SMALL 12V to 5V switching REG.
Mounted under ESP32
need about 100mA average current at 5V.

ESP32 WROOM 32 MODULE.
PLUGS IN TO MB ON PINSTRIP
USB CONNECTOR NOT SHOWN,
ITS ON THE MODULE.
MB AND SOCKETS DO NOT EXTEND PAST THE
TOP 5 PINS OF THE MODULE, TO ALLOW BETTER ANTENNA WIFI PERFORMANCE

This is a male XT60 flanged connector.
Goes to vehicle 12V when ignition is on.
marked + connector pin is +12V.

DIODE ALLOWS USBC ON ESP32 TO
RUN BOARD WHEN 12V NOT THERE.
EVEN IF USB HUB IS UNPOWERED.

U1
32V to 5V switch module

D1
1N4001

U2
ESP32 WROOM M1

J2
Conn_01x02_Pin

1   +12V
2   GND

1 Vin_p   V5V_p 4   5V
2 Vin_gnd   VO_GND 3
5 EN

VIN

1 EN   D23 30
2 VP   D22 29
3 VN   TXD0 28
4 D34   RXD0 27
5 D35   D21 26
6 D32   D19 25
7 D33   D18 24
8 D25   *   D5   23   CS
9 D26   D17 22
10 D27   D16 21
11 D14 *   D4   20   CS2
12 D12 * * D2   19
13 D13   * D15   18
14 GND   GND 17
15 VIN   3V3 16

GND

GND   VIN

SPI_SCLK

SPI_MOSI

6 0.1 INCH MALE PINS IN FRONT
TO DISPLAY WIRING BOARD

J1
Conn_01x06_Pin

1   VIN
2   GND
3   SPI_SCLK
4   SPI_MOSI
5   CS
6   CS2