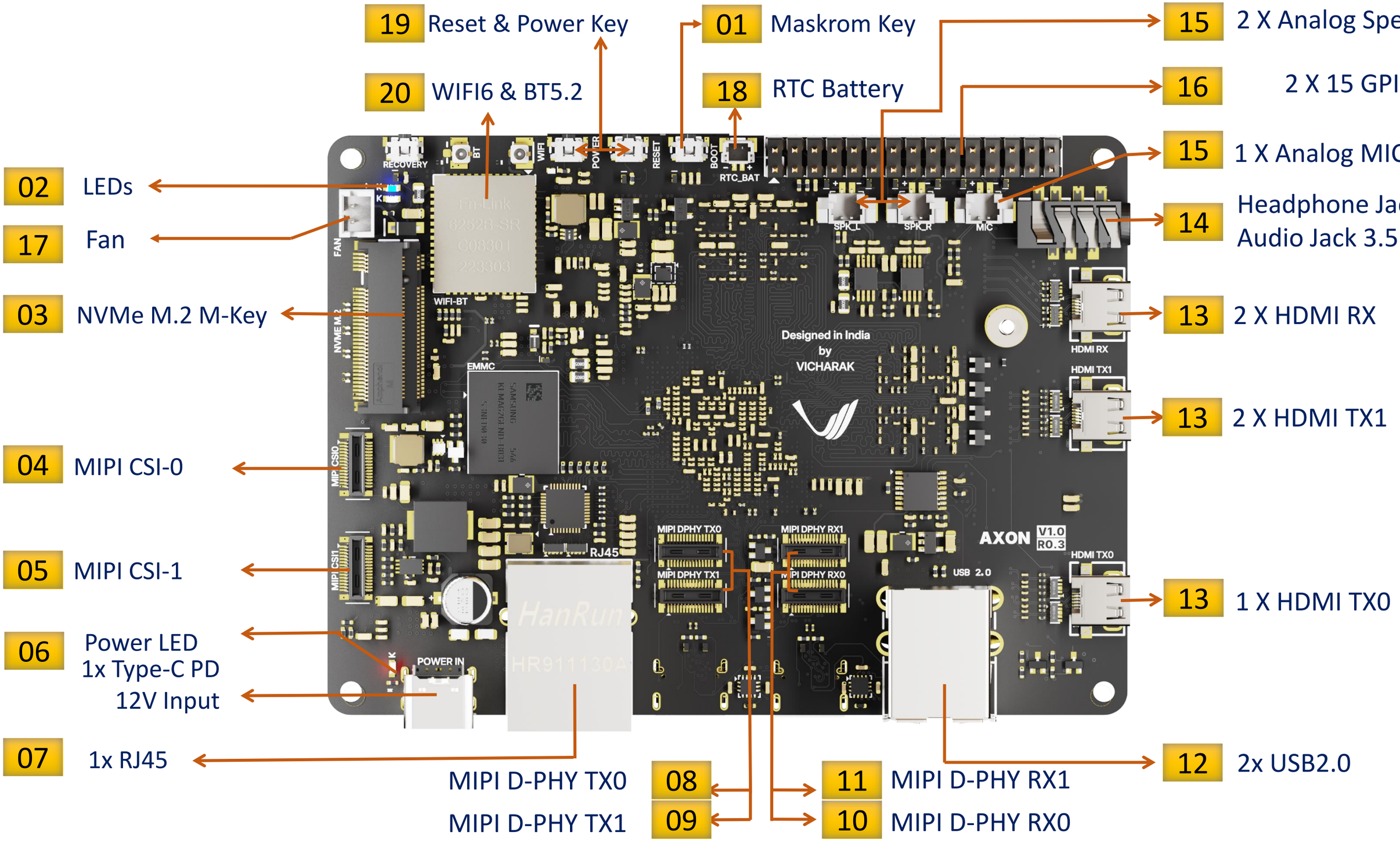
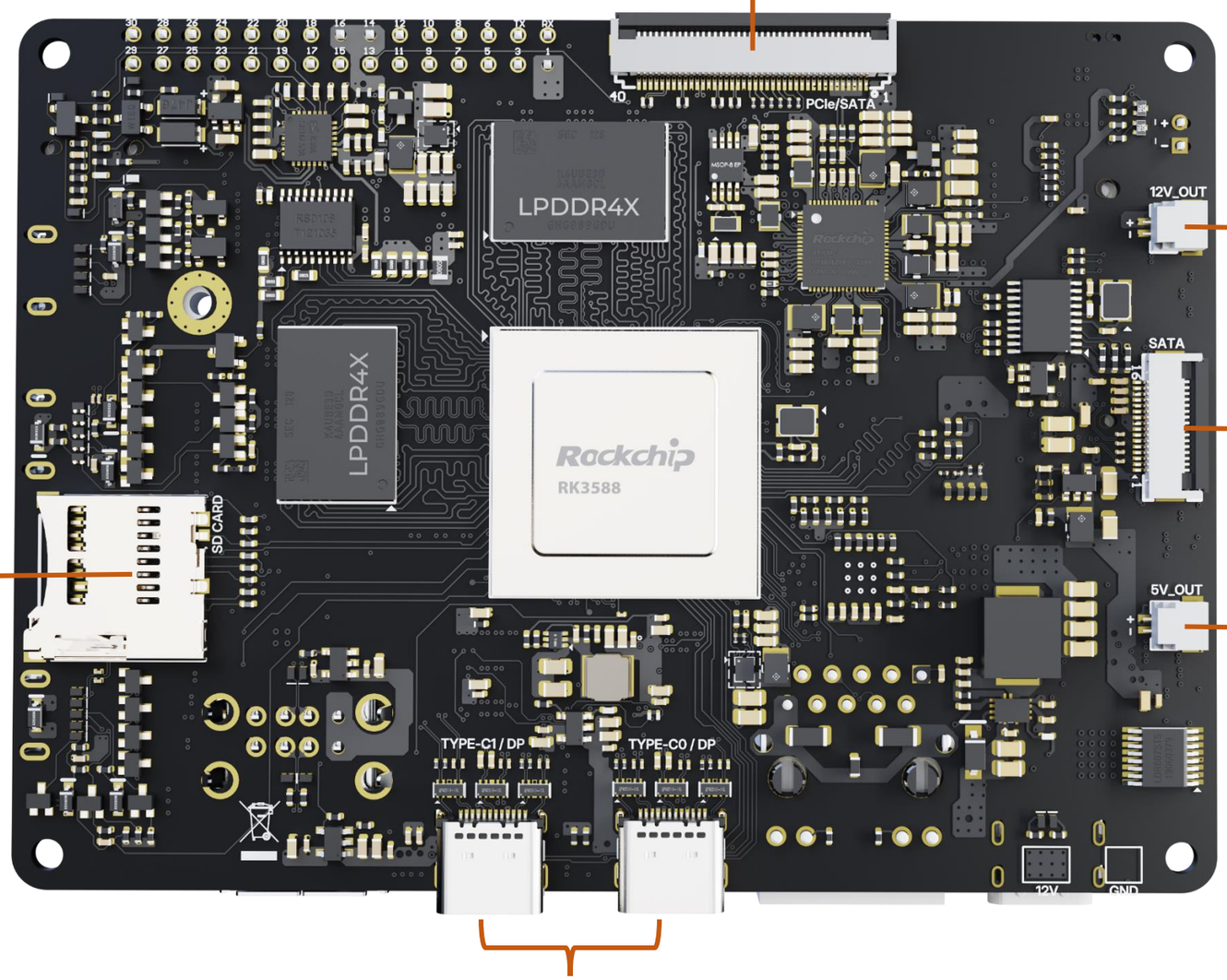

19 Reset & Power Key
01 Maskrom Key
15 2 X Analog Speaker
20 WIFI6 & BT5.2
18 RTC Battery
16 2 X 15 GPIOs
02 LEDs
15 1 X Analog MIC
17 Fan
14 Headphone Jack
Audio Jack 3.5mm
03 NVMe M.2 M-Key
13 2 X HDMI RX
13 2 X HDMI TX1
04 MIPI CSI-0
05 MIPI CSI-1
13 1 X HDMI TX0
06 Power LED
1x Type-C PD
12V Input
07 1x RJ45
12 2x USB2.0
MIPI D-PHY TX0
08
11 MIPI D-PHY RX1
MIPI D-PHY TX1
09
10 MIPI D-PHY RX0
RECOVERY
BT
WIFI
POWER
RESET
BOOT
RTC_BAT
SPK_L
SPK_R
MIC
FAN
WIFI-BT
NVME M.2
EMMC
Designed in India
by
VICHARAK
HDMI RX
HDMI TX1
MIPI CSI0
MIPI CSI1
RJ45
MIPI DPHY TX0
MIPI DPHY TX1
MIPI DPHY RX1
MIPI DPHY RX0
AXON
V1.0
R0.3
USB 2.0
HDMI TX0
POWER IN

TOP SIDE

21 2 X PCIE Gen 2.0/SATA3.0
(40 Pin FPC Connector)



25 12V_OUT

24 1 X SATA3.0
(16 PIN FPC
Connector)

