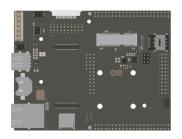


## Pinout Table - Portenta Mid Carrier

## Description

This document shows a detailed pinout table for the Portenta Mid Carrier sorted by its main connectors.



	Breakout Header (J14)						
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface		
1	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
2	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
3	RTS0		SERIAL0_RTS	J1-38	UART 0 RTS		
4	RTS1		SERIAL1_RTS	J1-37	UART 1 RTS		
5	NC		NC	NC			
6	NC		NC	NC			
7	RX0		SERIAL0_RX	J1-36	UART 0 RX		
8	RX1		SERIAL1_RX	J1-35	UART 1 RX		
9	TX0		SERIAL0_TX	J1-34	UART 0 TX		
10	TX1		SERIAL1_TX	J1-33	UART 1 TX		
11	CTS0		SERIAL0_CTS	J1-40	UART 0 CTS		
12	CTS1		SERIAL1_CTS	J1-39	UART 1 CTS		
13	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
14	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
15	RTS2		SERIAL2_RTS	J2-30	UART 2 RTS		
16	RTS3		SERIAL3_RTS	J2-29	UART 3 RTS		
17	NC		NC	NC			
18	NC		NC	NC			
19	RX2		SERIAL2_RX	J2-28	UART 2 RX		
20	RX3		SERIAL3_RX	J2-27	UART 3 RX		
21	TX2		SERIAL2_TX	J2-26	UART 2 TX		
22	TX3		SERIAL3_TX	J2-25	UART 3 TX		

				2
23	CTS2	SERIAL2_CTS	J2-32	UART 2 CTS
24	CTS3	SERIAL3_CTS	J2-31	UART 3 CTS
25	I2S CLK	I2S_CK	J1-56	I2S CK
26	CANO TX	CAN0_TX	J1-50	CAN 0 TX
27	I2S WS	I2S_WS	J1-58	I2S WS
28	CANO RX	CANO_RX	J1-52	CAN Ø RX
29	I2S SDI	I2S_SDI	J1-60	I2S SDI
30	CAN1 TX	CAN1_TX	J1-49	CAN 1 TX
31	I2S SDO	I2S_SD0	J1-62	I2S SDO
32	CAN1 RX	CAN1_RX	J1-51	CAN 1 RX
33	SPDIF TX	SPDIF_TX	J1-74	SPDIF TX
34	PDM CLK	PDM_CK	J1-66	PDM CK
35	SPDIF RX	SPDIF_RX	J1-76	SPDIF RX
36	PDM D0	PDM_D0	J1-68	PDM D0
37	GPI00	GPIO_0	J2-46	GPIO_0
38	PDM D1	PDM_D1	J1-70	PDM D1
39	GPI01	GPIO_1	J2-48	GPIO_1
40	GPI06	GPIO_6	J2-58	GPIO_6
41	GPI02	GPIO_2	J2-50	GPIO_2
42	GPI05	GPIO_5	J2-56	GPIO_5
43	GPI03	GPIO_3	J2-52	GPIO_3
44	GPI04	GPIO_4	J2-54	GPIO_4

	Breakout Header (J15)							
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface			
1	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
2	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
3	OUT VCC	+3V3 Portenta (Out)	VCC	J2-23, J2-34, J2-43, J2-69				
4	OUT VCC	+3V3 Portenta (Out)	VCC	J2-23, J2-34, J2-43, J2-69				
5	IN 5V	+5V (In/Out)	VIN	J1-21, J1-32, J1-41, J1-48				
6	IN 5V	+5V (In/Out)	VIN	J1-21, J1-32, J1-41, J1-48				
7	VREFP		ANALOG_VREF_P	J2-71				
8	VREFN		ANALOG_VREF_N	J2-72				



