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The diagram illustrates the internal components and pin connections of the ESP-WROOM-32 module. The central component is the ESP-WROOM-32 module itself, which is a black rectangular chip with various pins. The module is labeled "ESP-WROOM-32" and "MODULE".

Internal Components and Connections:

- Power and Ground:** The module has a +3.3V supply pin (pin 1) and a GND pin (pin 2). A 1MΩ resistor (R24) is connected between the +3.3V supply and the GND pin. A TAC-SWITCH SMD 6X6MM is connected to the GND pin.
- Reset:** A RESET pin (pin 3) is connected to a TAC-SWITCH SMD 6X6MM.
- Thermal Pad:** A THERMAL PAD is connected to the GND pin.
- GPIOs:** The module has 39 GPIO pins (pins 4-42). The pins are labeled with their functions:
 - GPIO0/ADC2_CH1/TOUCH1/RTC_GPIO11/CLK_OUT1/EMAC_TX_CLK
 - GPIO1/U0TXD/CLK_OUT3/EMAC_RXD2
 - GPIO2/ADC2_CH2/TOUCH2/RTC_GPIO12/HSPWIP/H52_DATA2/SD_DATA2
 - GPIO3/U0RXD/CLK_OUT2
 - GPIO4/ADC2_CH0/TOUCH0/RTC_GPIO10/HSPHID/H52_DATA1/SD_DATA1/EMAC_TX_ER
 - GPIO5/VSPIC0/H51_DATA6/EMAC_RX_CLK
 - GPIO6/SD_CLK/SPI_CLK/H51_CLK/U1CTS
 - GPIO7/SD_DATA0/SPI/H51_DATA0/U2RTS
 - GPIO8/SD_DATA1/SPI/H51_DATA1/U2CTS
 - GPIO9/SD_DATA2/SPI/H51_DATA2/U1RXD
 - GPIO10/SD_DATA3/SPI/H51_DATA3/U1RXD
 - GPIO11/SD_CMD/SPI/H51_CMD/U1RTS
 - GPIO12/ADC2_CH5/TOUCH5/RTC_GPIO15/MTD/HSPHID/H52_DATA2/SD_DATA2/EMAC_TXD3
 - GPIO13/ADC2_CH4/TOUCH4/RTC_GPIO14/MTCK/HSPHID/H52_DATA3/SD_DATA3/EMAC_RX_ER
 - GPIO14/ADC2_CH6/TOUCH6/RTC_GPIO16/MTMS/HSPICLK/H52_CLK/SD_CLK/EMAC_TXD2
 - GPIO15/ADC2_CH3/TOUCH3/MTDO/HSPICSO/RTC_GPIO13/H52_CMD/SD_CMD/EMAC_RXD3
 - GPIO16/H51_DATA4/U2RXD/EMAC_CLK_OUT
 - GPIO17/H51_DATA5/U2TXD/EMAC_CLK_OUT180
 - GPIO18/VSPICLK/H51_DATA7
 - GPIO19/VSPIC0/U0CTS/EMAC_TXD0
 - GPIO21/VSPHID/EMAC_TX_ER
 - GPIO22/VSPWIP/U0RTS/EMAC_TXD1
 - GPIO23/VSPID/H51_STROBE
 - GPIO25/DAC_1/ADC2_CH8/RTC_GPIO6/EMAC_RXD0
 - GPIO26/DAC_2/ADC2_CH9/RTC_GPIO7/EMAC_RXD1
 - GPIO27/ADC2_CH7/TOUCH7/RTC_GPIO17/EMAC_RX_DV
 - GPIO28/XTAL_32K_P/ADCL_CH4/TOUCH9/RTC_GPIO9
 - GPIO33/XTAL_32K_N/ADCL_CH5/TOUCH8/RTC_GPIO8
 - GPIO34/ADCL_CH6/RTC_GPIO4
 - GPIO35/ADCL_CH7/RTC_GPIO5
 - GPIO36/SENSOR_VP/ADC_H/ADCL_CH0/RTC_GPIO10
 - GPIO39/SENSOR_VN/ADCL_CH3/ADC_H/RTC_GPIO3