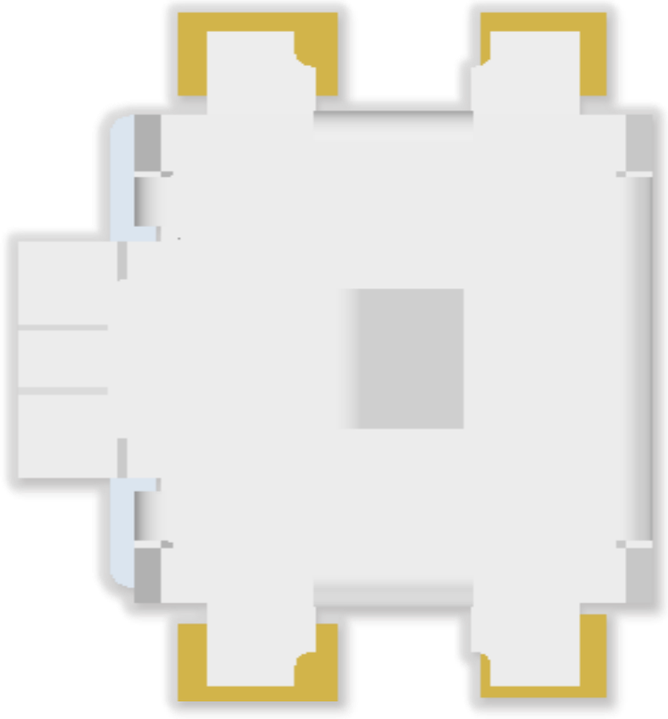
25 5V_OUT

22 SD Card Slot

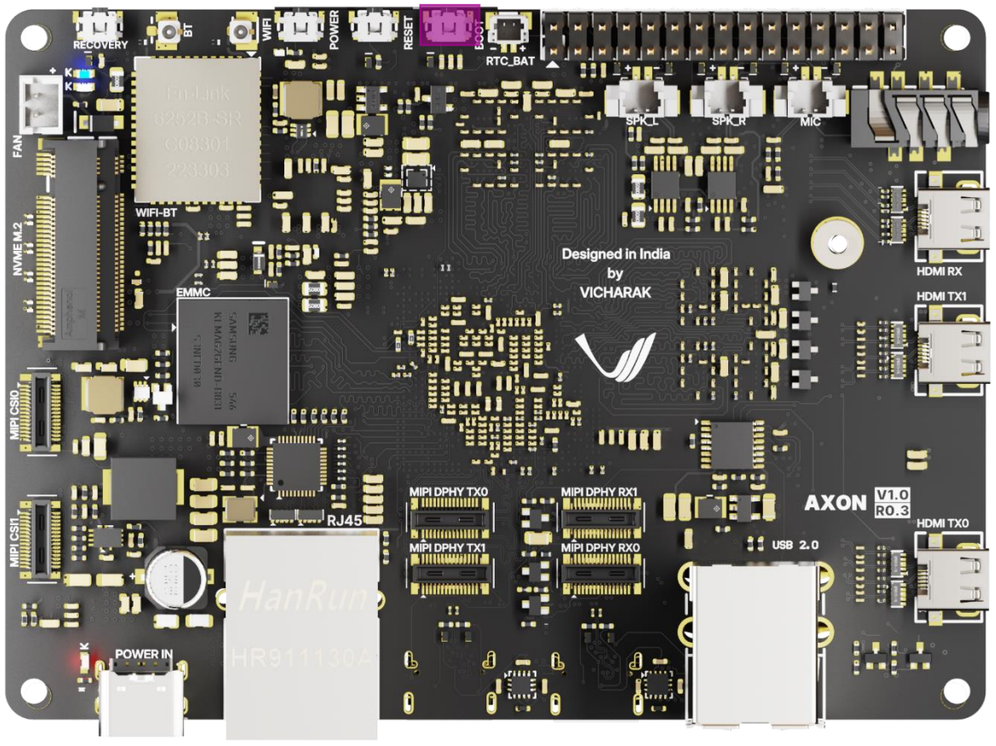
23 2 X Type-C/DP Port

BOTTOM SIDE

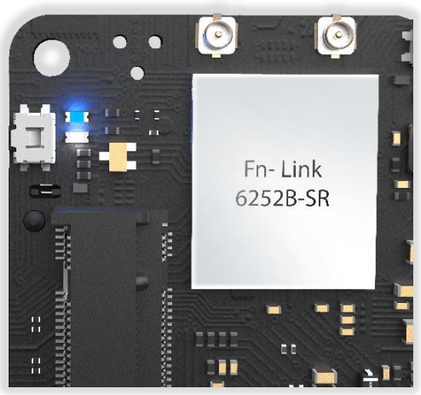
01 Maskrom key



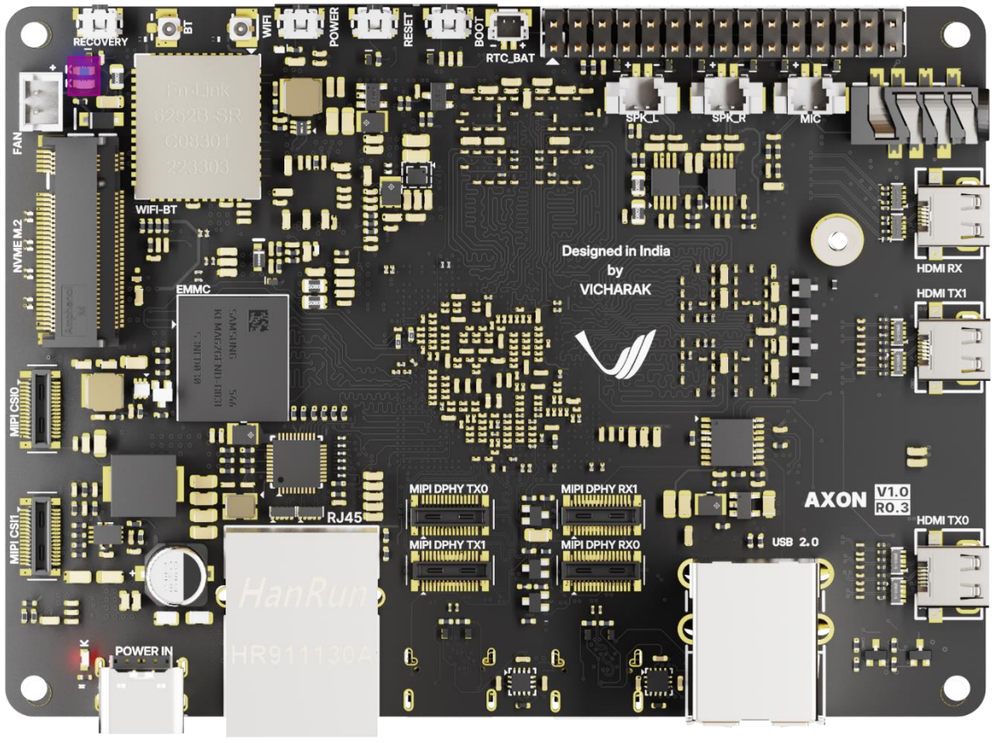
Maskrom Key



02 LEDs

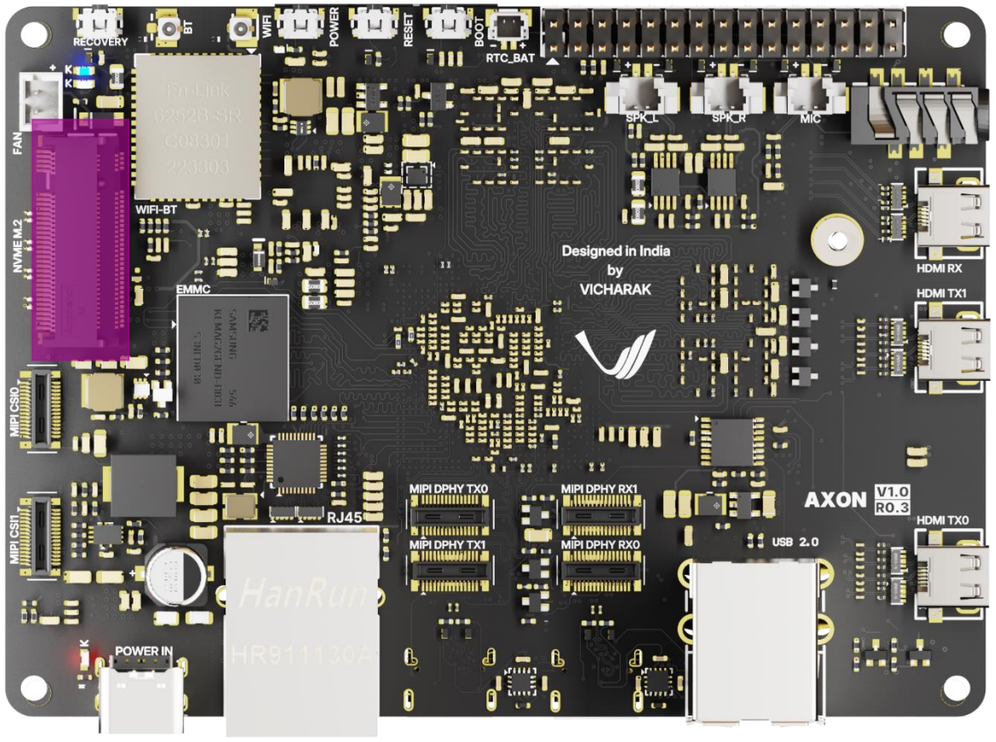


Status LED
USER LED

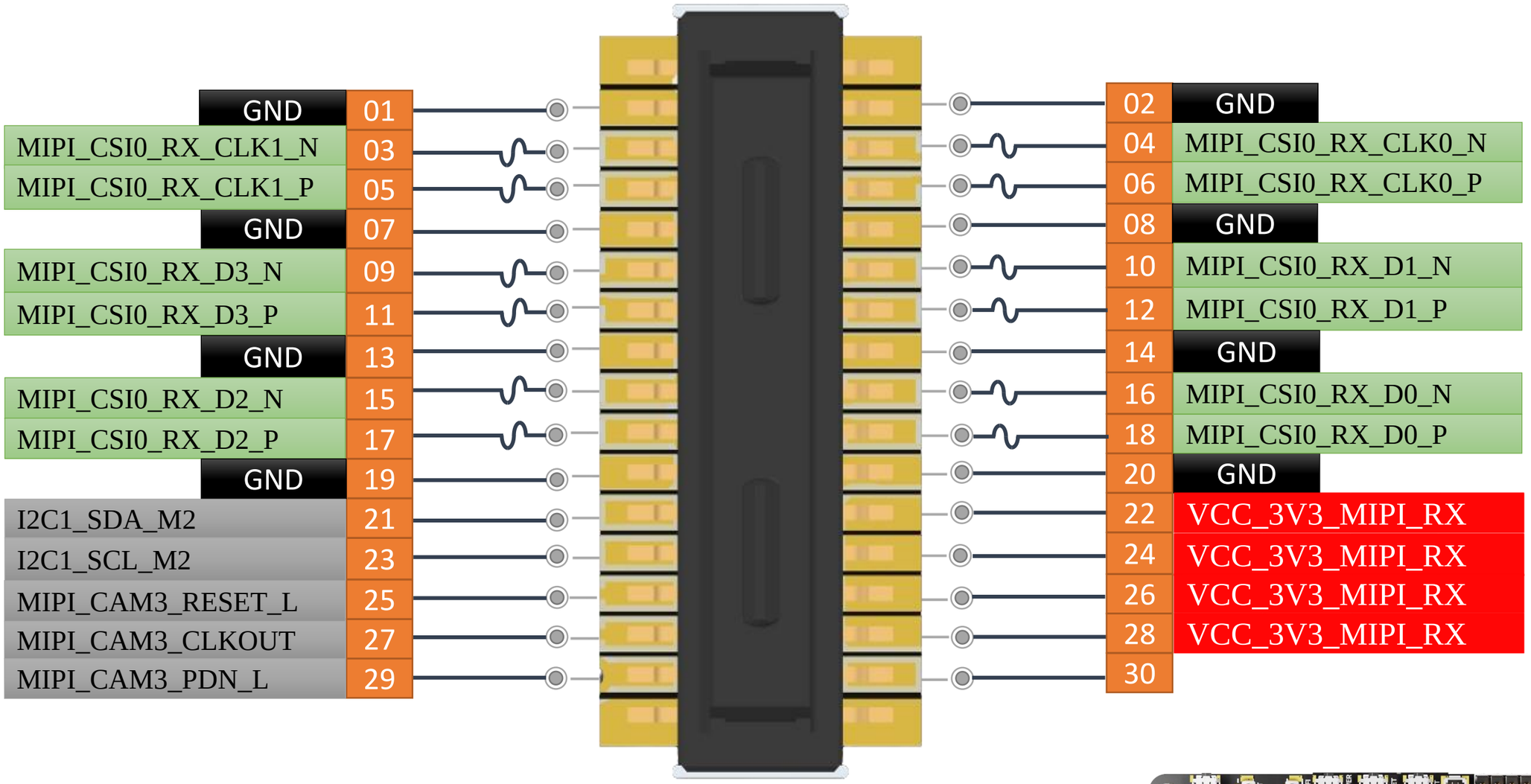


03 NVME M.2 M-key Connector

NVME M.2 M-Key
PCIe Gen3



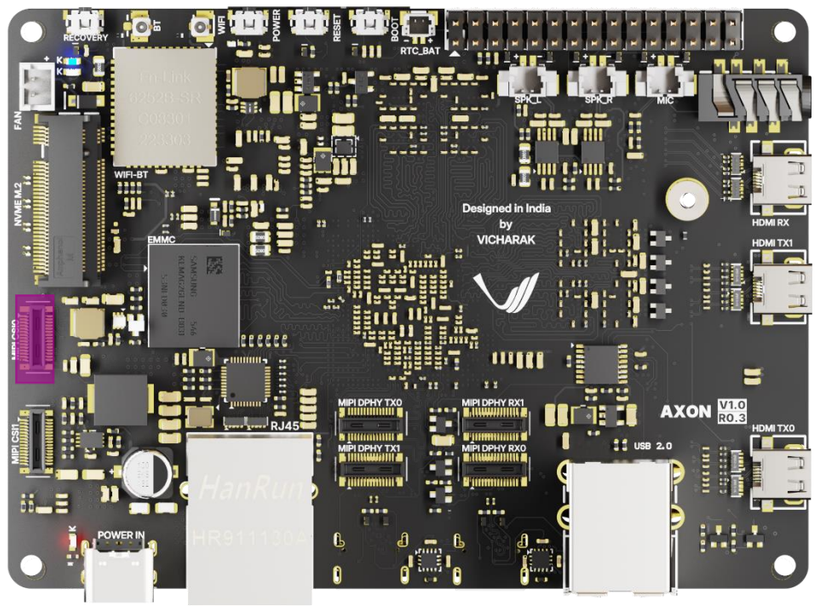
04 MIPI CSI RX PORT0



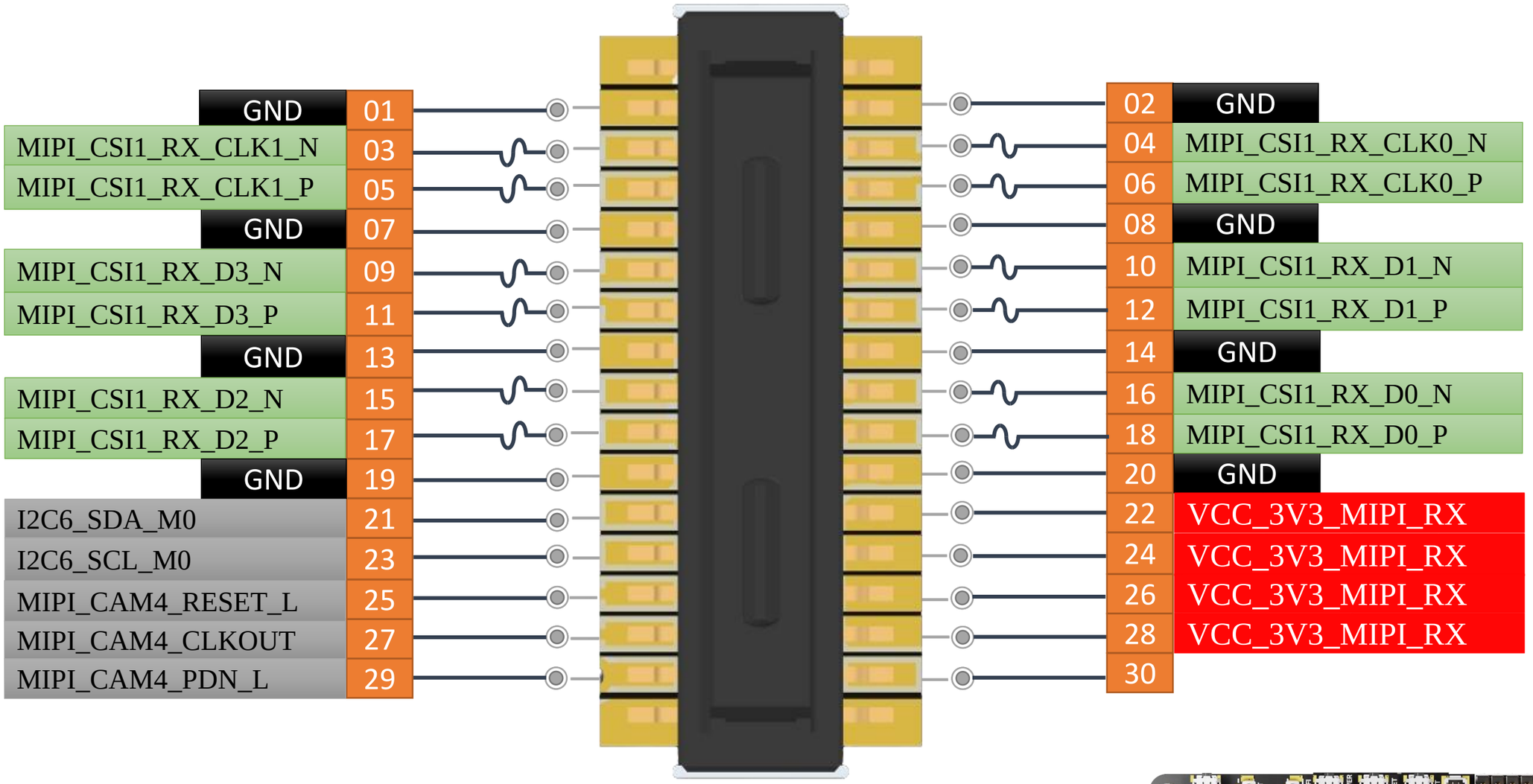
MIPI CSI RX0

On-Board Connector
30 Pin
0.4mm Pitch
Current Rating (Max): 300mA each pin
MPN : DF40C(2.0)-30DP-0.4V(51)

Mating Connector
30 Pin
0.4mm Pitch
MPN : DF40C(2.0)-30DS-0.4V(51)



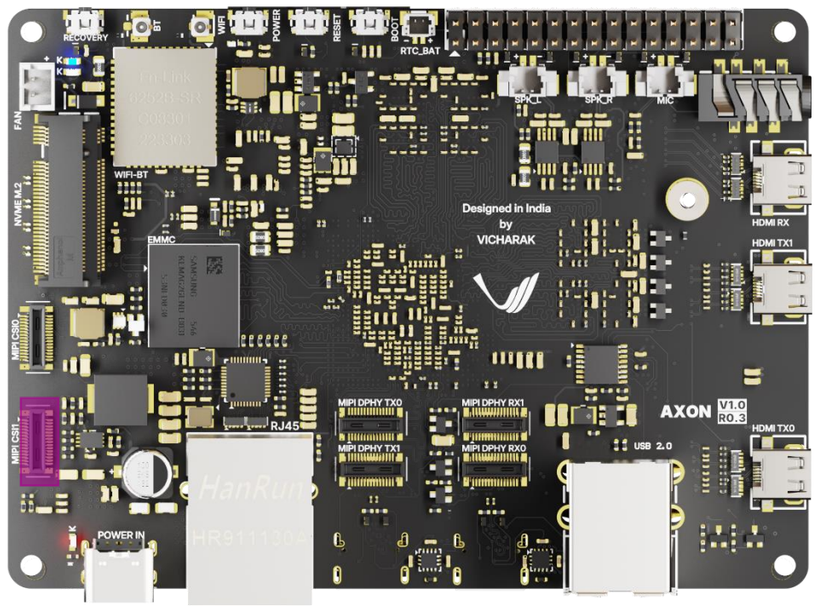
05 MIPI CSI RX PORT1



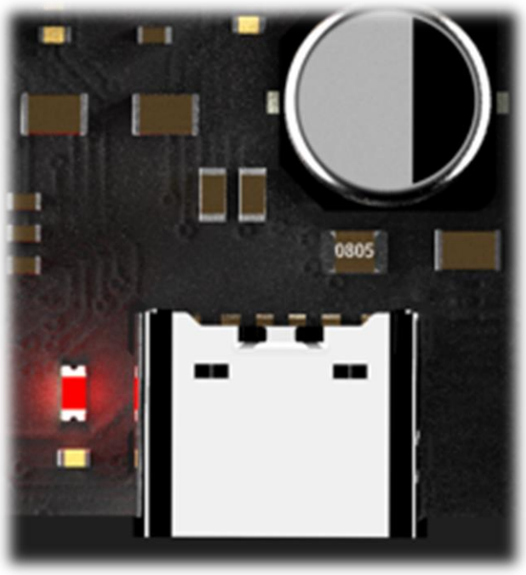
MIPI CSI RX1

On-Board Connector
30 Pin
0.4mm Pitch
Current Rating (Max): 300mA each pin
MPN : DF40C(2.0)-30DP-0.4V(51)