9	A0	ANALOG_A0	J2-73	3
10	SPI0 CS	SPIO_CS	J2-53	SPI 0 CS
11	A1	ANALOG_A1	J2-75	3F1 0 C3
12	SPIØ SCLK	SPIO_CK	J2-37	SPI 0 CK
13	A2	ANALOG_A2	J2-77	SFI 0 CK
	<b>+</b>			CDT 0 CTD0
14	SPI0 CIPO	SPI0_MISO	J2-39	SPI 0 CIPO
15	A3	ANALOG_A3	J2-79	007 0 0007
16	SPI0 COPI	SPI0_MOSI	J2-41	SPI 0 COPI
17	A4	ANALOG_A4	J2-74	
18	SPI1 CS	SPI1_CS	J2-36	SPI 1 CS
19	A5	ANALOG_A5	J2-76	
20	SPI1 SCLK	SPI1_CK	J2-38	SPI 1 CK
21	A6	ANALOG_A6	J2-78	
22	SPI1 CIPO	SPI1_MISO	J2-40	SPI 1 CIPO
23	A7	ANALOG_A7	J2-80	
24	SPI1 COPI	SPI1_MOSI	J2-42	SPI 1 COPI
25	PWM0	PWM_0	J2-59	
26	I2C0 SDA	I2C0_SDA	J1-44	I2C 0 SDA
27	PWM1	PWM_1	J2-61	
28	I2C0 SCL	I2C0_SCL	J1-46	I2C 0 SCL
29	PWM2	PWM_2	J2-63	
30	I2C1 SDA	I2C1_SDA	J1-43	I2C 1 SDA
31	PWM3	PWM_3	J2-65	
32	I2C1 SCL	I2C1_SCL	J1-45	I2C 1 SCL
33	PWM4	PWM_4	J2-67	
34	I2C2 SDA	I2C2_SDA	J2-45	I2C 2 SDA
35	PWM5	PWM_5	J2-60	
36	I2C2 SCL	I2C2_SCL	J2-47	I2C 2 SCL
37	PWM6	PWM_6	J2-62	
38	SAI CLK	SAI_CK	J2-49	SAI CLK
39	PWM7	PWM_7	J2-64	
40	SAI FS	SAI_FS	J2-51	SAI FS
41	PWM8	PWM_8	J2-66	<u> </u>
42	SAI D0	SAI_D0	J2-53	SAI D0
43	PWM9	PWM_9	J2-68	
44	SAI D1	SAI_D1	J2-55	SAI D1



	Power Block CAN bus (J4)							
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface			
1	VIN	+5V (In/Out)	VIN	J1-21, J1-32, J1-41, J1-48				
2	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
3	VCC	+3V3 Portenta (Out)	VCC	J2-23, J2-34, J2-43, J2-69				
4	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
5	CANH		CAN1 TX	J1-49 (Through U2)	CAN BUS 1 - CANH			
6	CANL		CAN1 RX	J1-51 (Through U2)	CAN BUS 1 - CANL			

	JTAG Header (J3)							
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface			
1	N/A	+3V3 Portenta (Out)	vcc	J2-23, J2-34, J2-43, J2-69				
2	N/A		JTAG_SWD	J1-75	JTAG SWD			
3	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
4	N/A		JTAG_SCK	J1-77	JTAG SCK			
5	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
6	N/A		JTAG_SWO	J1-79	JTAG SWO			
7	N/A		NC	NC				
8	N/A		JTAG_TDI	J1-78	JTAG TDI			
9	N/A		JTAG_TRST	J1-80	JTAG TRST			
10	N/A		JTAG_RST	J1-73	JTAG_RESET			

	MIPI Camera (J10)							
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface			
1	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
2	N/A		CAM_D0_D0_N	J2-16				
3	N/A		CAM_D1_D0_P	J2-14				
4	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
5	N/A		CAM_D2_D1_N	J2-12				
6	N/A		CAM_D3_D1_P	J2-10				
7	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
8	N/A		CAM_CK_CK_N	J2-20				
9	N/A		CAM_VS_CK_P	J2-18				
10	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
11	N/A		GPIO_3	J2-52				
12	N/A		NC	NC				
13	N/A		I2C0_SCL	J1-46	I2C 0 SCL			
14	N/A		I2C0_SDA	J1-44	I2C 0 SDA			
15	N/A	+3V3 Portenta (Out)	VCC	J2-23, J2-34, J2-43, J2-69				

