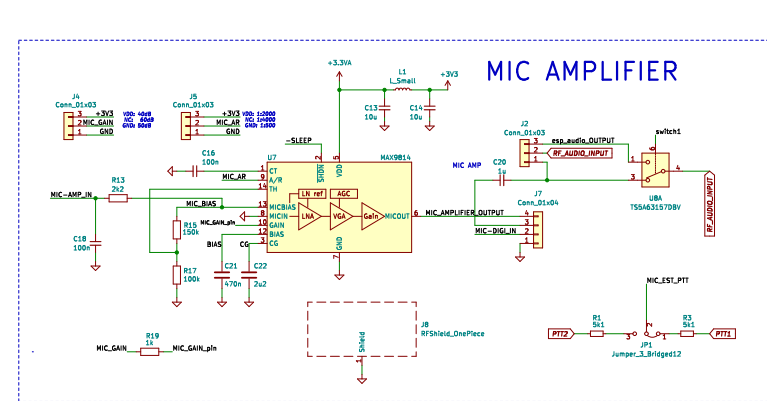


The schematic illustrates the hardware setup for an ESP32-A15 module interfaced with an Arduino Uno. Key components and connections include:

- Power Supply:** A 5V regulator (U1) powered by a USB Type-C port (J5) and a 3.3V regulator (U2) for the module's logic supply. Decoupling capacitors (C1-C5) are used for stability.
- UART Interface:** The ESP32's TX and RX pins are connected to the Arduino's RX and TX pins via a 10k pull-up resistor (R1).
- I2C Interface:** The ESP32's I2C pins are connected to the Arduino's I2C pins via a 10k pull-up resistor (R2).
- SPI Interface:** The ESP32's SPI pins are connected to the Arduino's SPI pins via a 10k pull-up resistor (R3).
- Sensors:** A DS18B20 temperature sensor (U3) and an MPU6050 accelerometer (U4) are connected to the ESP32's I2C pins.
- SD Card:** An SD card module (U5) is connected to the ESP32's SPI pins.
- Arduino Uno:** The ATmega328P microcontroller (U6) is connected to the ESP32's UART, I2C, and SPI pins.



The diagram shows the CONTROL section of the PC4955-64PW power supply. It features a 74VHC00 hex inverter (U4) connected to various control pins of the power supply IC. The pins are labeled as follows:

- GPO_02: P1FE
- GPO_03: P1F2
- GPO_05: P1F1
- GPO_12: P1FE
- GPO_13: P1F2
- GPO_14: AUDIO_DIN
- GPO_15: AUDIO_DIN2
- GPO_16: SLEEP
- GPO_21: SLEEP
- GPO_22: SLEEP
- GPO_23: SLEEP
- GPO_3n: SLEEP

The inverters are connected to the IC pins through a 100nF capacitor and a 3V3 supply. The IC pins are labeled with functions like P1FE, P1F2, AUDIO_DIN, AUDIO_DIN2, SLEEP, and others.

ANALOG BIDIRECTIONAL SWITCHES

MISCELLANEOUS

H1 H2 H3 H4

node node node node

F101
F102
F103
F104

AUDIO IO

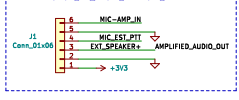
J1
Conn_D1006

5
4
3
2
1

MIC-AMP-IN
MIC-ESD-INT
EXT_SPEAKER+
AMPLIFIED_AUDIO_OUT

+3V3

AUDIO 10



Rev: 1
Id: 1/1