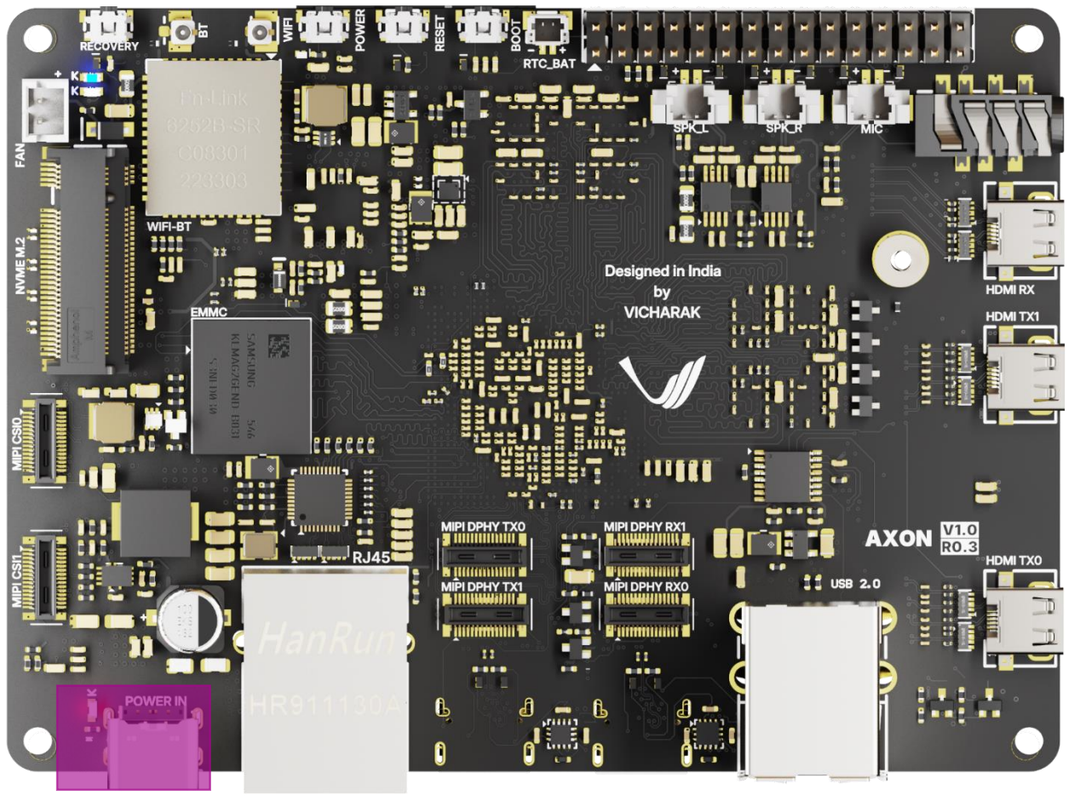
Mating Connector
30 Pin
0.4mm Pitch
MPN : DF40C(2.0)-30DS-0.4V(51)



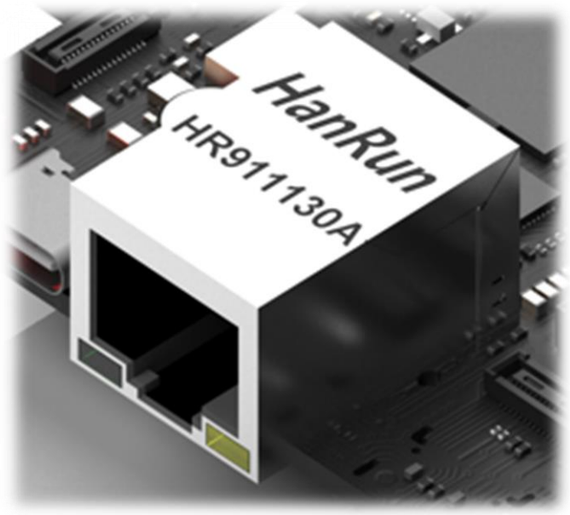
06 Type-C PD (12V Input) & PWR LED



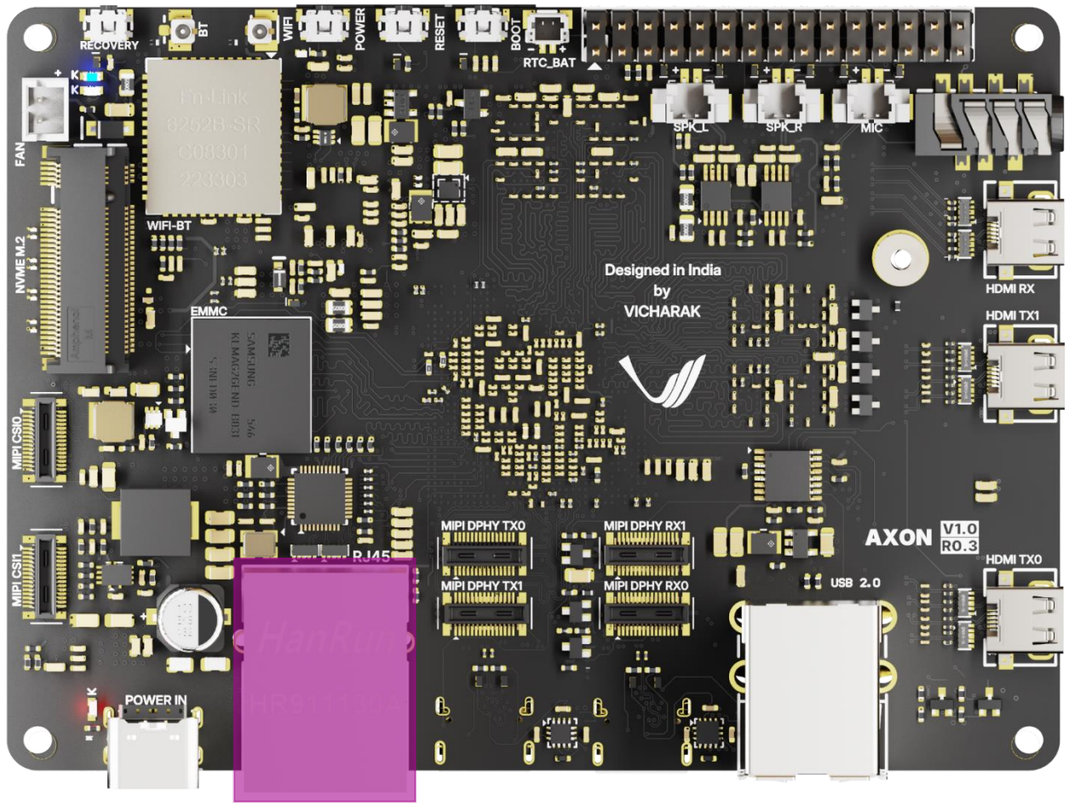
Type-C Power Input (12VDC-5A)



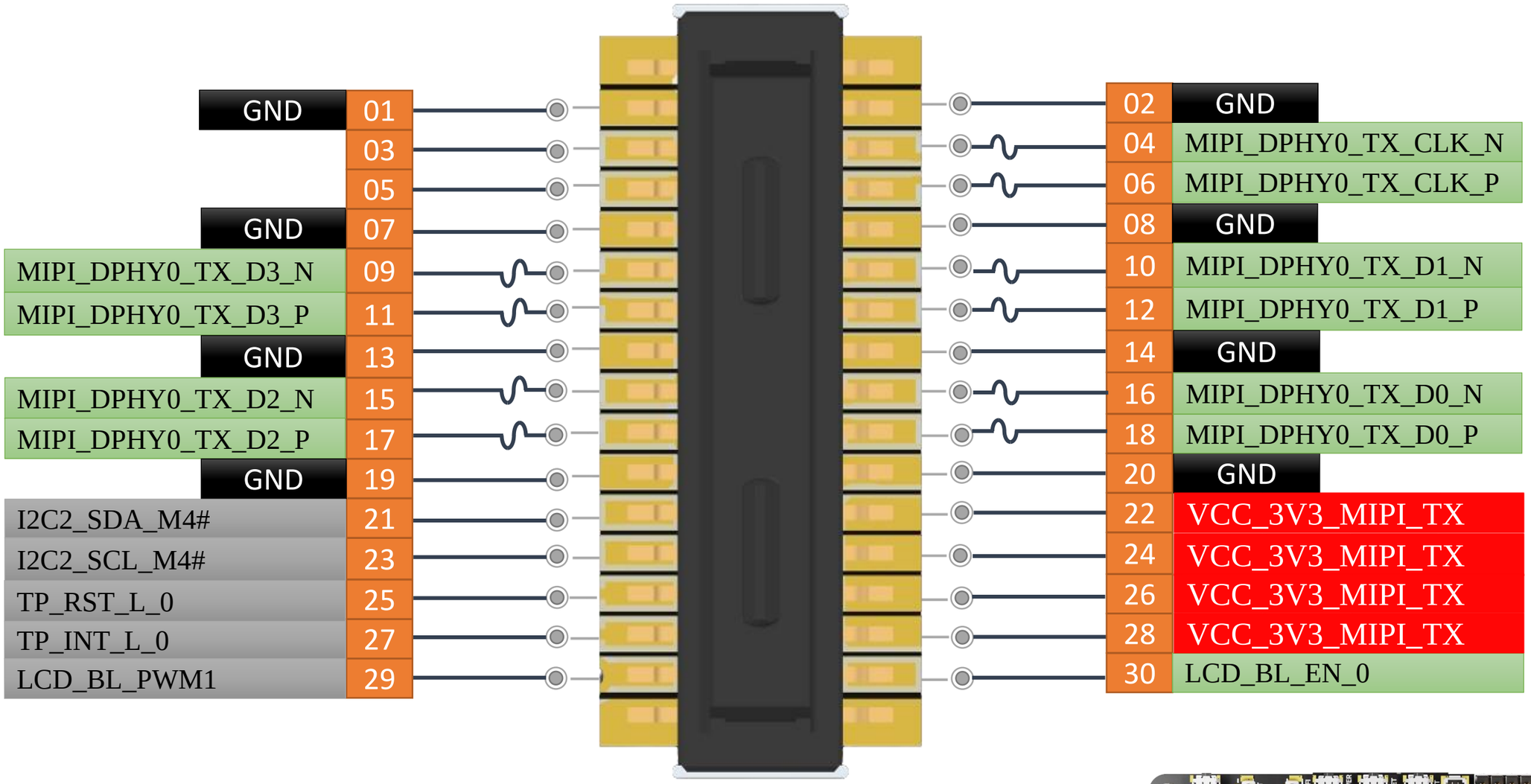
07 ETHERNET



ETHERNET
(10/100/1000Mbps)



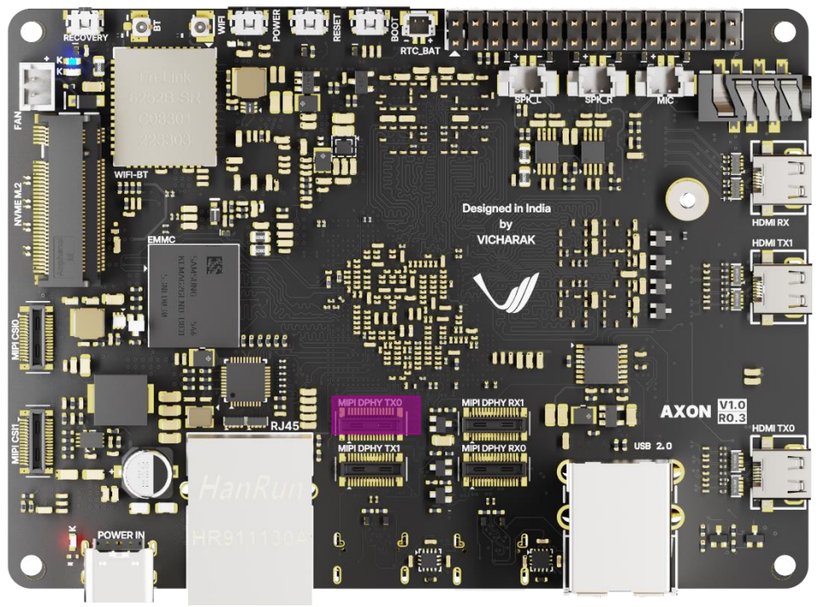
08 MIPI D-PHY TX PORT0



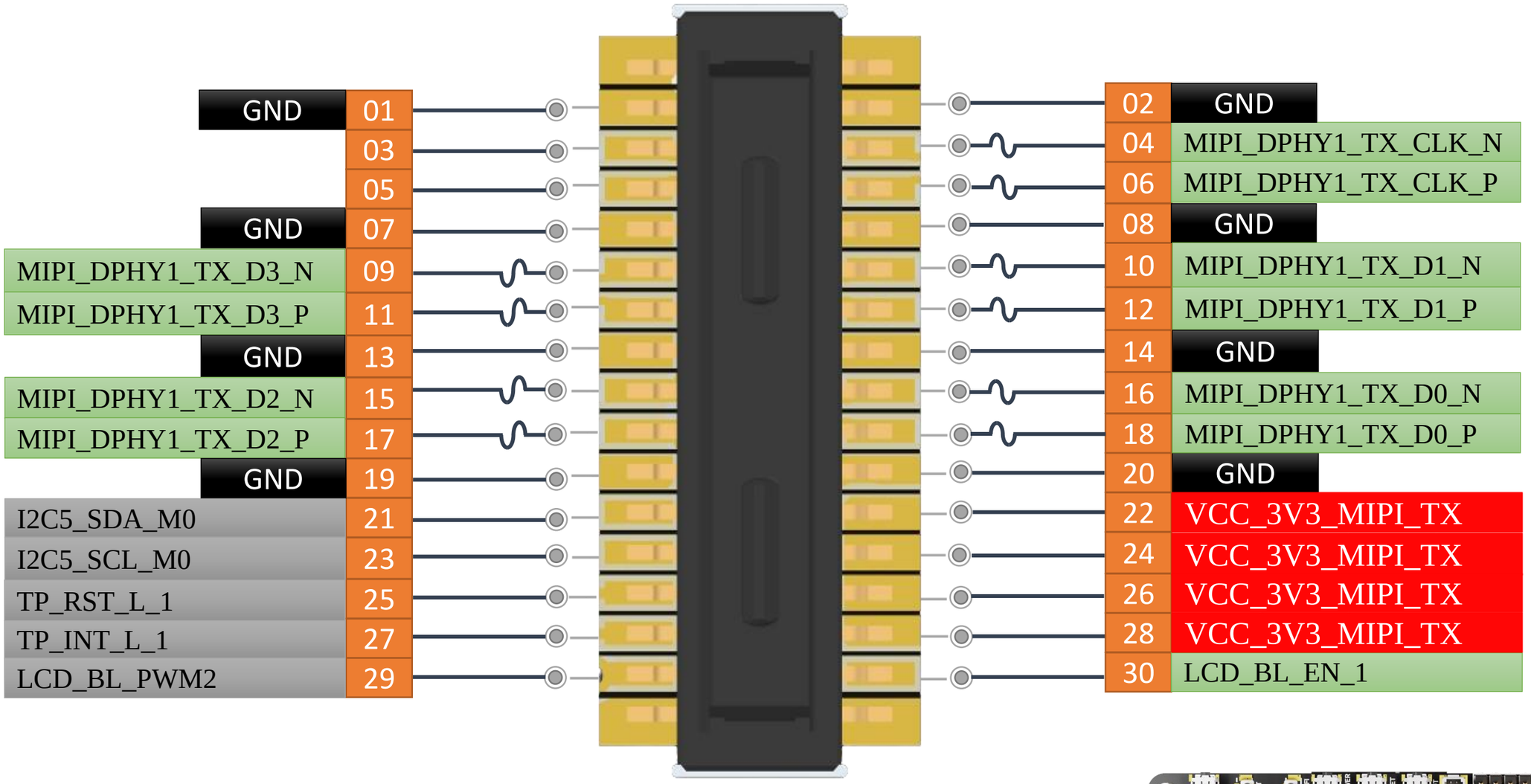
MIPI D-PHY0 TX

On-Board Connector
30 Pin
0.4mm Pitch
Current Rating (Max): 300mA each pin
MPN : DF40C(2.0)-30DP-0.4V(51)

Mating Connector
30 Pin
0.4mm Pitch
MPN : DF40C(3.5)-30DS-0.4V(51)