	Camera Socket (J11)								
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface				
1	VCC	+3V3 Portenta (Out)	VCC	J2-23, J2-34, J2-43, J2-69					
2	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70					
3	SCL0		I2C0_SCL	J1-46	I2C 0 SCL				
4	SDA0		I2C0_SDA	J1-44	I2C 0 SDA				
5	VSYNC		CAM_VS_CK_P	J2-18	CSI CAM_VS_CK_P				
6	HREF		CAM_HS	J2-22	CSI CAM_HS				
7	PCLK		CAM_CK_CK_N	J2-20	CSI CAM_CK_CK_N				
8	XCLK		PWM_0	J2-59					



9	DOUT7	CAM_D7_D3_P	J2-2	CSI CAM_D7_D3_P
10	DOUT6	CAM_D6_D3_N	J2-4	CSI CAM_D6_D3_N
11	DOUT5	CAM_D5_D2_P	J2-6	CSI CAM_D5_D2_P
12	DOUT4	CAM_D4_D2_N	J2-8	CSI CAM_D4_D2_N
13	DOUT3	CAM_D3_D1_P	J2-10	CSI CAM_D3_D1_P
14	DOUT2	CAM_D2_D1_N	J2-12	CSI CAM_D2_D1_N
15	DOUT1	CAM_D1_D0_P	J2-14	CSI CAM_D1_D0_P
16	DOUT0	CAM_D0_D0_N	J2-16	CSI CAM_D0_D0_N
17	PWRENABLE	GPIO_3	J2-52	GPIO_3
18	PWDN	GPIO_4	J2-54	GPIO_4
19	PWRENABLE	GPIO_3	J2-52	GPIO_3
20	PWDN	GPIO_4	J2-54	GPIO_4

	USB-A (J13)							
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface			
1	N/A	+5V (In/Out)	VIN	J1-21, J1-32, J1-41, J1-48				
2	N/A		USB0_D_N	J1-28	USB D-			
3	N/A		USB0_D_P	J1-26	USB D+			
4	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				

	SD Card Slot (J12)							
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface			
1	N/A		SDC_D2	J1-63				
2	N/A		SDC_D3	J1-65				
3	N/A		SDC_CMD	J1-57				
4	N/A	VDD_SDCARD	VSD	J1-72				
5	N/A		SDC_CLK	J1-55				
6	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70				
7	N/A		SDC_D0	J1-59				
8	N/A		SDC_D1	J1-61				



CD1	N/A		SDC_CD	J1-67	
CD2	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70	

	Ethernet (J18)								
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface				
1	N/A	+3V3 Portenta (Out)	VCC (through SW3)	J2-23, J2-34, J2-43, J2-69					
2	N/A		ETH_C_N	J1-11					
3	N/A		ETH_C_P	J1-9					
4	N/A		ETH_B_P	J1-5					
5	N/A		ETH_B_N	J1-7					
6	N/A	+3V3 Portenta (Out)	VCC (through SW3)	J2-23, J2-34, J2-43, J2-69					
7	N/A	+3V3 Portenta (Out)	VCC (through SW3)	J2-23, J2-34, J2-43, J2-69					
8	N/A		ETH_D_P	J1-13					
9	N/A		ETH_D_N	J1-15					
10	N/A		ETH_A_N	J1-3					
11	N/A		ETH_A_P	J1-1					
12	N/A	+3V3 Portenta (Out)	VCC (through SW3)	J2-23, J2-34, J2-43, J2-69					
13	N/A	Ground	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70					
14	N/A		ETH_LED2	J1-19 (through resistor)					
15	N/A		ETH_LED1	J1-17					
16	N/A	vcc	VCC (through resistor)	J2-23, J2-34, J2-43, J2-69					
17	N/A		NC	NC					

