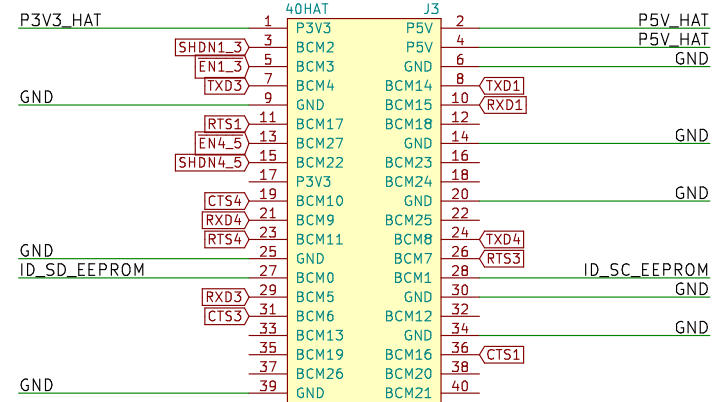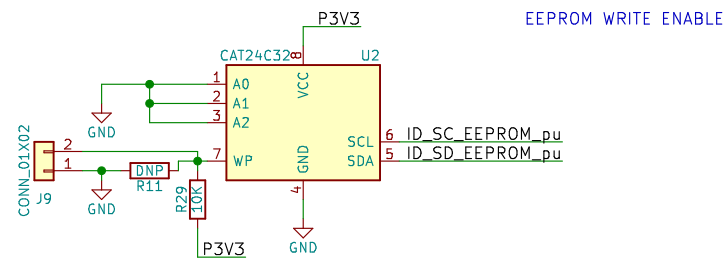This is based on the official Raspberry Pi spec to be able to call an extension board a HAT.
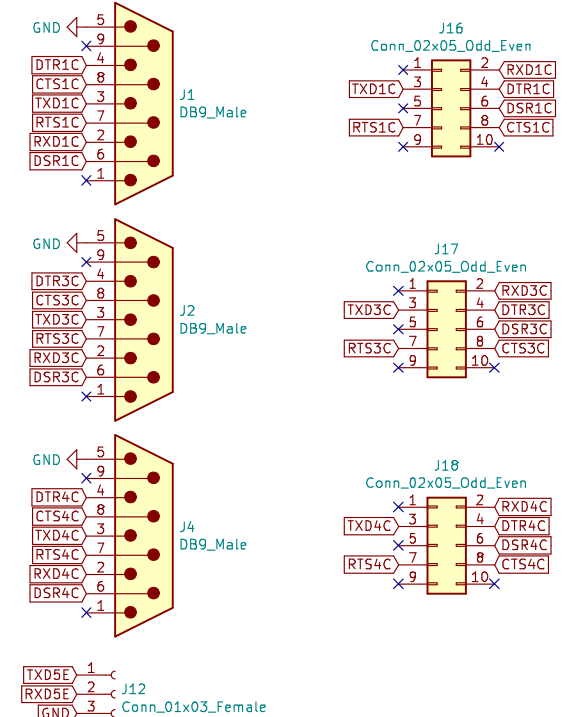https://github.com/raspberrypi/hats/blob/master/designguide.md

40-Pin HAT Connector

40HAT J3

P3V3_HAT — P3V3 — P5V — P5V_HAT
P5V — P5V_HAT
SHDN1_3 — BCM2 — P5V
EN1_3 — BCM3 — GND
TXD3 — BCM4 — BCM14 — TXD1
GND — BCM15 — RXD1
RTS1 — BCM17 — BCM18
EN4_5 — BCM27 — GND
SHDN4_5 — BCM22 — BCM23 — GND
P3V3 — BCM24
CTS4 — BCM10 — GND
RXD4 — BCM9 — BCM25
RTS4 — BCM11 — BCM8 — TXD4
GND — BCM7 — RTS3
ID_SD_EEPROM — BCM0 — BCM1 — ID_SC_EEPROM
RXD3 — BCM5 — GND
CTS3 — BCM6 — BCM12 — GND
BCM13 — GND
BCM19 — BCM16 — CTS1
BCM26 — BCM20
GND — BCM21

