

Diagram of the J4 connector pinout:

- Pin 1: 01x07 Generic, socket
- Pin 2: 3V3_IN
- Pin 3: D0_HEAT
- Pin 4: D1_COOL
- Pin 5: D2
- Pin 6: D3
- Pin 7: VT

Ground connections (marked with X) are shown for pins 2 and 7.

01x02 JST XH

[illegible]

Four wiring diagrams for Molex KK254 connectors J8, J10, J12, and J17. Each diagram shows a 4-pin connector with pins 1, 2, 3, and 4. Pin 1 is connected to +12V, pin 2 to +5V, pin 3 to GND, and pin 4 to GND. Each diagram also shows a 10uF 25V capacitor connected between the +12V and +5V lines. The capacitors are labeled C2, C4, C5, and C7 respectively.

- J8:** 1FAN_PELTIER_PWM_HV, 2FAN_PELTIER_PWM_HV, 3FAN_PELTIER_PWM_HV, 4FAN_PELTIER_PWM_HV. Capacitor C2.
- J10:** 1FAN_WIND_PWM_HV, 2FAN_WIND_PWM_HV, 3FAN_WIND_PWM_HV, 4FAN_WIND_PWM_HV. Capacitor C4.
- J12:** 1FAN_EXT1_PWM, 2FAN_EXT1_PWM, 3FAN_EXT1_PWM, 4FAN_EXT1_PWM. Capacitor C5.
- J17:** 1FAN_EXT2_PWM, 2FAN_EXT2_PWM, 3FAN_EXT2_PWM, 4FAN_EXT2_PWM. Capacitor C7.

J7

1	STEPPER_A2
2	STEPPER_A1
3	STEPPER_B1
4	STEPPER_B2

01x04 JST XH

The image contains two wiring diagrams for a 01x22 Generic socket. The left diagram shows connections for a 01x22 socket with pins 1-22. The right diagram shows connections for a 01x22 socket with pins 1-22. Both diagrams include labels for various components like +3V3, PWR_FLAG, J13, DBG_LED, FAN_PELTIER_PWM, FAN_WIND_PWM, SERVO_PWM, LED_DATA, ESP_17, ESP_18, ESP_8, ESP_3, D1_COOL, D0_HEAT, AMP_nCS, AMP_MISO, AMP_SCK, +5V, ESP_13, ESP_14, 5V_IN, J14, ESP_TX, ESP_RX, ESP_1, ESP_2, ESP_4, STEPPER_EN, STEPPER_STEP, STEPPER_DIR, ESP_37_NC, ESP_36_NC, ESP_35_NC, ESP_0, ESP_45, BUTTON_UPCOMING, BUTTON_CURRENT, MOTOR_EN, and GND.

Left Diagram (01x22 Generic socket):

- +3V3 (red) to Pin 1
- PWR_FLAG (red) to Pin 2
- J13 (red) to Pin 3
- DBG_LED (blue) to Pin 4
- ESP_5 (blue) to Pin 5
- FAN_PELTIER_PWM (blue) to Pin 6
- FAN_WIND_PWM (blue) to Pin 7
- SERVO_PWM (blue) to Pin 8
- LED_DATA (blue) to Pin 9
- ESP_17 (blue) to Pin 10
- ESP_18 (blue) to Pin 11
- ESP_8 (blue) to Pin 12
- ESP_3 (blue) to Pin 13
- D1_COOL (blue) to Pin 14
- D0_HEAT (blue) to Pin 15
- AMP_nCS (blue) to Pin 16
- AMP_MISO (blue) to Pin 17
- AMP_SCK (blue) to Pin 18
- +5V (red) to Pin 19
- ESP_13 (blue) to Pin 20
- ESP_14 (blue) to Pin 21
- 5V_IN (red) to Pin 22

Right Diagram (01x22 Generic socket):

- J14 (red) to Pin 22
- ESP_TX (blue) to Pin 21
- ESP_RX (blue) to Pin 20
- ESP_1 (blue) to Pin 19
- ESP_2 (blue) to Pin 18
- ESP_4 (blue) to Pin 17
- ESP_45 (blue) to Pin 16
- STEPPER_EN (blue) to Pin 15
- STEPPER_STEP (blue) to Pin 14
- STEPPER_DIR (blue) to Pin 13
- ESP_37_NC (blue) to Pin 12
- ESP_36_NC (blue) to Pin 11
- ESP_35_NC (blue) to Pin 10
- ESP_0 (blue) to Pin 9
- ESP_45 (blue) to Pin 8
- BUTTON_UPCOMING (blue) to Pin 7
- BUTTON_CURRENT (blue) to Pin 6
- MOTOR_EN (blue) to Pin 5
- ESP_20 (blue) to Pin 4
- ESP_19 (blue) to Pin 3
- ESP_1 (blue) to Pin 2
- ESP_1 (blue) to Pin 1

The diagram illustrates the button circuit for the ESP8266 module. It shows two buttons, J11 and J16, connected to the BUTTON_CURRENT and BUTTON_UPCOMING pins of the ESP8266 module. Both buttons are connected to a +3V3 supply and ground through resistors R2 and R3 (10k). A callout box shows the pin connections for the 01x04 Generic header: J15 to ESP_17, J14 to ESP_18, J13 to ESP_8, and J12 to ESP_3.

The image displays two pinout diagrams for a 01x06 Generic socket, which is a 6-pin connector used for the FAN_PELTIER_PWM_HV and FAN_WIND_PWM_HV signals.

Left Diagram (01x06 Generic socket):

- Pin 1: HGND (Ground)
- Pin 2: HVCC (5V)
- Pin 3: LED_DATA_HV (5V)
- Pin 4: SERVO_PWM_HV (5V)
- Pin 5: FAN_WIND_PWM_HV (5V)
- Pin 6: FAN_PELTIER_PWM_HV (5V)

Right Diagram (01x06 Generic socket):

- Pin 1: LGND (Ground)
- Pin 2: LED_DATA (5V)
- Pin 3: SERVO_PWM (5V)
- Pin 4: FAN_WIND_PWM (5V)
- Pin 5: FAN_PELTIER_PWM (5V)
- Pin 6: NC (Not Connected)