Video Display Connector (J19)							
Pin			Portenta HD Standard				
number	Silkscreen	Power Net	Pin	High-Density Pin	Interface		
1	DSI D1N		DSI_D1_N	J1-12	DSI D1 N		
2	DSI D1P		DSI_D1_P	J1-10	DSI D1 P		
3	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
4	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
5	DSI CKN		DSI_CK_N	J1-20	DSI CK N		
6	DSI CKP		DSI_CK_P	J1-18	DSI CK P		
7	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
8	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
9	DSI DØN		DSI_D0_N	J1-16	DSI D0 N		
10	DSI D0P		DSI_D0_P	J1-14	DSI D0 P		
11	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
12	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
13	DSI D2N		DSI_D2_N	J1-8	DSI D2 N		
14	DSI D2P		DSI_D2_P	J1-6	DSI D2 P		
15	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
16	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70			
17	DSI D3N		DSI_D3_N	J1-4	DSI D3 N		

18	DSI D3P		DSI_D3_P	J1-2	DSI D3 P
19	NC		NC	NC	
20	NC		NC	NC	
21	VIN	+5V	VIN	J1-21, J1-24, J1-32, J1-41, J1-48	
22	GND	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70	
23	VCC	+3V3 Portenta (Out)	VCC	J2-23, J2-34, J2-43, J2-69	
24	VIN	+5V (In/Out)	VIN	J1-21, J1-24, J1-32, J1-41, J1-48	

	mPCIE Connector (J8)								
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface	Note			
1	N/A					Connected to pin 23 of J16 connector			
2	N/A	+3V3 PCIE (Out)				From PCIE dedicated high current 3V3 power supply			
3	N/A					Connected to pin 21 of J16 connector			
4	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70					
5	N/A					Connected to pin 19 of J16 connector			
6	N/A					Connected to pin 17 of J16 connector			
7	N/A		GPIO_1	J2-48	GPIO 1/PCIE CLKREQ				
8	N/A				USIM PWR	Connected to pin C1 of SIM1 slot			
9	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70					
10	N/A				USIM DATA	Connected to pin C7 of SIM1 slot			



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11	N/A		PCIE_CK_N	J2-19	PCIE CK N	
12	N/A				USIM CLK	Connected to pin
13	N/A		PCIE_CK_P	J2-17	PCIE CK P	
14	N/A				USIM RST	Connected to pin C2 of SIM1 slot
15	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
16	N/A					Connected to pin 15 of J16 connector
17	N/A					Connected to pin 13 of J16 connector
18	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
19	N/A					Connected to pin 11 of J16 connector
20	N/A		GPIO_2	J2-50	GPIO 2/PCIE W_DISABLE	
21	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
22	N/A		PCIE_RST	J2-21	PCIE RST	Connected to pin 9 of J16 connector
23	N/A		PCIE_RX_N	J2-15	PCIE RX N	
24	N/A	+3V3 PCIE (Out)				From PCIE dedicated high current 3V3 power supply
25	N/A		PCIE_RX_P	J2-13	PCIE RX P	
26	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
27	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
28	N/A					Connected to pin 22 of J16 connector
29	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
30	N/A		I2C0_SCL		I2C 0 SCL	Connected to pin 28 of J15 connector

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31	N/A		PCIE_TX_N	J2-11	PCIE TX N	
32	N/A		I2C0_SDA		I2C 0 SDA	Connected to pin 26 of J15 connector
33	N/A		PCIE_TX_P	J2-9	PCIE TX P	
34	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
35	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
36	N/A		USB0_D_N	J1-28	USB 0 D-	Connected to USB-A connector J13
37	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
38	N/A		USB0_D_P	J1-26	USB 0 D+	Connected to USB-A connector J13
39	N/A	+3V3 PCIE (Out)				From PCIE dedicated high current 3V3 power supply
40	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
41	N/A	+3V3 PCIE (Out)				From PCIE  dedicated high  current 3V3  power supply
42	N/A					Connected to pin 20 of J16 connector
43	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
44	N/A					Connected to pin 18 of J16 connector
45	N/A					Connected to pin 12 of J16 connector
46	N/A					Connected to pin 16 of J16 connector
47	N/A					Connected to pin 10 of J16 connector

