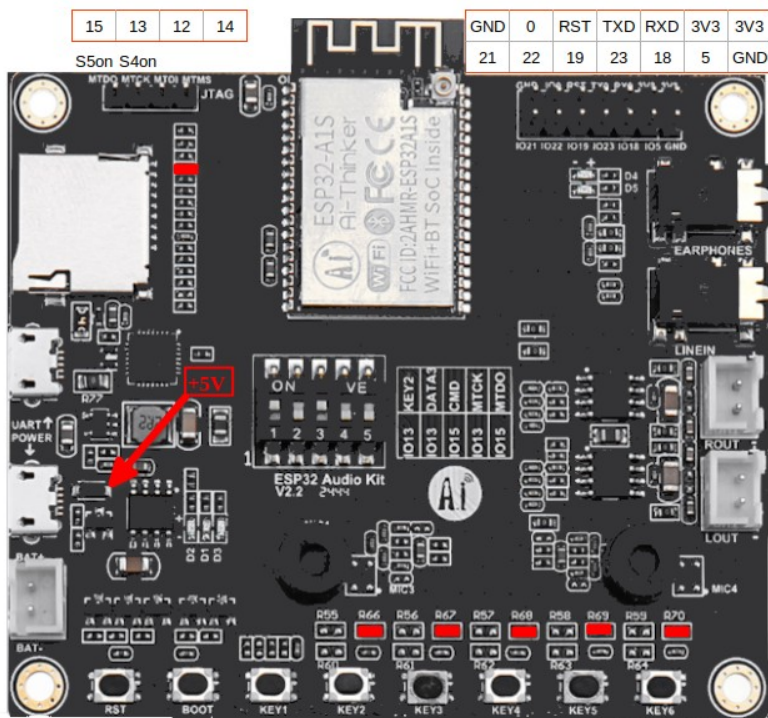
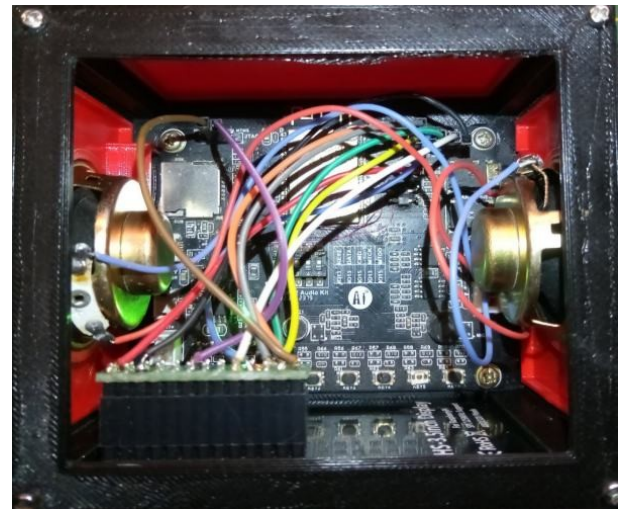


MWR-V2 / AI Thinker A1S Board



GPIO		SD_MMC	SD_SPI		KEYS
0				At boot high	
1	TX0				
2		DATA0	MISO	At boot high	
3	RX0				
4		DATA1			
5					
12		DATA2		MTDI At boot low	
13		DATA3 S2 on	CS	MTCK S4 on	KEY2 S1 on
14		CLK	SCK	MTMS LED4 red	
15		CMD S3 on	MOSI	MTDO S5 on	
18					KEY5
19				LED5 red	KEY3
21	Amplifier ShutDown				
22					
23					KEY4
34	SD Detect			Input only	
36				SENSOR VP Input only	KEY1
39	Headphones Detect			SENSOR VN Input only	

Remove R66(I013) R67(I019) R68(I023) R69(I018) R70(I05) and R32

Schematic:

<https://github.com/schreibfaul1/ESP32-audioI2S/blob/master/examples/ESP32-A1S/A1S.pdf>

```

#ifndef CONFIG_IDF_TARGET_ESP32S3
// Digital I/O used
#define TFT_CS 8
#define TFT_DC 12
#define TFT_BL 10 // at -1 the brightness menu is not displayed
#define TP_IRQ 39
#define TP_CS 15
#define SD_MMC_D0 11
#define SD_MMC_CLK 13
#define SD_MMC_CMD 14
#define IR_PIN 4 // IR Receiver (if available)
#define TFT_MOSI 18 // TFT and TP (FSPI)
#define TFT_MISO 2 // TFT and TP (FSPI)
#define TFT_SCK 17 // TFT and TP (FSPI)

#define I2S_DOUT 9
#define I2S_BCLK 3
#define I2S_LRC 1
#define I2S_MCLK 0

#define I2C_DAC_SDA -1 // some DACs are controlled via I2C
#define I2C_DAC_SCL -1
#define SD_DETECT -1 // some pins on special boards: Lyra, Olimex, A1S ...
#define HP_DETECT -1
#define AMP_ENABLED -1

#define BT_EMITTER_RX 45 // TX pin - KCX Bluetooth Transmitter (-1 if not available)
#define BT_EMITTER_TX 38 // RX pin - KCX Bluetooth Transmitter (-1 if not available)
#define BT_EMITTER_LINK 19 // high if connected (-1 if not available)
#define BT_EMITTER_MODE 20 // high transmit - low receive (-1 if not available)
#define BT_EMITTER_CONNECT 48 // high impulse -> awake after POWER_OFF (-1 if not available)

#define I2C_SDA 41 // I2C, data line for additional HW
#define I2C_SCL 42 // I2C, clock line for additional HW
#endif

```