

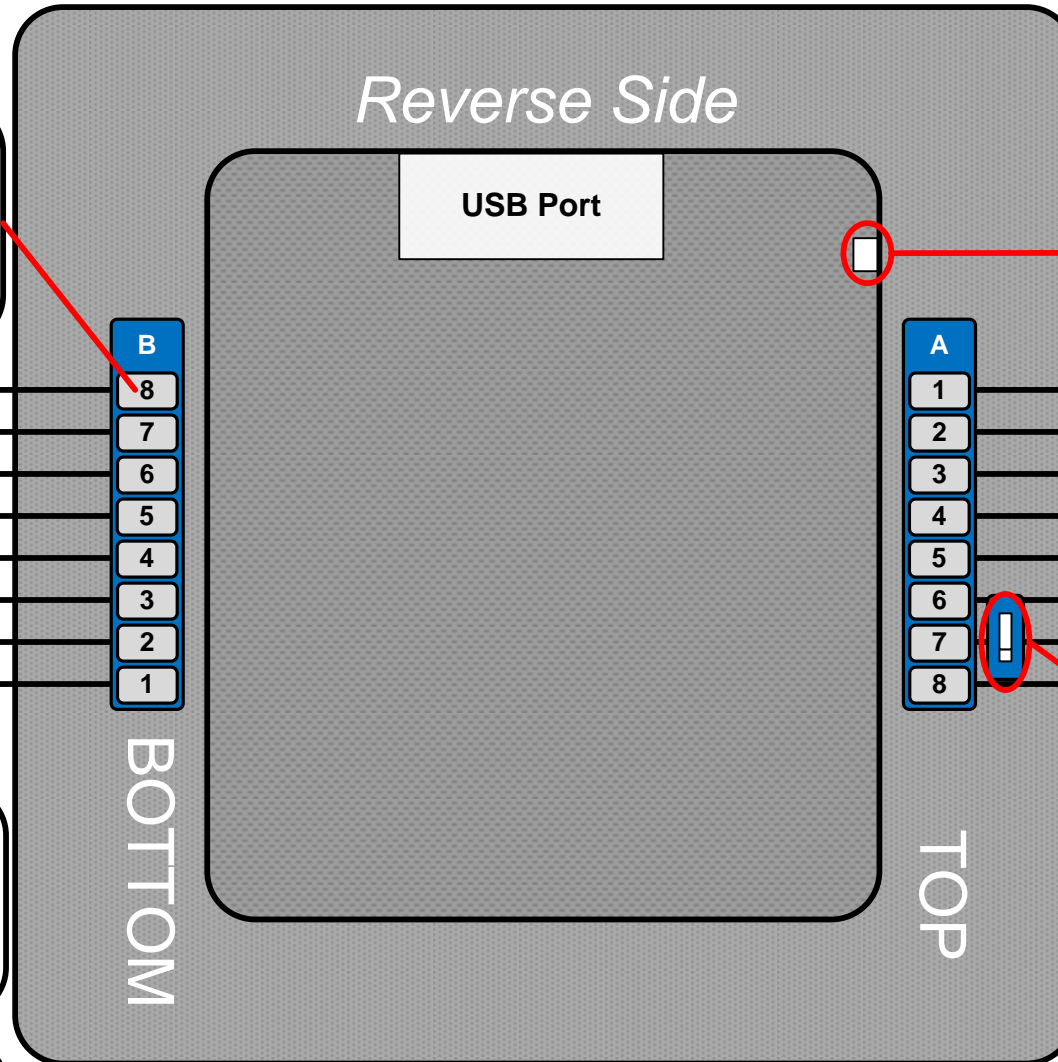
huVVer-AVI-3 MK1 Quick Reference



Version 2.0 Hardware Reference

Arduino IDE

ESPRESSIF IDF



Mating Connectors:
Molex 0022292081
(DigiKey WM2750-ND)

Pins:
Molex 0008550102
(DigiKey WM2312-ND)

Reset Switch (hole on side)

Audio Right	AUDR	IO26	B	8
Audio Left	AUDL	IO25		7
Sensor Ground	GND			6
Sensor +5V Output	+5V			5
Sensor Input 2	X2	IO33		4
Sensor Input 1	X1	IO32		3
Relay Driver 2	OC2	IO12		2
Relay Driver 1	OC1	IO4		1

1	IO22	TX1	RS232 TX1
2	IO21	RX1	RS232 RX1
3	IO17	TX2	RS232 TX2
4	IO16	RX2	RS232 RX2
5	IO14 TX IO27 RX	CANL	CAN L
6		CANH	CAN H
7		GND	Power Ground
8		PWR	8V to 36V Input

CAN bus termination switch
Select down to enable

Internal Signals

Pushbutton 1 (B)	SW1	IO36
Pushbutton 2 (A)	SW2	IO39
Pushbutton 3 (C)	SW3	IO34
Pushbutton 4 (D)	SW4	IO35

Internal Signals

IO22	RS	CAN Driver Control
------	----	--------------------

RS (IO22) controls the CAN transceiver mode. Float (set as input) for normal operation. Set LOW as an output to enable high speed operation. Set HIGH as an output to power down.

Sensor Input range on X1 and X2 are 0 to +5V. For 0 to +15V range, add external 100 KOhm series resistors.

The Sensor +5V Output and Sensor Ground allow powering of active sensors.

Note: Device consumes up to 500 mA. Use 22 AWG power and ground wires protected by a 5 Amp fuse or breaker.

Do not exceed +/- 100 Volts on PWR input.

COLOR LEGEND

Physical Pin	
ESP32 Function	ADC
Functional Name	
Descriptive Name	
Power	
Ground	