

## **USB 3.1 Connector**

Function	Description			
Location	Р3			
Туре	Tiger Eye 20 Pin Connector, 0.05mm Pitch			
Carrier Connector	Part Number: TFM-110-02-L-D-WT Manufacturer: Samtec			
Mating Cables	CBG615 (USB 2.0 only), CBG686 (USB3.0), XBG023			
	Pinout	-		
Pin 1	GND			
Pin 2	USB1_D_P			
Pin 3	USBO_D_P	20, 19 3		
Pin 4	USB1_D_N	, , = = = =		
Pin 5	USBO_D_N			
Pin 6	GND			
Pin 7	GND	S		
Pin 8	USB3_P1_TX_P	. , , σ		
Pin 9	USB3_P0_TX_P	· · · · · · · · · · · · · · · · · · ·		
Pin 10	USB3_P1_TX_N			
Pin 11	USB3_PO_TX_N			
Pin 12	GND			
Pin 13	GND			
Pin 14	USB3_P1_RX_P			
Pin 15	USB3_P0_RX_P			
Pin 16	USB3_P1_RX_N			
Pin 17	USB3_PO_RX_N			
Pin 18	USB1 VBUS			
Pin 19	USB0 VBUS			
Pin 20	GND			
Notes	Both ports will only be USB 3.1 capable when using Jetson Orin™ NX. Only Port 0 will be USB 3.1 capable when using Jetson Xavier™ NX.  Maximum power available on each individual port is as below:  Hadron Rev A, Rev B = 1A per port  Hadron Rev C and onwards = 2A per port			



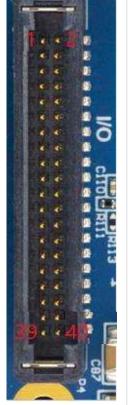
## I/O Header

## Description

The Hadron Carrier implements a TFM-120-02-L-D-WT Connector to allow access for additional GPIO and interfaces.

Function	Description		
Location	P4		
Туре	Samtec 40Pin Connector, 1.27mm Pitch		
Carrier Connector	Part Number: TFM-120-02-L-D-WT Manufacturer: Samtec		
Mating Cable/Connector	CBG629 / SFSD-20-28C-G-12.00-SR Manufacturer: Samtec		

Pinout							
Description	Signal Name	Pins		Signal Name	Description		
Signal Ground	GND	1	2	GND	Signal Ground		
GPIO10	GPIO10	3	4	GPIO13	GPIO13 (PWM)		
GPIO11	GPIO11	5	6	GPIO12	GPIO12 (PWM)		
Signal Ground	GND	7	8	GND	Signal Ground		
+5V Power Out <sup>1</sup>	+5V_IO	9	10	+3.3V_IO	+3.3V Power Out <sup>1</sup>		
+5V Power Out <sup>1</sup>	+5V_IO	11	12	+3.3V_IO	+3.3V Power Out <sup>1</sup>		
Signal Ground	GND	13	14	GND	Signal Ground		
SPIO Transmit	SPI0 MOSI	15	16	SPIO SCK	SPI0 Clock		
SPI0 Receive	SPI0 MISO	17	18	SPIO CSO	SPIO Chip Select		
Signal Ground	GND	19	20	GND	Signal Ground		
RS-232_0 Request to Send	RS-232_0_RTS	21	22	RS-232_0_TX	RS-232_0 Transmit		
RS-232_0 Clear to Send	RS-232_0_CTS	23	24	RS-232_0_RX	RS-232_0 Receive		
Signal Ground	GND	25	26	GND	Signal Ground		
RS-232_1 Transmit	RS-232_1_TX	27	28	RS-232_1_RTS	RS-232_1 Request to Send		
RS-232_1 Receive	RS-232_1_RX	29	30	RS-232_1_CTS	RS-232_1 Clear to Send		
Signal Ground	GND	31	32	GND	Signal Ground		
I2C0 Clock	12C 0 SCL	33	34	I2C 0 SDA	I2CO Data		
Signal Ground	GND	35	36	GND	Signal Ground		
Debug UART RX	UART2_RX	37	38	UART2_TX	Debug UART TX		
Signal Ground	GND	39	40	GND	Signal Ground		



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