

P3V3_HAT	40HAT	J3	P5V_HAT
	1 P3V3	2	P5V_HAT
	5 BCM2	4	P5V_HAT
	6 SDA	6	GND
	7 SCL	8	
	7 BCM3	8	SerialRX
	7 BCM4	10	SerialTX
	9 GND	12	CAN_CS
	9 BCM17	14	
	13 BCM27	14	GND
	15 SHUTDOWN	18 BCM23	MCU_RUNNING
	17 P3V3	20 BCM24	XCLR
	19 BCM10	22 GND	GND
	21 MISO	22-X BCM25	
	21 BCM9	24	CS
	23 SCK	24 BCM8	
	25 GND	26 BCM7	
	25 BCM11	28 BCM1	ID_SC_EEPROM
	27 ID_SC_EEPROM	30 GND	GND
	27 BCM6	32 BCM12	
	29 BCM5	32-X	
	31 BCM13	34 GND	GND
	31 BCM19	36 BCM16	
	33 CAN_CS	38	CAN_RST
	35 CAN_INT	38	CAN_SI
	37 BCM26	40 BCM20	
	39 GND	40 BCM21	CAN_SCK

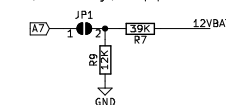
The diagram shows a 5V to 3.3V level shifter circuit. A 5V supply is connected to the non-inverting input (pin 1) of the first comparator (DM75M01-Q2A). The inverting input (pin 2) of the first comparator is connected to the 3.3V supply. The output (pin 3) of the first comparator is connected to the gate of the MOSFET (DMG2305UX). The MOSFET's source (pin 4) is connected to ground, and its drain (pin 5) is connected to the 3.3V supply. The MOSFET's gate (pin 6) is also connected to the 3.3V supply. The MOSFET's drain (pin 5) is connected to the inverting input (pin 2) of the second comparator (DM75M01-Q2B). The non-inverting input (pin 1) of the second comparator is connected to the 3.3V supply. The output (pin 3) of the second comparator is connected to the 3.3V supply. The MOSFET's gate (pin 6) is also connected to the 3.3V supply. The MOSFET's drain (pin 5) is connected to the inverting input (pin 2) of the second comparator (DM75M01-Q2B). The non-inverting input (pin 1) of the second comparator is connected to the 3.3V supply. The output (pin 3) of the second comparator is connected to the 3.3V supply.

Pinout diagram for J1 JST PH connector:

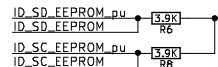
- Pin 1: VEE
- Pin 2: GND
- Pin 3: EOC
- Pin 4: XCLR
- Pin 5: SCL
- Pin 6: SDA

Diagram illustrating the four mounting holes (H1, H2, H3, H4) on the PCB, each labeled "3mm_Mounting_Hole".

To use, solder bridge, and populate R7 and R9



These are just pullup resistors for the I2C bus on the EEPROM. The resistor values are per the HAT spec. VEE

[illegible]