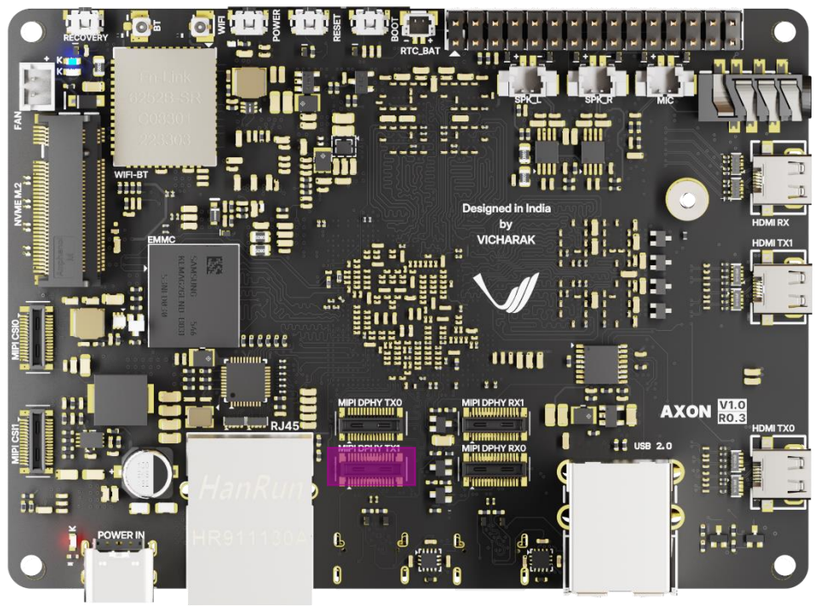
09 MIPI D-PHY TX PORT1



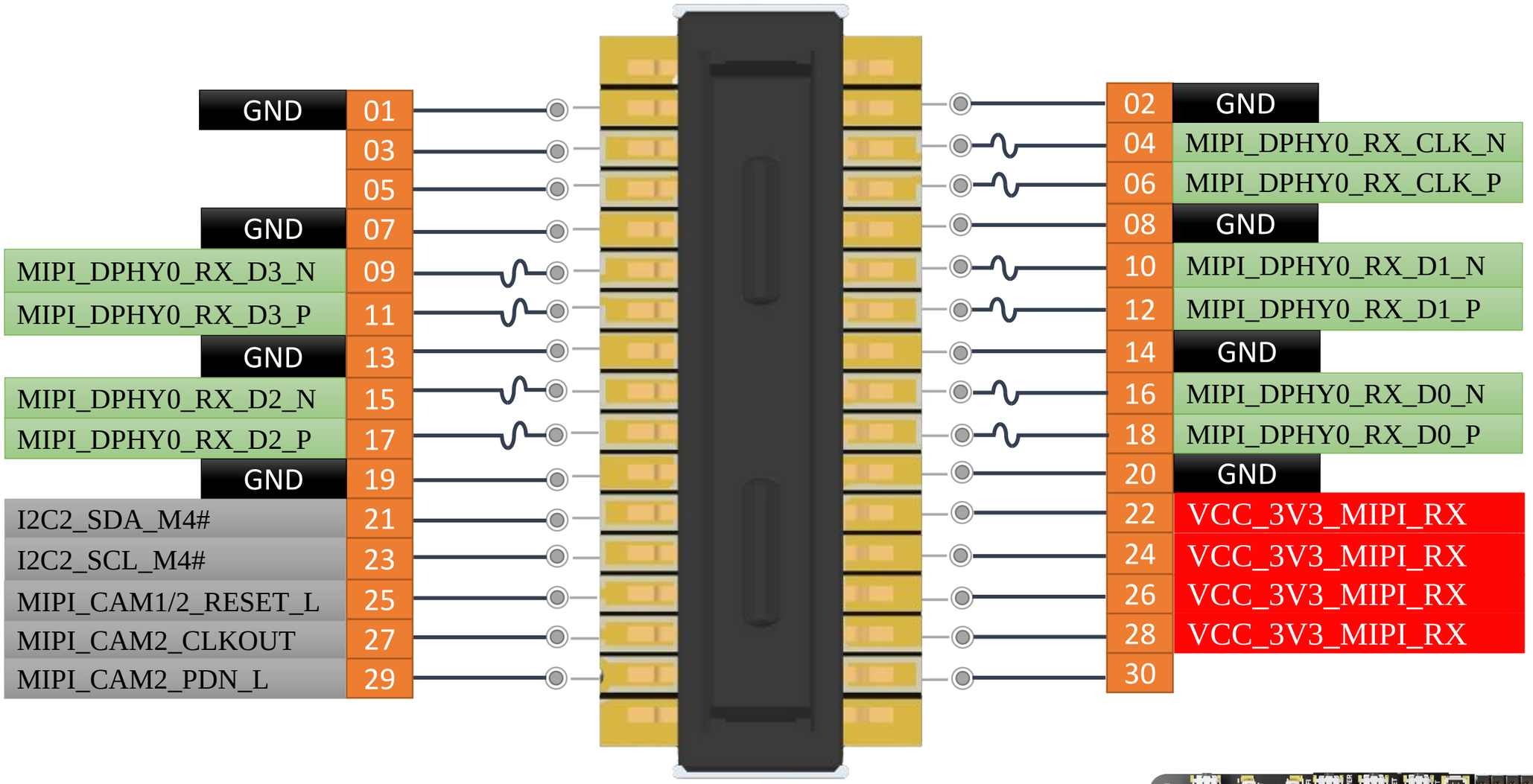
MIPI D-PHY1 TX

On-Board Connector
30 Pin
0.4mm Pitch
Current Rating (Max): 300mA each pin
MPN : DF40C(2.0)-30DP-0.4V(51)

Mating Connector
30 Pin
0.4mm Pitch
MPN : DF40C(2.0)-30DS-0.4V(51)



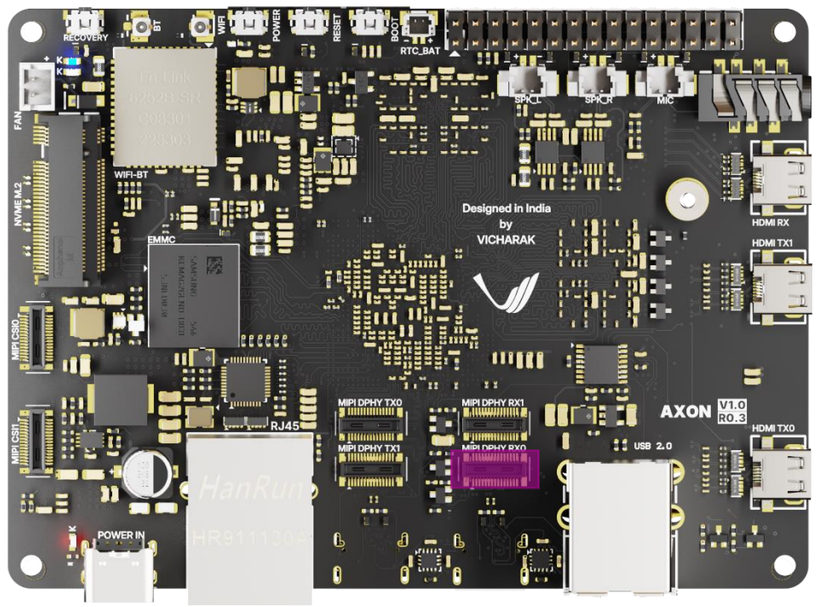
10 MIPI D-PHY RX PORT0



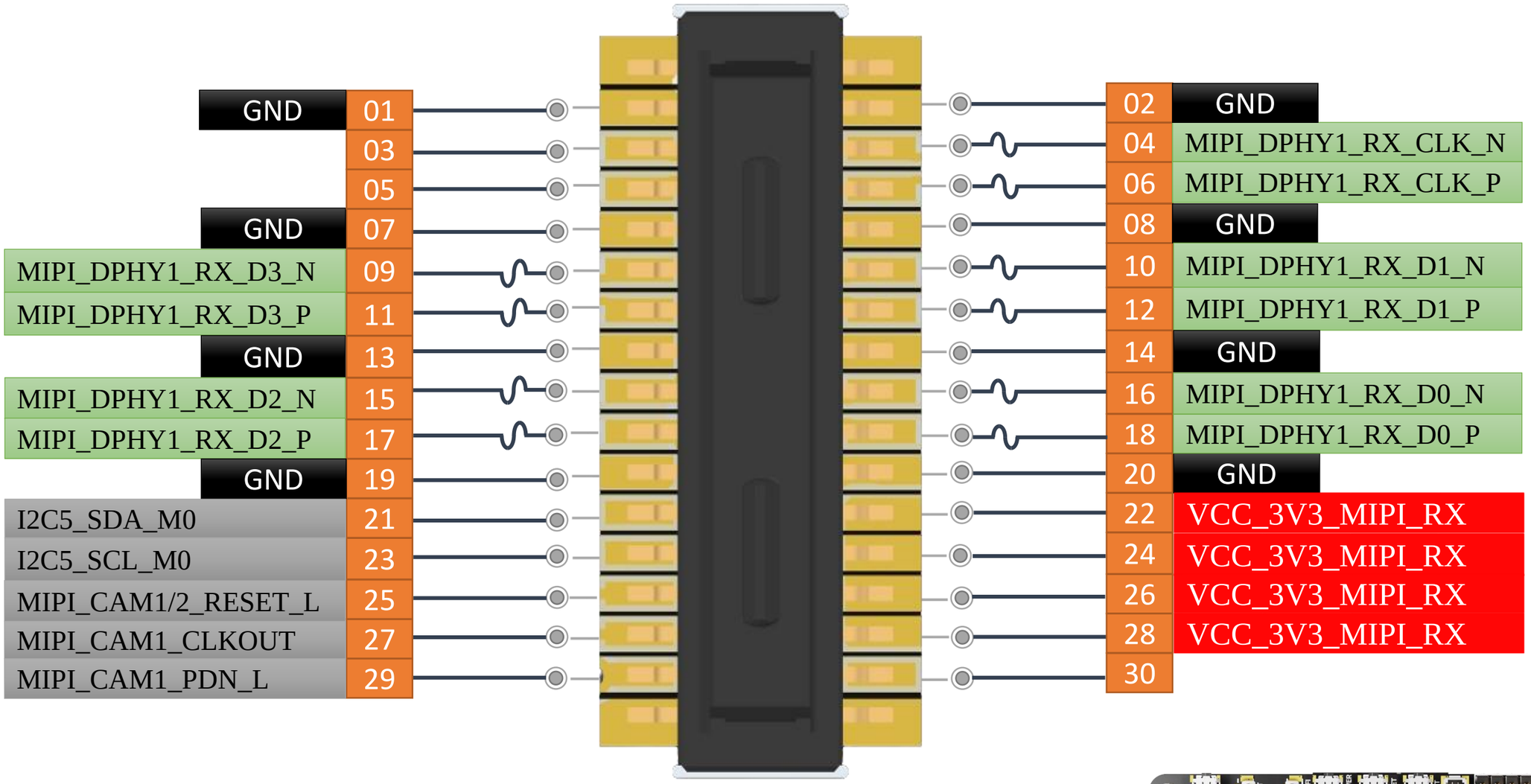
MIPI D-PHY0 RX

On-Board Connector
30 Pin
0.4mm Pitch
Current Rating (Max): 300mA each pin
MPN : DF40C(2.0)-30DP-0.4V(51)

Mating Connector
30 Pin
0.4mm Pitch
MPN : DF40C(2.0)-30DS-0.4V(51)



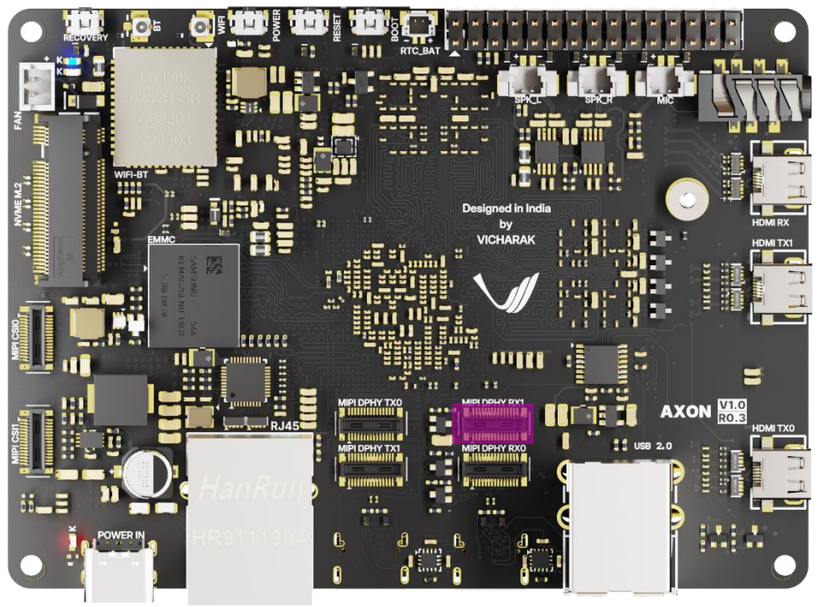
11 MIPI D-PHY RX PORT1



MIPI D-PHY1 RX

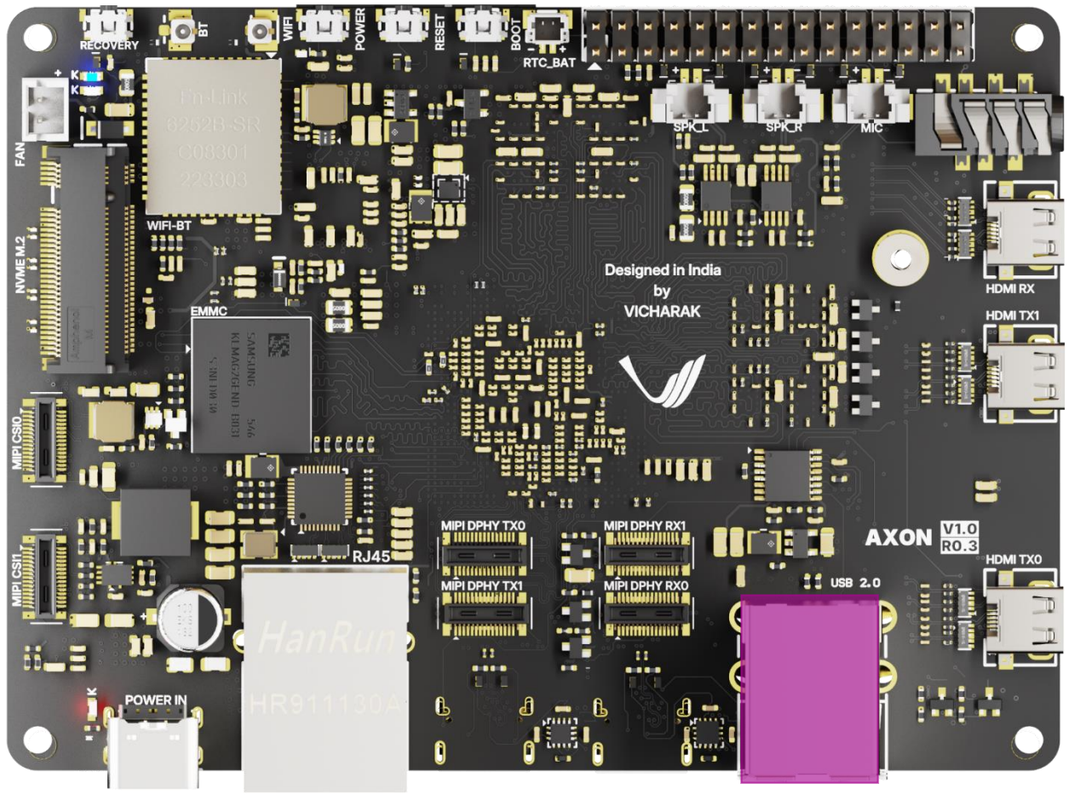
On-Board Connector
30 Pin
0.4mm Pitch
Current Rating (Max): 300mA each pin
MPN : DF40C(2.0)-30DP-0.4V(51)