48	N/A				Connected to pin 14 of J16 connector
49	N/A				Connected to pin 8 of J16 connector
50	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70	
51	N/A				Connected to pin 6 of J16 connector
52	N/A	+3V3 PCIE (Out)			From PCIE dedicated high current 3V3 power supply

	Breakout Header (J16)										
Pin number	Silkscreen	Power Net Portenta HD Standard Pin	High-Density Pin	Interface	Note						
1	N/A	PCIE_CK_P	J2-17	PCIE CK P							
2	N/A	PCIE_TX_P	J2-9	PCIE TX P							
3	N/A	PCIE_CK_N	J2-19	PCIE CK N							
4	N/A	PCIE_TX_N	J2-11	PCIE TX N							
5	N/A	PCIE_RX_N	J2-15	PCIE RX N							
6	N/A				Connected to pin 51 of mPCIE J8 connector						
7	N/A	PCIE_RX_P	J2-13	PCIE RX P							
8	N/A				Connected to pin 49 of mPCIE J8 connector						
9	N/A	PCIE_RST	J2-21	PCIE RST	Connected to pin 22 of mPCIE J8 connector						
10	N/A				Connected to pin 47 of mPCIE J8 connector						
11	N/A				Connected to pin 19 of mPCIE J8 connector						
12	N/A				Connected to pin 45 of mPCIE J8 connector						



13	N/A					Connected to pin 17 of mPCIE J8 connector
14	N/A					Connected to pin 48 of mPCIE J8 connector
15	N/A					Connected to pin 16 of mPCIE J8 connector
16	N/A					Connected to pin 46 of mPCIE J8 connector
17	N/A					Connected to pin 6 of mPCIE J8 connector
18	N/A					Connected to pin 44 of mPCIE J8 connector
19	N/A					Connected to pin 5 of mPCIE J8 connector
20	N/A					Connected to pin 42 of mPCIE J8 connector
21	N/A					Connected to pin 3 of mPCIE J8 connector
22	N/A					Connected to pin 28 of mPCIE J8 connector
23	N/A					Connected to pin 1 of mPCIE J8 connector
24	N/A	GND	GND	J1-22, J1-31, J1-42, J1-47, J1-54 J2-24, J2-33, J2-44, J2-57, J2-70		
25	N/A		I2C0_SCL	J1-46	I2C 0 SCL	
26	N/A					Connected to pin 30 of mPCIE J8 connector
27	N/A		I2C0_SDA	J1-44	I2C 0 SDA	
28	N/A					Connected to pin 32 of mPCIE J8 connector

				Breakout Header (J17)		
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface	Note
1	N/A		SERIAL1_RX	J1-35	UART 1 RX	Connected to pin 8 of J14 connector
2	N/A		SERIAL1_TX	J1-33	UART 1 TX	Connected to pin 10 of J14 connector
3	N/A		SERIAL1_RTS	J1-37	UART 1 RTS	Connected to pin 4 of J14 connector
4	N/A		SERIAL1_CTS	J1-39	UART 1 CTS	Connected to pin 12 of J14 connector
5	N/A		GPIO_6	J2-58	GPIO 6 / PCIE RST via jumper	Connected to pin 40 of J14 connector   Can be connected to mPCIe_RST with a jumper

	Breakout Header (J9)											
Pin number	Silkscreen	Power Net	Portenta HD Standard Pin	High-Density Pin	Interface	Note						
1	3V3 PCIE	+3V3 PCIE (Out)										
2	VCC	+3V3 Portenta (Out)										
3	3V3 BUCK	+3V3 Buck (Out)										
4	N/A	PCIE EN (+3V3)	GPIO_5	J2-56	GPIO 5/ PCIE ENABLE	Connected to pin 42 of J14 connector						
5	NC		NC									
6	GND	GND										