

The schematic diagram illustrates the pin connections for two STM32F407VET6 microcontrollers, labeled U1.1 and U1.2.

**U1.1 STM32F407VET6:**

- PA0-WKUP (PA0):** Connected to pin 23.
- PA1:** Connected to pin 24.
- PA2:** Connected to pin 25.
- PA3:** Connected to pin 26.
- PA4:** Connected to pin 29.
- PA5:** Connected to pin 30.
- PA6:** Connected to pin 31.
- PA7:** Connected to pin 32.
- PA8:** Connected to pin 67.
- PA9:** Connected to pin 68.
- PA10:** Connected to pin 69.
- PA11:** Connected to pin 70.
- PA12:** Connected to pin 71.
- PA13 (JTMS-SWDIO):** Connected to pin 72.
- PA14 (JTCK-SWCLK):** Connected to pin 76.
- PA15 (JTDI):** Connected to pin 77.
- PC0:** Connected to pin 15.
- PC1:** Connected to pin 16.
- PC2:** Connected to pin 17.
- PC3:** Connected to pin 18.
- PC4:** Connected to pin 23.
- PC5:** Connected to pin 24.
- PC6:** Connected to pin 23.
- PC7:** Connected to pin 24.
- PC8:** Connected to pin 65.
- PC9:** Connected to pin 66.
- PC10:** Connected to pin 78.
- PC11:** Connected to pin 79.
- PC12:** Connected to pin 80.
- PC13:** Connected to pin 7.
- PC14-OSC32\_IN (PC14):** Connected to pin 8.
- PC15-OSC32\_OUT (PC15):** Connected to pin 9.
- PE0:** Connected to pin 97.
- PE1:** Connected to pin 98.
- PE2:** Connected to pin 1.
- PE3:** Connected to pin 2.
- PE4:** Connected to pin 3.
- PE5:** Connected to pin 4.
- PE6:** Connected to pin 5.
- PE7:** Connected to pin 38.
- PE8:** Connected to pin 39.
- PE9:** Connected to pin 40.
- PE10:** Connected to pin 41.
- PE11:** Connected to pin 42.
- PE12:** Connected to pin 43.
- PE13:** Connected to pin 44.
- PE14:** Connected to pin 45.
- PE15:** Connected to pin 46.
- PB0:** Connected to pin 35.
- PB1:** Connected to pin 36.
- PB2-BOOT1 (PB2):** Connected to pin 37.
- PB3 (JTDOTRACESWO):** Connected to pin 89.
- PB4 (NJTRST):** Connected to pin 90.
- PB5:** Connected to pin 91.
- PB6:** Connected to pin 92.
- PB7:** Connected to pin 93.
- PB8:** Connected to pin 95.
- PB9:** Connected to pin 96.
- PB10:** Connected to pin 47.
- PB11:** Connected to pin 48.
- PB12:** Connected to pin 51.
- PB13:** Connected to pin 52.
- PB14:** Connected to pin 53.
- PB15:** Connected to pin 54.
- PD0:** Connected to pin 81.
- PD1:** Connected to pin 82.
- PD2:** Connected to pin 83.
- PD3:** Connected to pin 84.
- PD4:** Connected to pin 85.
- PD5:** Connected to pin 86.
- PD6:** Connected to pin 87.
- PD7:** Connected to pin 88.
- PD8:** Connected to pin 55.
- PD9:** Connected to pin 56.
- PD10:** Connected to pin 57.
- PD11:** Connected to pin 58.
- PD12:** Connected to pin 59.
- PD13:** Connected to pin 60.
- PD14:** Connected to pin 61.
- PD15:** Connected to pin 62.
- PH0-OSC\_IN (PH0):** Connected to pin 12.
- PH1-OSC\_OUT (PH1):** Connected to pin 13.
- BOOT0:** Connected to pin 94.
- NRST:** Connected to pin 14.
- VCAP\_1:** Connected to pin 49.
- VCAP\_2:** Connected to pin 73.
- OE:** Connected to pin 23.
- R1:** Connected to pin 24.
- G1:** Connected to pin 26.
- B1:** Connected to pin 29.
- R2:** Connected to pin 30.
- G2:** Connected to pin 31.
- B2:** Connected to pin 32.
- CLK:** Connected to pin 35.
- A:** Connected to pin 36.
- BOOT1:** Connected to pin 37.
- UART1\_TX:** Connected to pin 92.
- UART1\_RX:** Connected to pin 93.
- C:** Connected to pin 47.
- LAT:** Connected to pin 51.
- D:** Connected to pin 52.
- B:** Connected to pin 53.

**U1.2 STM32F407VET6:**

- VBAT:** Connected to pin 6.
- VREF+:** Connected to pin 21.
- VDD:** Connected to pins 11, 19, 28, 50, 75, 100.
- VDDA:** Connected to pin 22.
- VSS:** Connected to pins 10, 27, 74, 99.
- VSSA:** Connected to pin 20.
- +3V3:** Connected to pin 21.
- C12:** 100nF capacitor connected to VBAT and GND.
- C11:** 100nF capacitor connected to VREF+ and GND.
- GND:** Connected to pins 10, 27, 74, 99, 20.

H1  
HDR-F-2.54\_2x8

G1

G2

B

D

LA1

1 2

3 4

5 6

7 8

9 10

11 12

13 14

15 16

R1

B1

R2

B2

A

C

CLK

OE

GND

A schematic diagram showing the connection for Pin 1 of the H2 HDR-F-2.54\_1x4 connector. The connector is represented by a red rectangle with pins numbered 1 to 4. Pin 1 is connected to a green wire labeled +3V3. Pin 2 is connected to a blue wire labeled SWDIO. Pin 3 is connected to a blue wire labeled SWCLK. Pin 4 is connected to a green wire labeled GND, which is also connected to a ground symbol.

The diagram shows a voltage divider circuit. A +3V3 supply is connected to a red resistor labeled R3 10k. The other end of R3 is connected to a red dot, which is also connected to a green LDR sensor. The other end of the LDR is connected to a green resistor labeled R2 GL5528. The other end of R2 is connected to a GND symbol.

[illegible]

Diagram showing the pin connection for the H3 HDR-F-2.54\_1x3 connector. The connector has three pins labeled 1, 2, and 3. Pin 1 is connected to UART1\_TX, pin 2 is connected to UART1\_RX, and pin 3 is connected to GND.

TITLE: Sheet_1		REV: 1.0
	Company: Your Company	Sheet: 1/1
	Date: 2024-10-27      Drawn By:	