Mating Connector
30 Pin
0.4mm Pitch
MPN : DF40C(3.5)-30DS-0.4V(51)

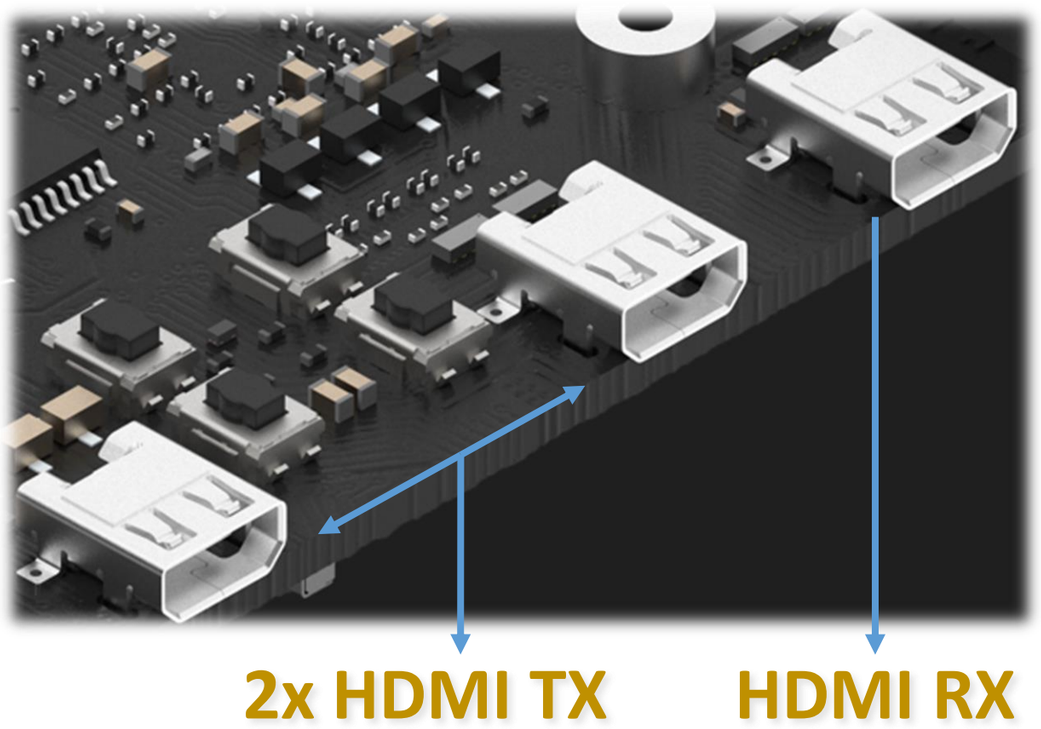


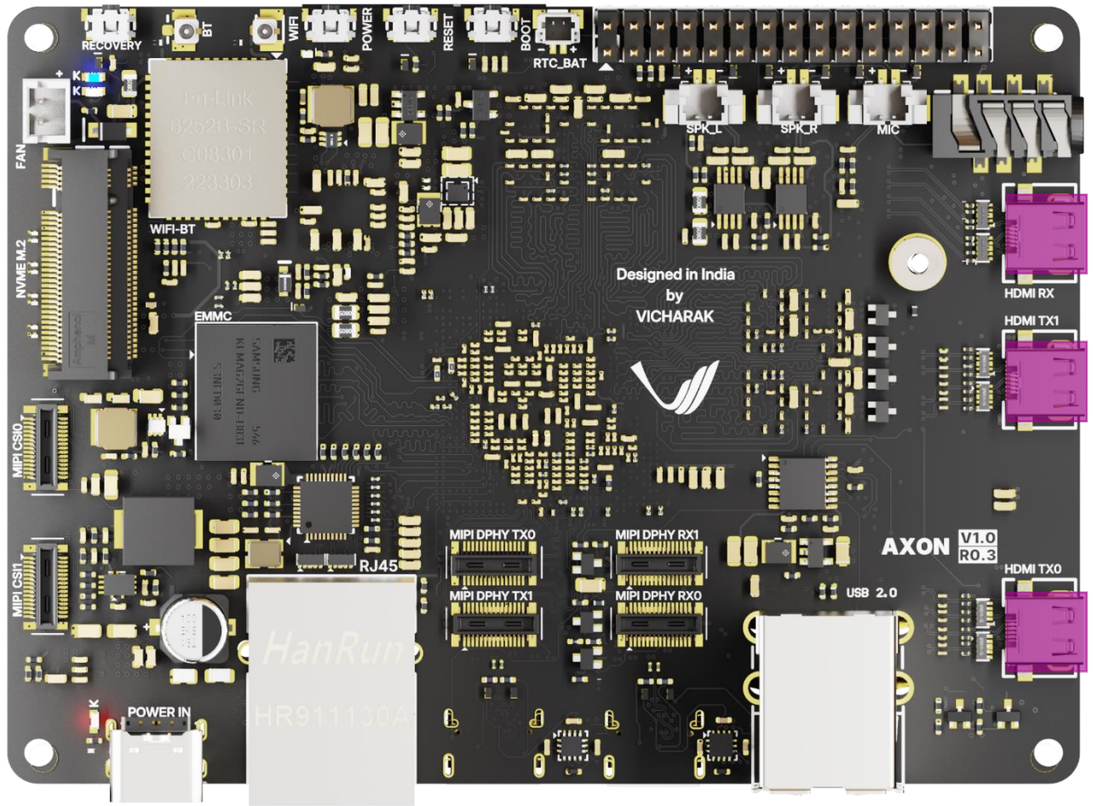
12 Dual USB2.0 HOST

2x USB2.0 HOST

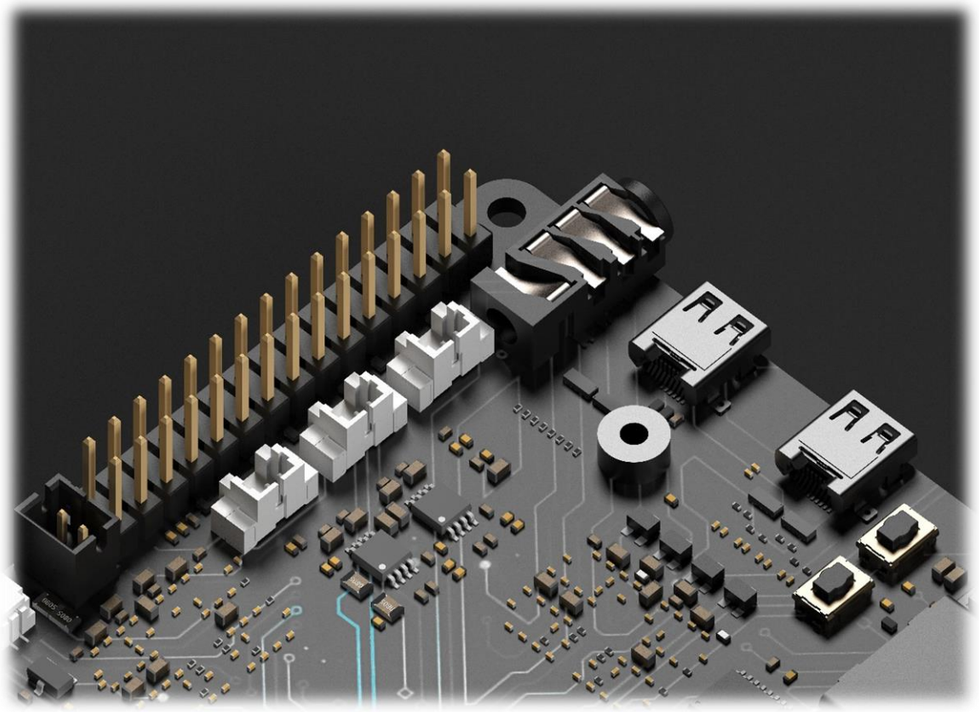


13 HDMI

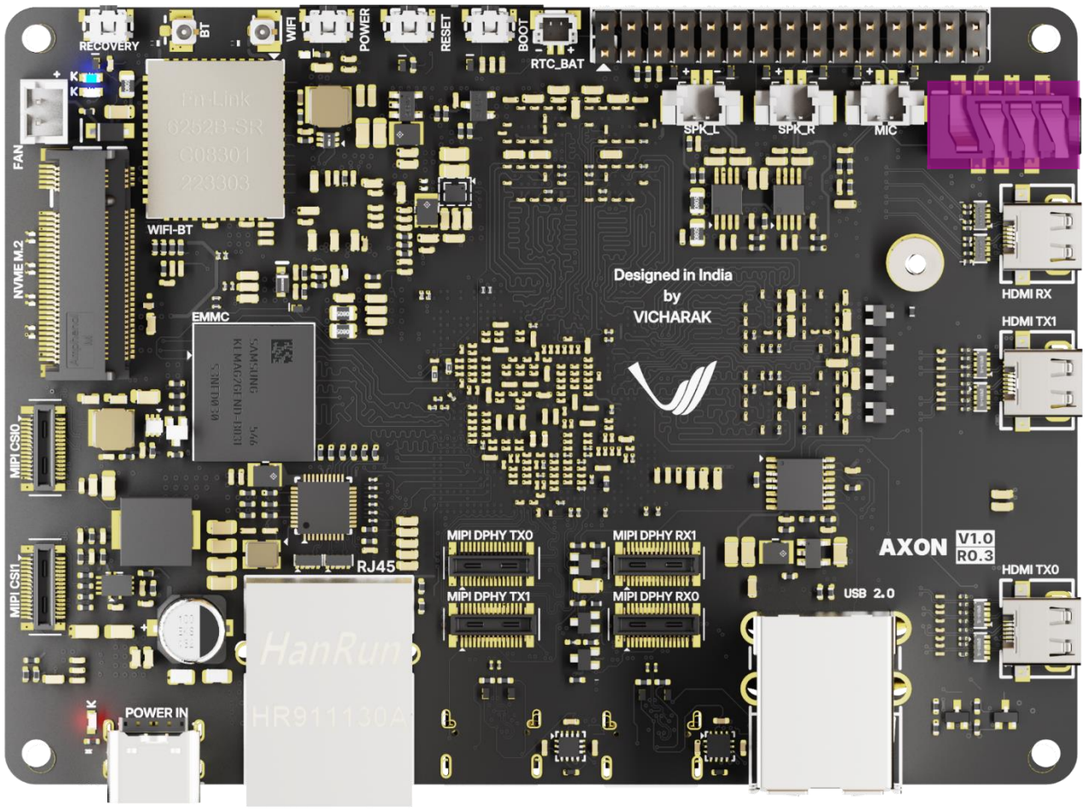

2x HDMI TX
HDMI RX


RECOVERY
BT
WIFI
POWER
RESET
BOOT
RTC_BAT
SPK_L
SPK_R
MIC
FAN
WIFI-BT
NVME M.2
EMMC
Designed in India
by
VICHARAK
HDMI RX
HDMI TX1
MIPI CSI0
MIPI CSI1
MIPI DPHY TX0
MIPI DPHY TX1
MIPI DPHY RX1
MIPI DPHY RX0
RJ45
AXON
V1.0
RO.3
USB 2.0
HDMI TX0
POWER IN