External Components:

- Resistors:** R54 (10k/R0603) is connected between the +3.3V supply and the GND pin. R29 (10k/R0603) is connected between the GND pin and the +3.3V supply.
- Capacitors:** R24 (1M/R0603) is connected between the +3.3V supply and the GND pin.
- Other Components:** R3 (2.2k/R0603) is connected between the GND pin and the +3.3V supply. R29 (10k/R0603) is connected between the GND pin and the +3.3V supply.

Pin Connections:

- Pin 1: +3.3V
- Pin 2: GND
- Pin 3: RESET
- Pin 4: GPIO0
- Pin 5: GPIO1
- Pin 6: GPIO2
- Pin 7: GPIO3
- Pin 8: GPIO4
- Pin 9: GPIO5
- Pin 10: GPIO6
- Pin 11: GPIO7
- Pin 12: GPIO8
- Pin 13: GPIO9
- Pin 14: GPIO10
- Pin 15: GPIO11
- Pin 16: GPIO12
- Pin 17: GPIO13
- Pin 18: GPIO14
- Pin 19: GPIO15
- Pin 20: GPIO16
- Pin 21: GPIO17
- Pin 22: GPIO18
- Pin 23: GPIO19
- Pin 24: GPIO20
- Pin 25: GPIO21
- Pin 26: GPIO22
- Pin 27: GPIO23
- Pin 28: GPIO24
- Pin 29: GPIO25
- Pin 30: GPIO26
- Pin 31: GPIO27
- Pin 32: GPIO28
- Pin 33: GPIO29
- Pin 34: GPIO30
- Pin 35: GPIO31
- Pin 36: GPIO32
- Pin 37: GPIO33
- Pin 38: GPIO34
- Pin 39: GPIO35

Programador

The diagram shows a 7-pin header with the following connections:

- Pin 1: GND
- Pin 2: +3.3V
- Pin 3: ESP_EN
- Pin 4: GPIO0/WTXD
- Pin 5: GPIO3/V0RXD
- Pin 6: GPIO4/HS2_DATA1
- Pin 7: GPIO0

Additional labels on the right side of the diagram:

- Pin 4 is also labeled J1.
- Pin 5 is labeled Conn_01x07_Male.

Below the diagram, the text "Dejado por las dudas." is written.

Fiduciales

 FID2
Fiducial

 FID3
Fiducial

Mounting Holes

Sensores

The diagram illustrates the connection of three temperature sensors (U7, U6, U1) to a microcontroller. Each sensor is connected to a +3.3V supply via a 47K/R0603 resistor (R35, R36, R40) and to GND. The sensors are ACPL-217-56AE (U7, U6, U1). The output of each sensor is connected to a microcontroller pin (GPIO16, GPIO14, GPIO32) and labeled as DOOR4, DOOR3, and DOOR1 respectively. The microcontroller pins are connected to GND via 47K/R0603 resistors (R41, R40, R41).

Top Circuit (U7): +3.3V is connected to R35 (47K/R0603), which is connected to the input of U7 (ACPL-217-56AE). The output of U7 is connected to GPIO16 and labeled DOOR4. The microcontroller pin is connected to GND via R41 (47K/R0603).

Middle Circuit (U6): +3.3V is connected to R36 (47K/R0603), which is connected to the input of U6 (ACPL-217-56AE). The output of U6 is connected to GPIO14 and labeled DOOR3. The microcontroller pin is connected to GND via R40 (47K/R0603).

Bottom Circuit (U1): +3.3V is connected to R40 (47K/R0603), which is connected to the input of U1 (ACPL-217-56AE). The output of U1 is connected to GPIO32 and labeled DOOR1. The microcontroller pin is connected to GND via R41 (47K/R0603).

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