HAT EEPROM

CAT24C32   U2   P3V3
A0 A1 A2   VCC
WP   SCL — ID_SC_EEPROM_pu
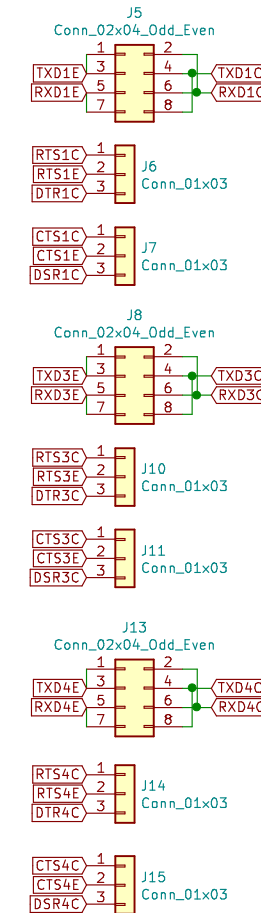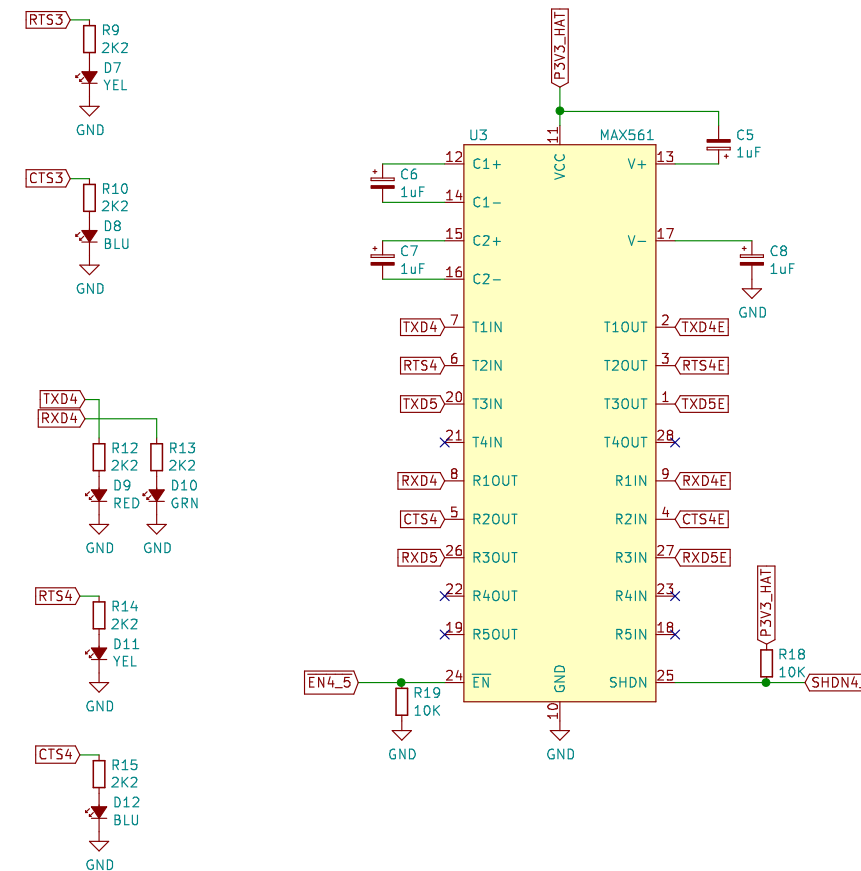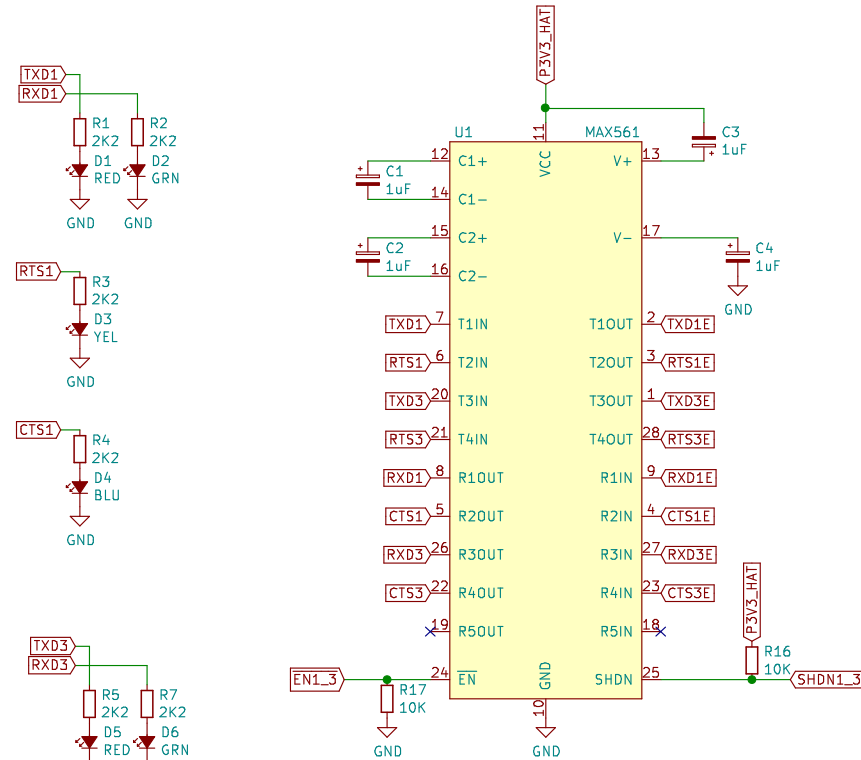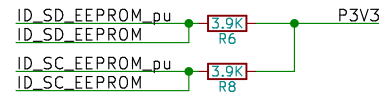GND   SDA — ID_SD_EEPROM_pu
DNP R11 R29 10K
CONN_01x02 J9
EEPROM WRITE ENABLE

Pullup Resistors

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

ID_SD_EEPROM_pu — 3.9K R6 — P3V3
ID_SC_EEPROM_pu — 3.9K R8

U1 MAX561
U3 MAX561

J5 Conn_02x04_Odd_Even
J6 Conn_01x03
J7 Conn_01x03
J8 Conn_02x04_Odd_Even
J10 Conn_01x03
J11 Conn_01x03
J13 Conn_02x04_Odd_Even
J14 Conn_01x03
J15 Conn_01x03
J12 Conn_01x03_Female

J1 DB9_Male
J2 DB9_Male
J4 DB9_Male

J16 Conn_02x05_Odd_Even
J17 Conn_02x05_Odd_Even
J18 Conn_02x05_Odd_Even

Mounting Holes

H1 3mm_Mounting_Hole
H2 3mm_Mounting_Hole
H3 3mm_Mounting_Hole
H4 3mm_Mounting_Hole