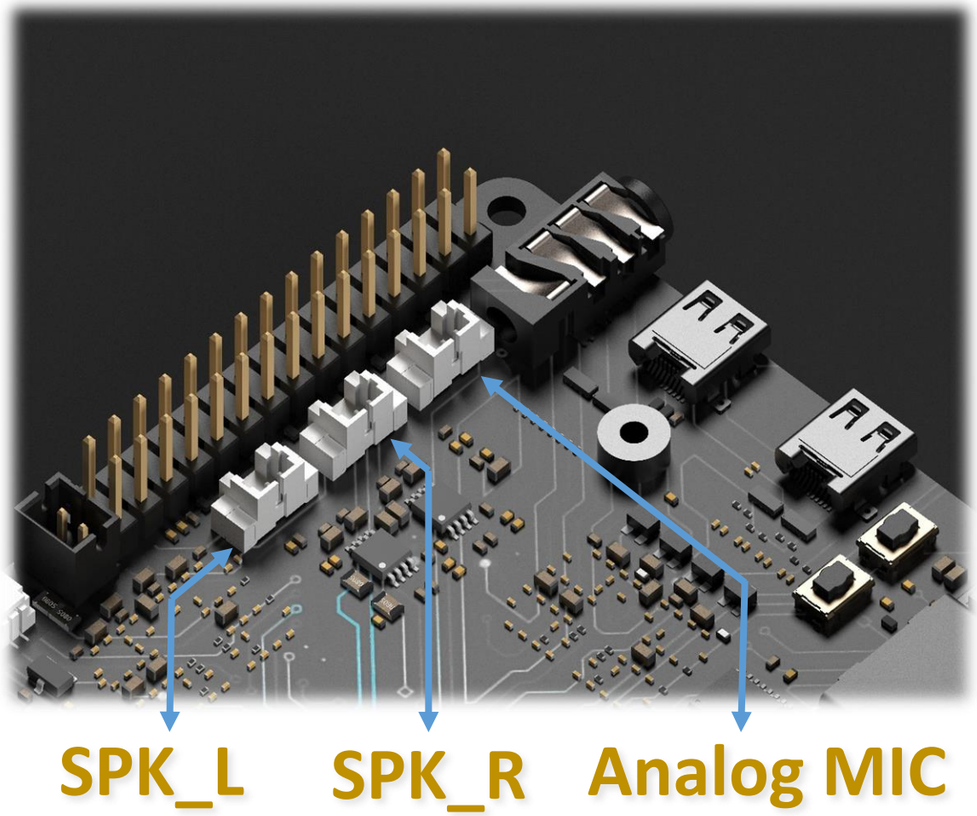
14 Audio Jack

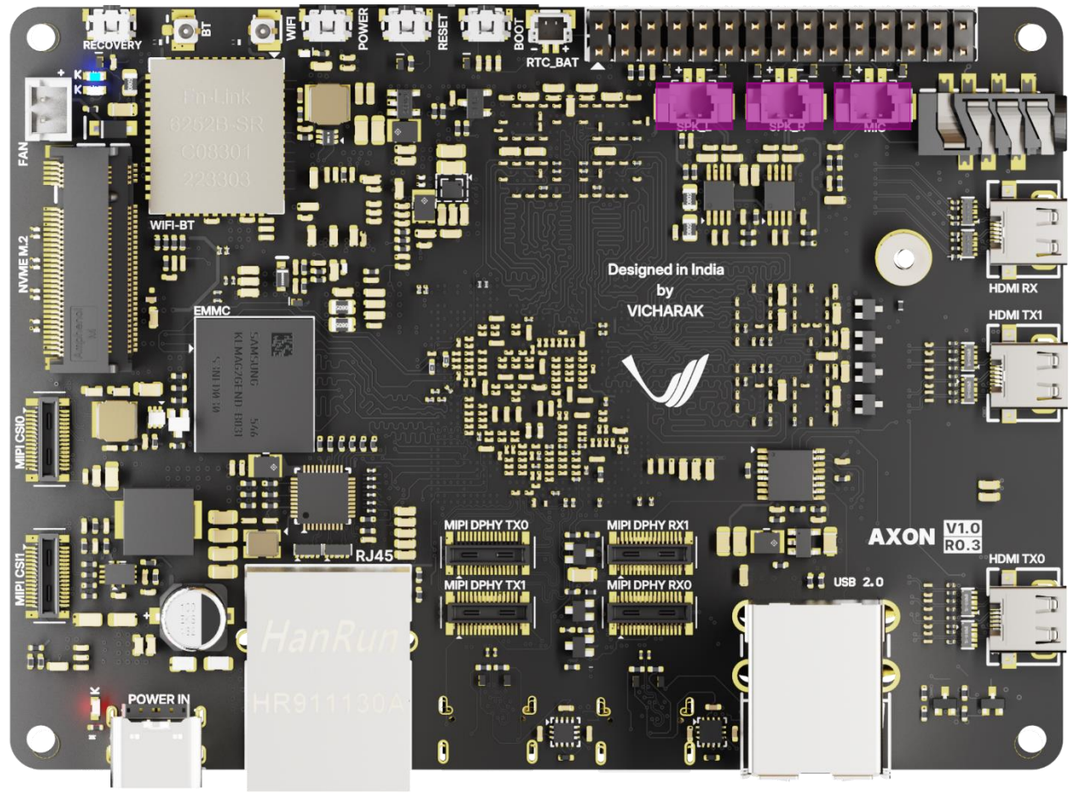


3.5mm Audio Jack with MIC

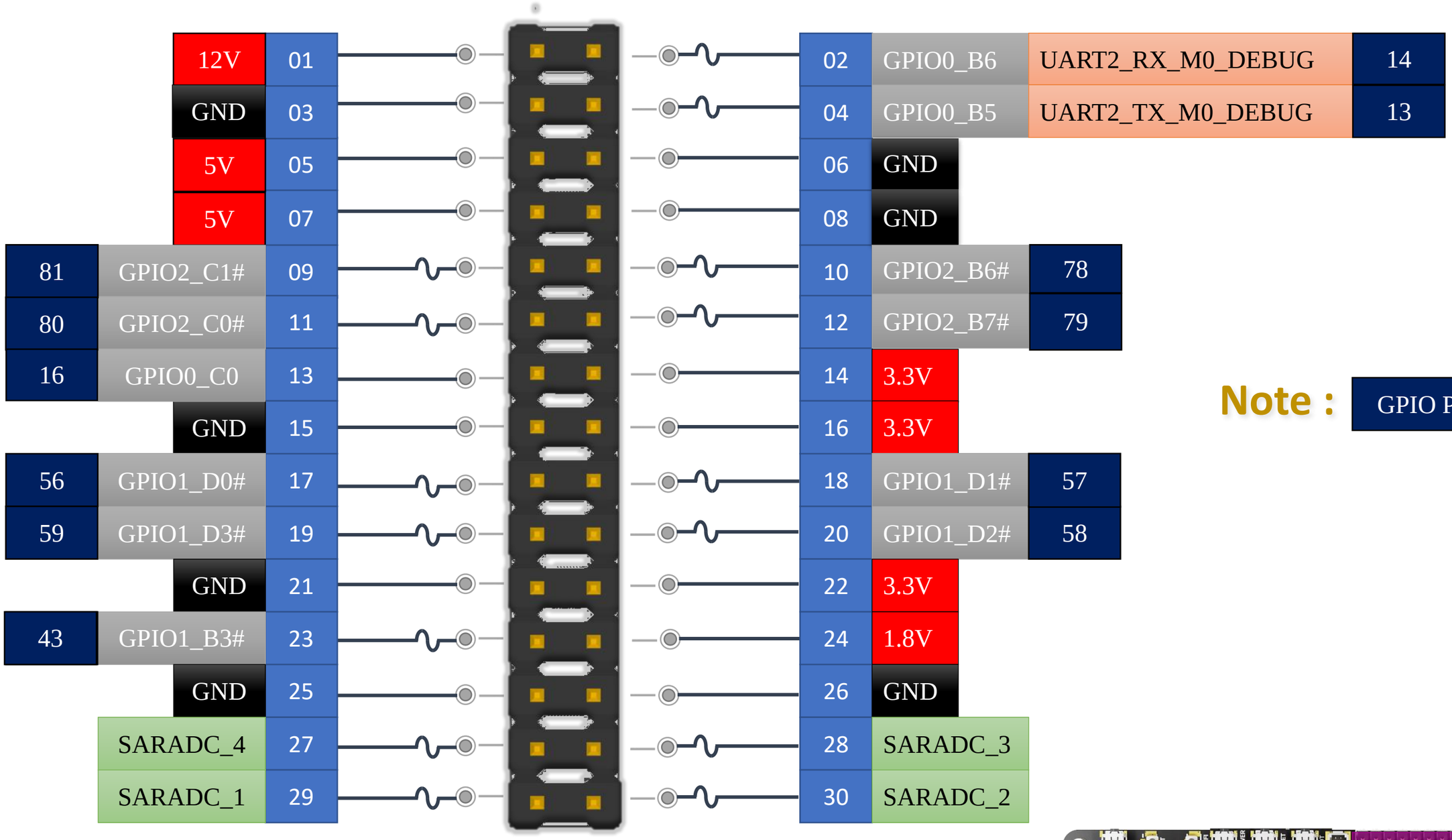


15 Analog Mic and Speaker



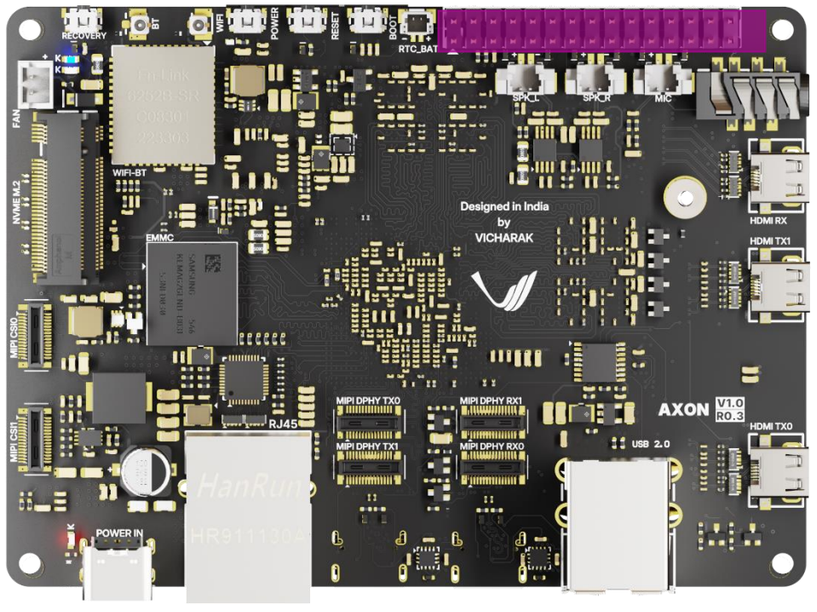


RK3588 GPIOs

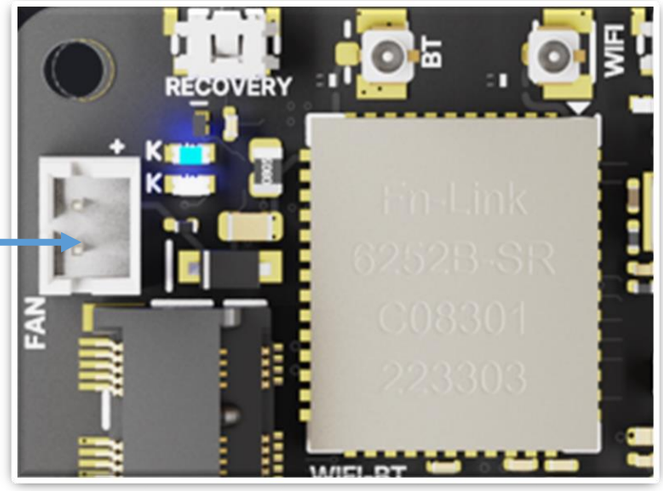


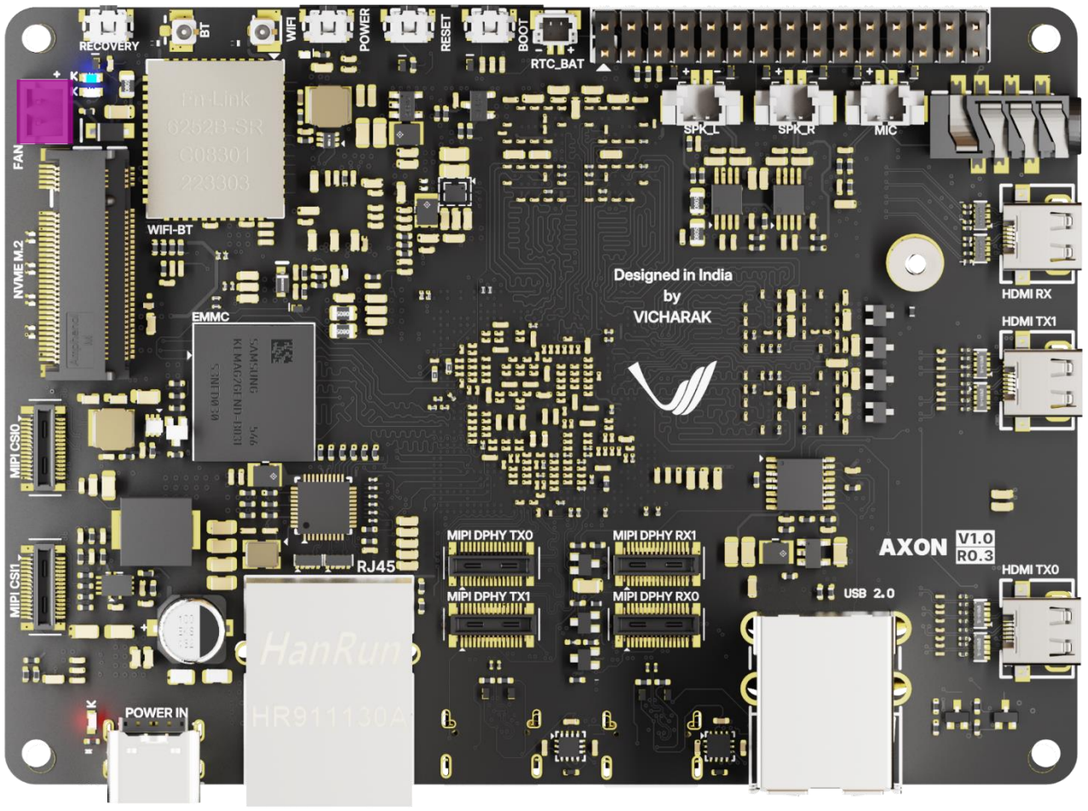
Note : GPIO Pin Number

RK3588 30Pin GPIO Header 2.54mm



DC FAN Connector

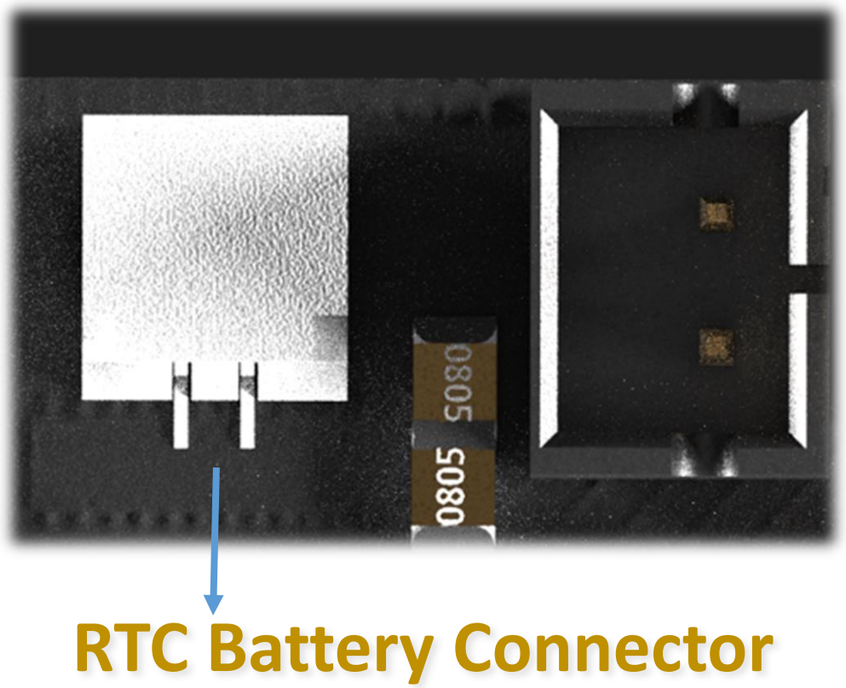


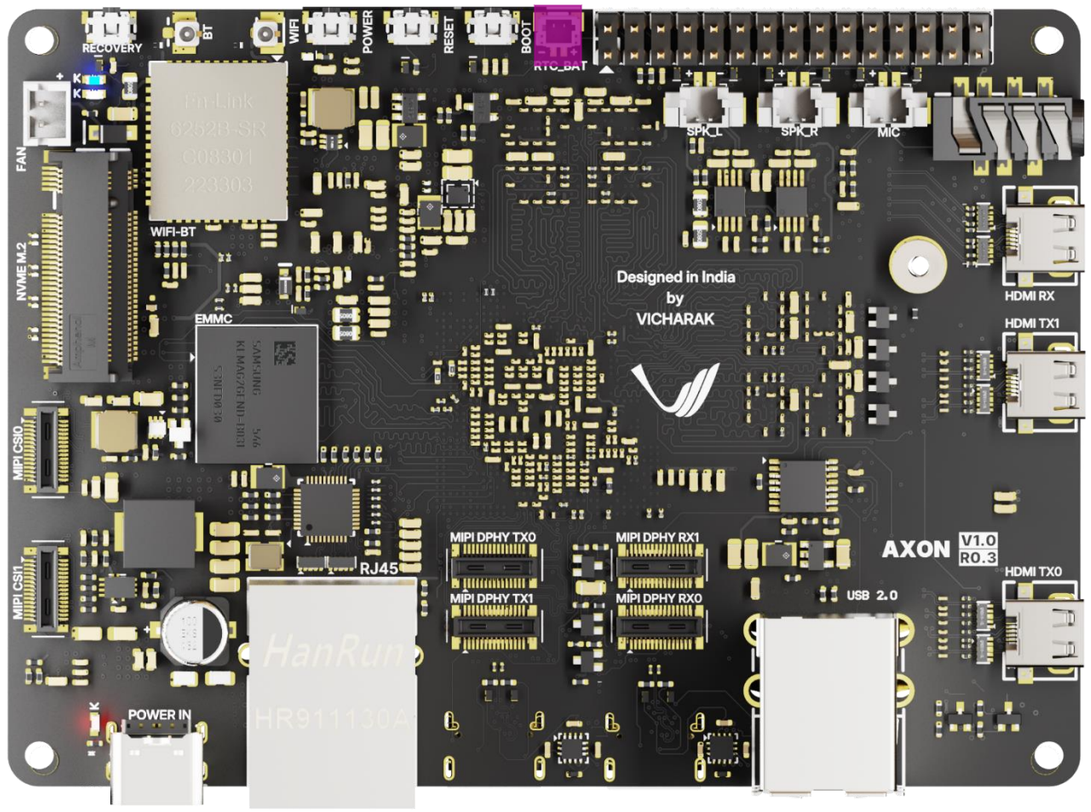


Fan Connector

FAN Connector
2 Pin
2mm Pitch
Current rating (max): 2A

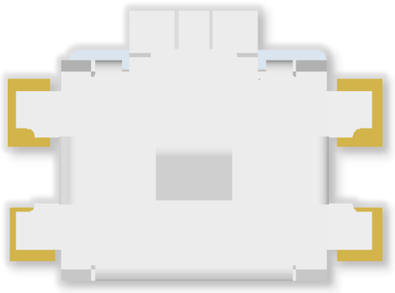
RTC Battery Connector



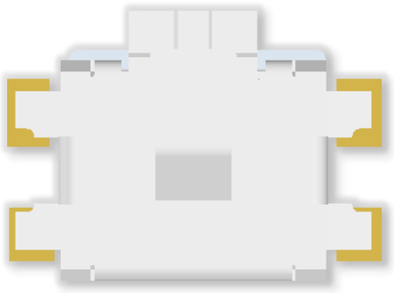


JST Connector
2 Pin
1mm Pitch
Current rating(max): 1A

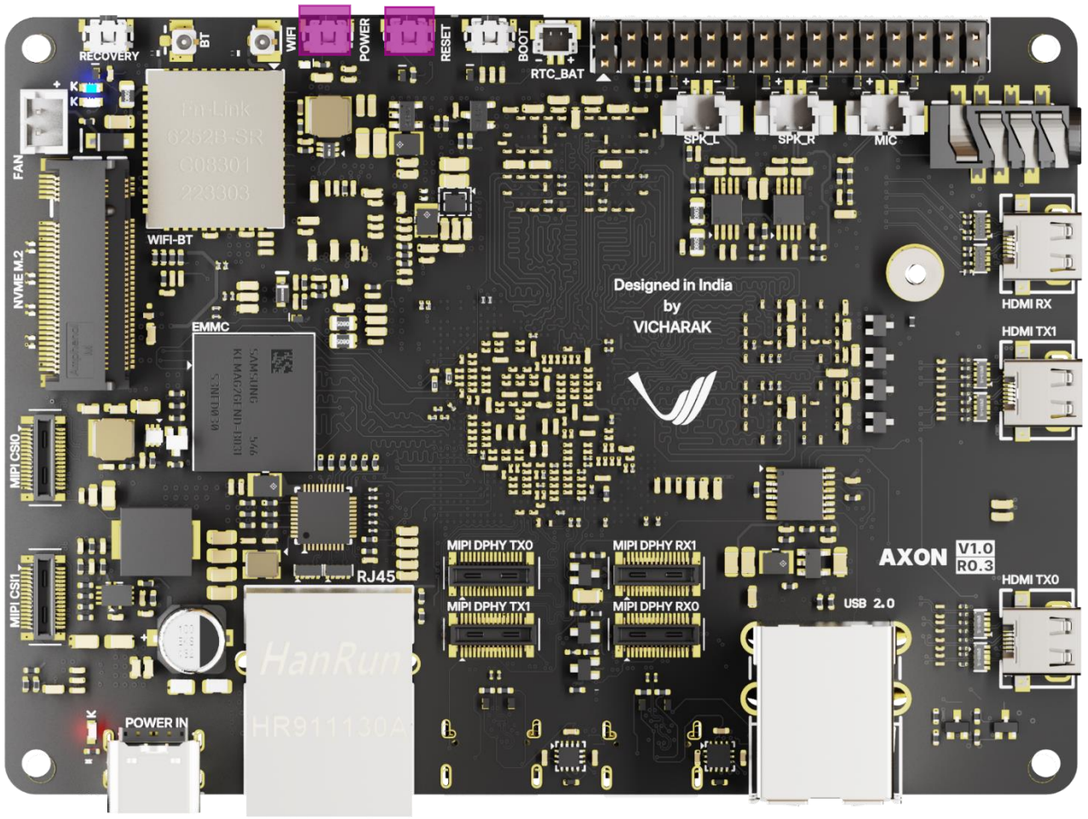
Reset & Power Key



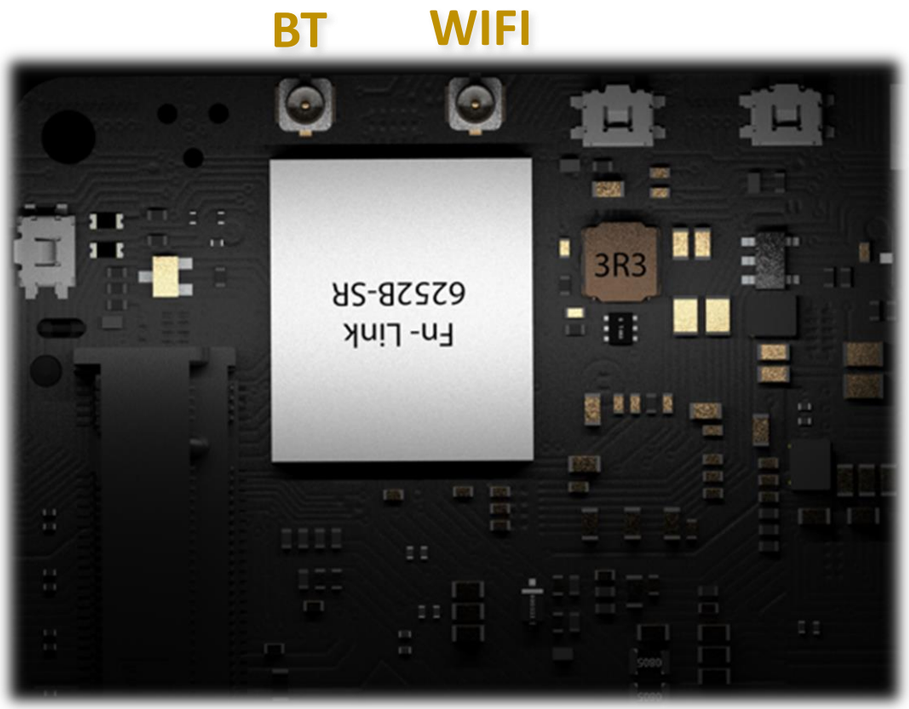
PWR on/off Key



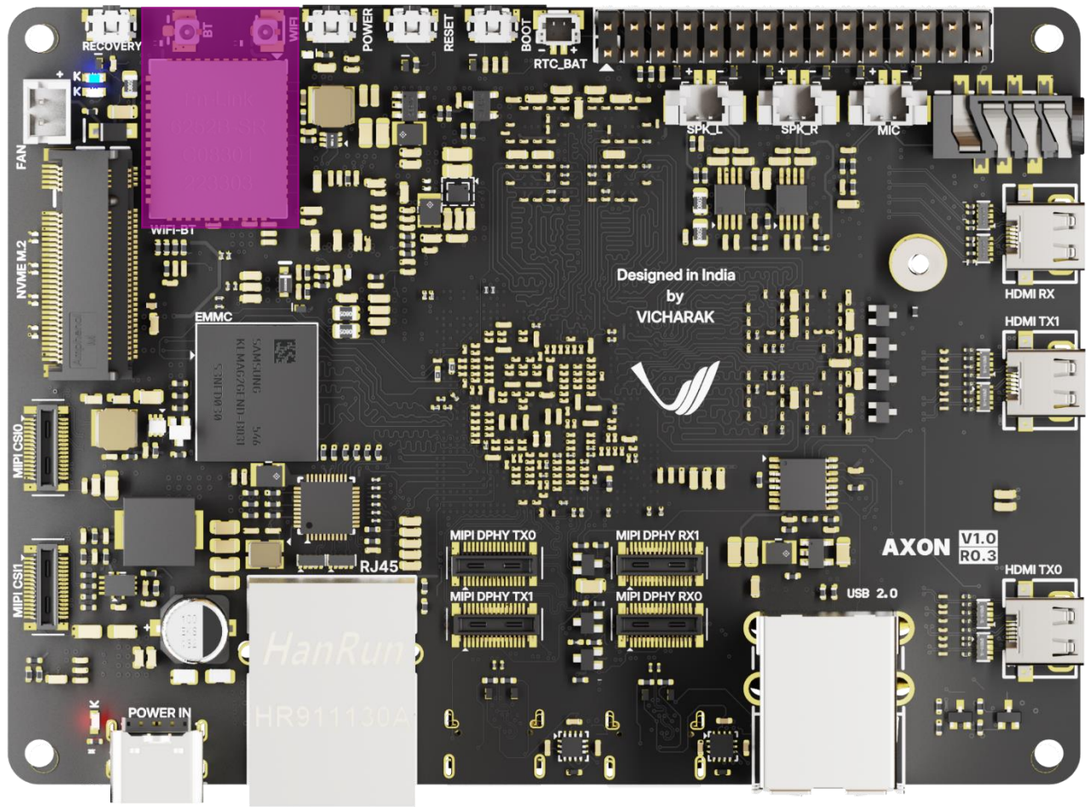
Reset Key



WIFI Module

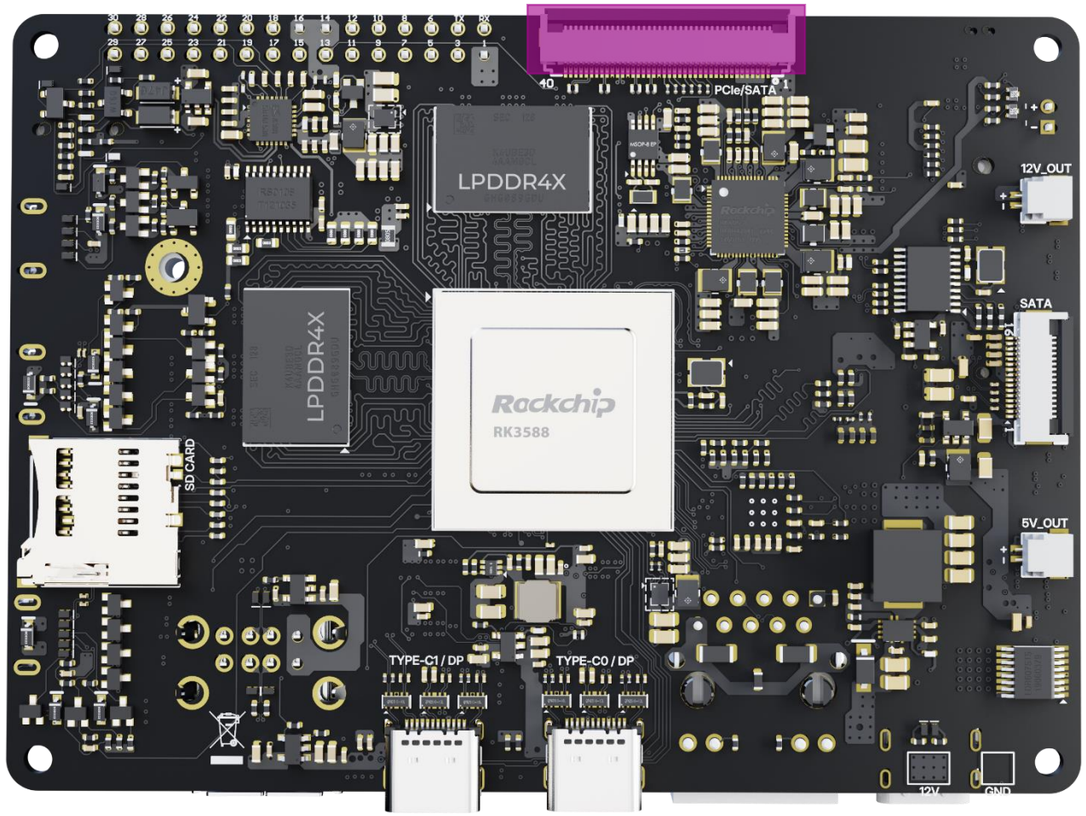


6252B-SR Wifi 6 BT5.2 Module



PCIE GEN/SATA3.0/USB3.0FPC CONNECTOR

01	GND
02-07	VCC_3.3V
08-12	GND
13	PCIE_PWREN_H
14	GND
15	PCIEx1_1_CLKREQn_M1_L
16	PCIEx1_1_WAKEn_M1_L
17	PCIEx1_1_PERSTn_M1_L
18	GND
19	PCIEX1_2_CLKREQn_M1_L
20	PCIEX1_2_WAKEn_M1_L
21	PCIEX1_2_PERSTn_M1_L
22	GND
23	PCIE20_1_TX/SATA30_1_TX_P
24	PCIE20_1_TX/SATA30_1_TX_N
25	GND
26	PCIE20_1_RX/SATA30_1_RX_P
27	PCIE20_1_RX/SATA30_1_RX_N
28	GND
29	PCIE20_1_REFCLK_P
30	PCIE20_1_REFCLK_N
31	GND
32	PCIE20_2_RX/SATA30_2_RX_P/USB3.0_RX_P
33	PCIE20_2_RX/SATA30_2_RX_N/USB3.0_RX_N
34	GND
35	PCIE20_2_TX/SATA30_2_TX_P/USB3.0_TX_P
36	PCIE20_2_TX/SATA30_2_TX_N/USB3.0_TX_N
37	GND
38	PCIE20_2_REFCLK_P
39	PCIE20_2_REFCLK_N
40	GND



PCIe2.0/SATA3.0/USB3.0 FPC Connector

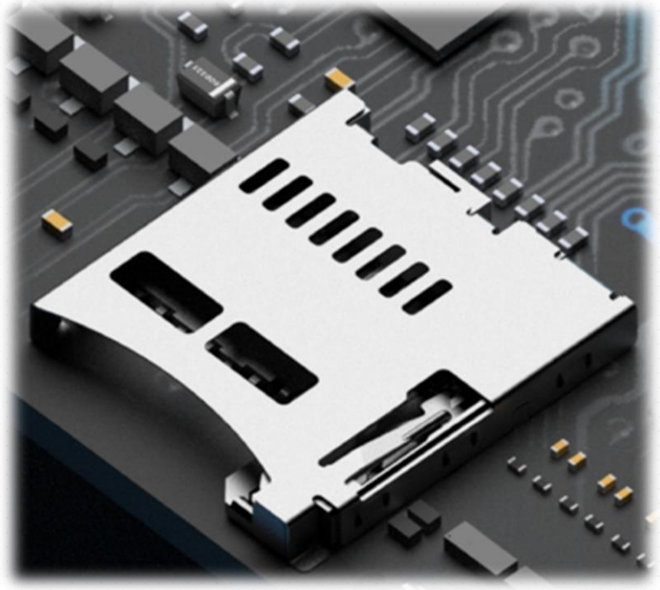
FPC Connector
40 Pin
0.5mm Pitch
Current rating (max): 0.5A each pin
MPN : FPC-05F-40PH20

FPC Cable
40 Pin
0.5mm Pitch
Impedance 85 Ohm

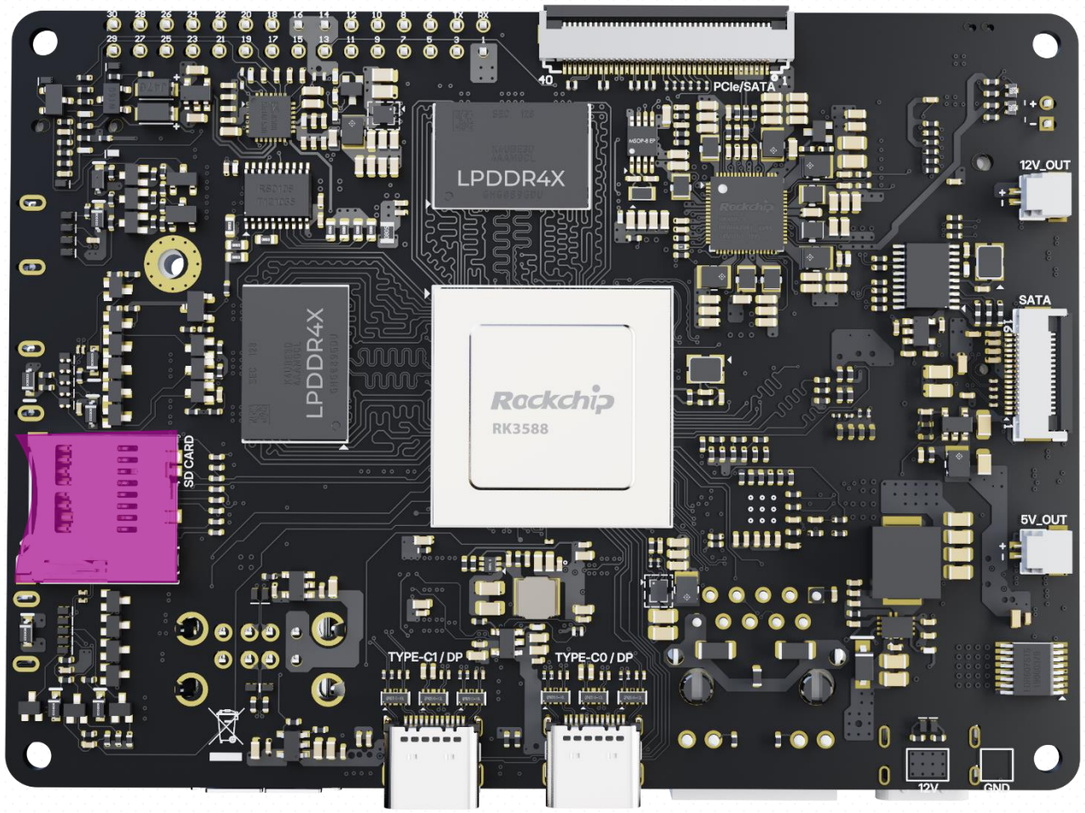
NOTE:- If you want to use USB/SATA, you can take 5V directly from the 5V_OUT connector on the AXON board, or you can use a boost converter on the daughterboard to convert 3.3V to 5V, alternatively, you can supply 5V externally.

NOTE:- If you want to use SATA ,You can take 12V directly from the 12V out connector on the AXON board, or you can use a boost converter on the daughterboard to convert 3.3V to 12V. Alternatively, you can use a Type-C or DC JACK connector on the daughterboard to supply power directly from a power adapter

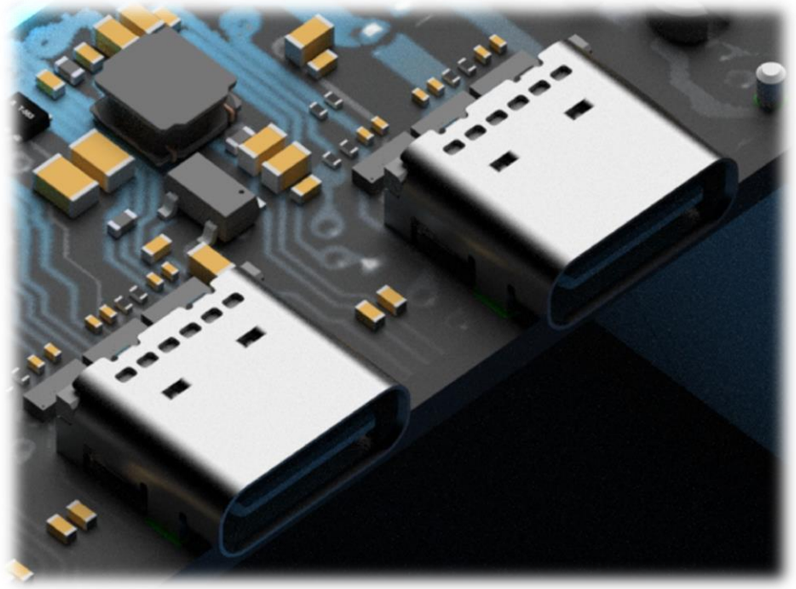
MicroSD Card



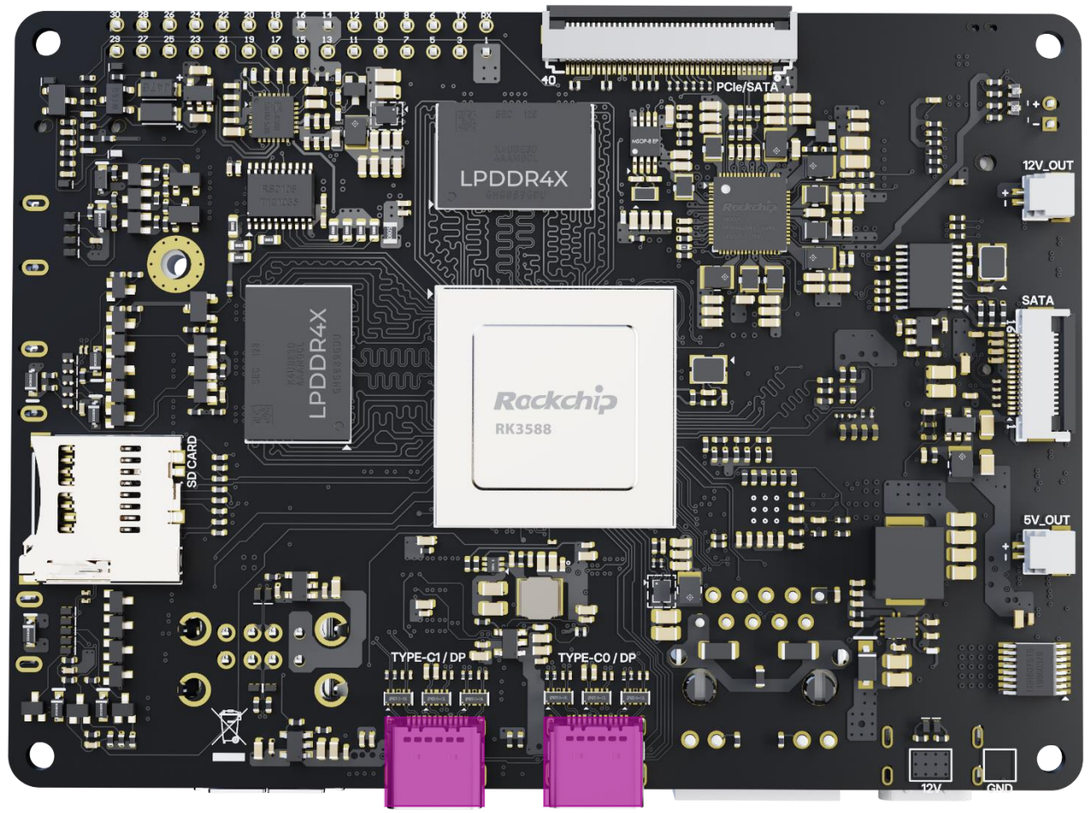
Push-Push Type MicroSD Card Slot

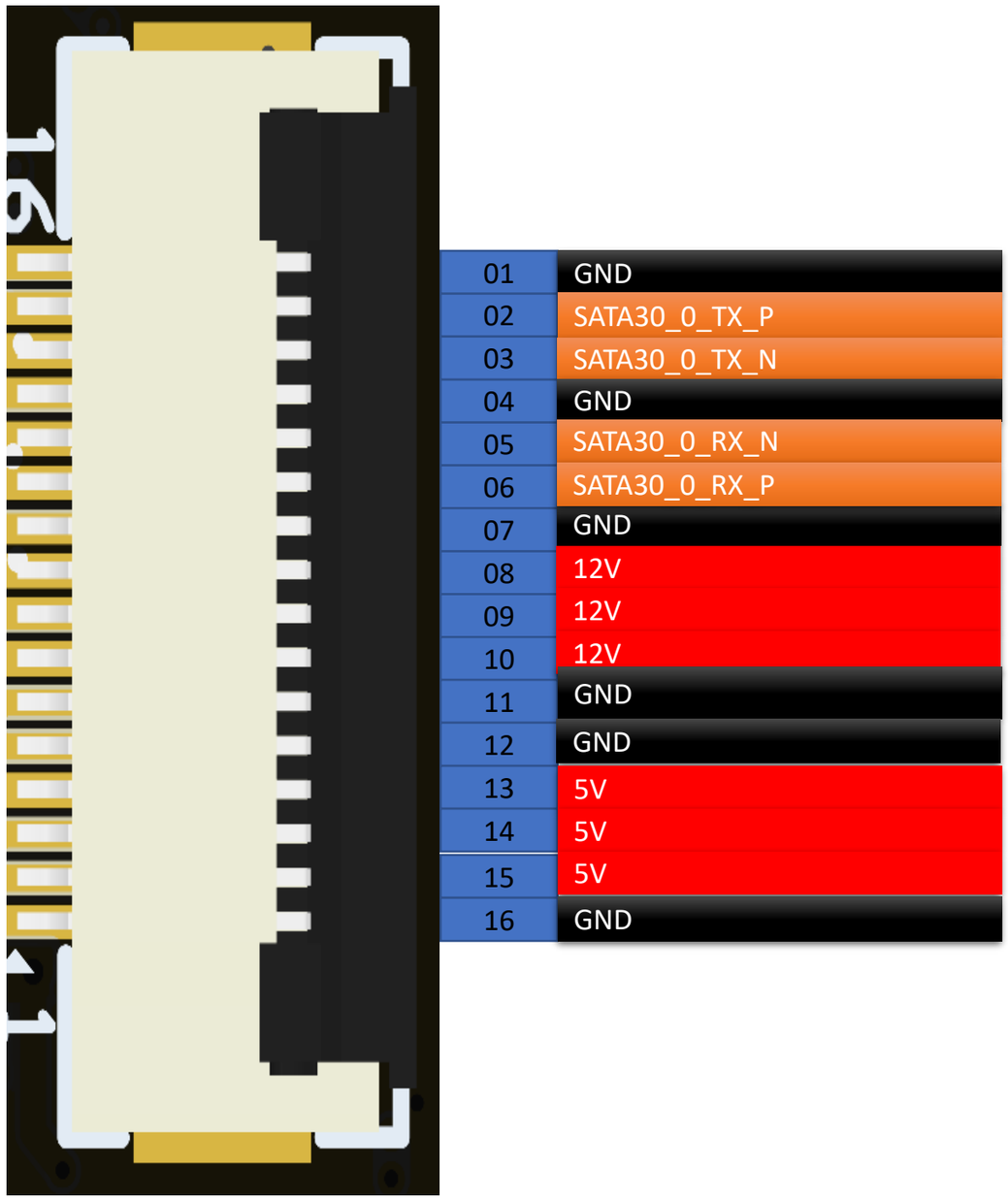


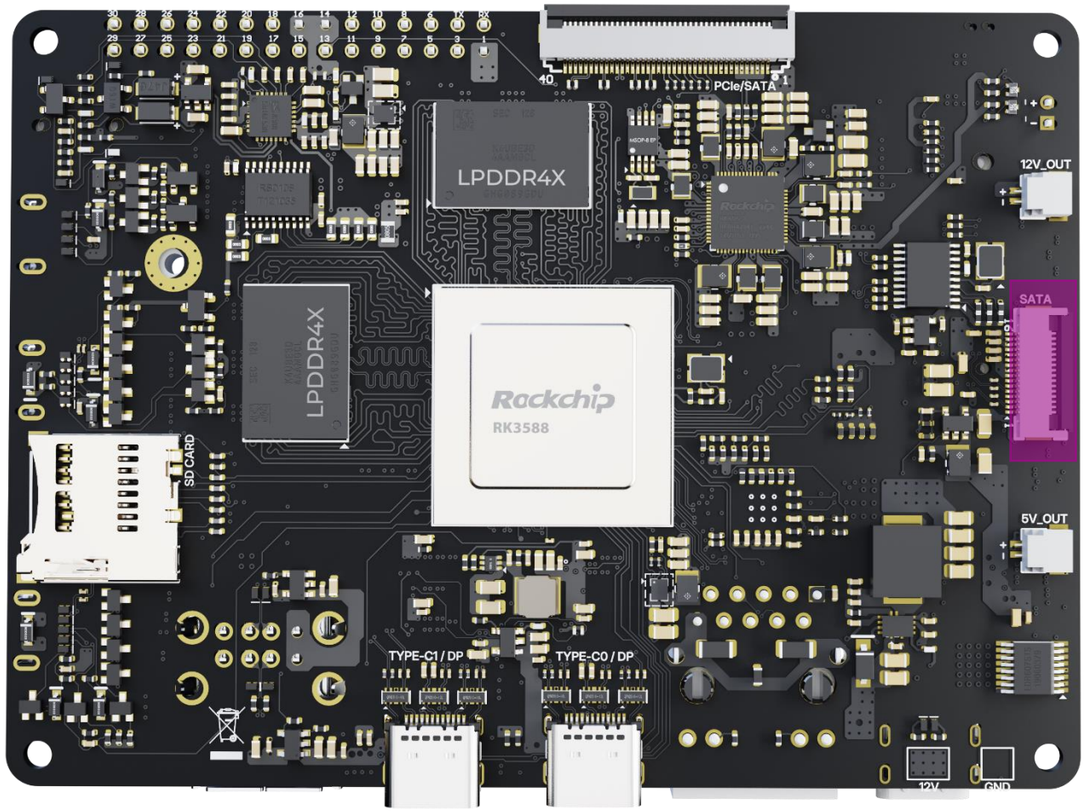
USB TYPE-C



TYPE-C /DP Port





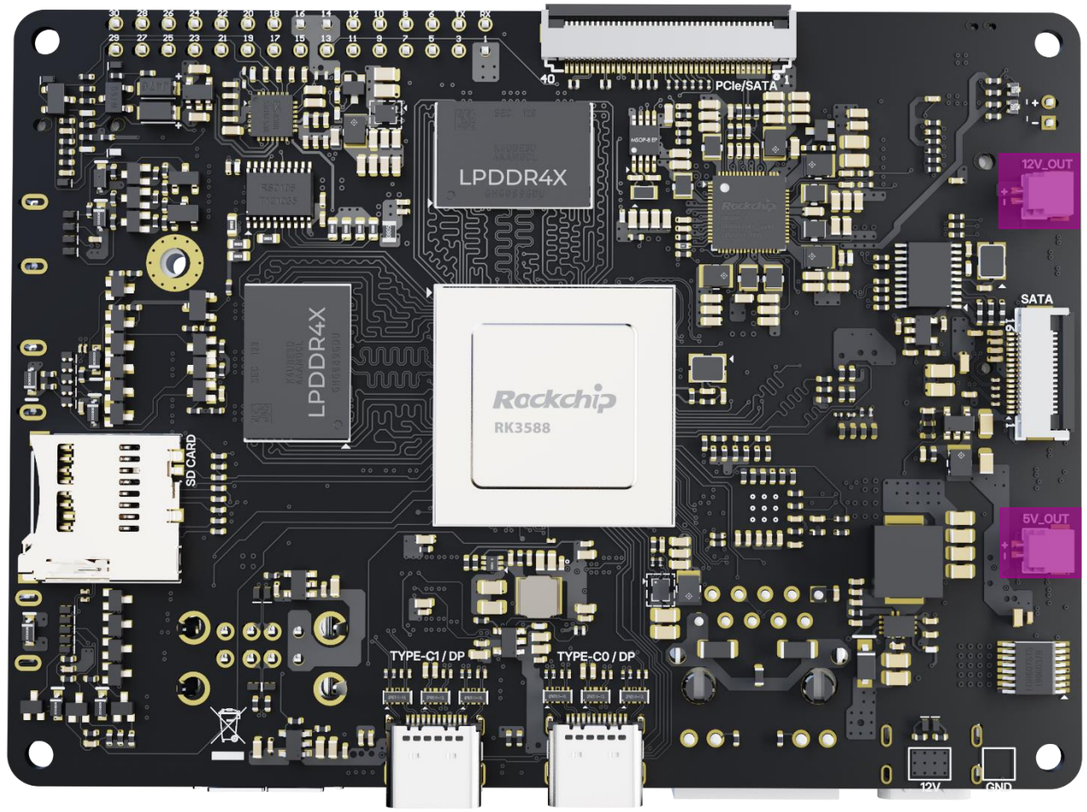


SATA 3.0, 16 Pin FPC Connector

FPC Connector
16 Pin
0.5mm Pitch
Current rating (max): 0.5A each pin
MPN : FPC-05F-16PH20

FPC Cable
16 Pin
0.5mm Pitch
Impedance 90 Ohm

12V_OUT & 5V_OUT



12V_OUT & 5V_OUT Connector

JST Connector
2 pin
1mm Pitch
Current Rating (max): 1A