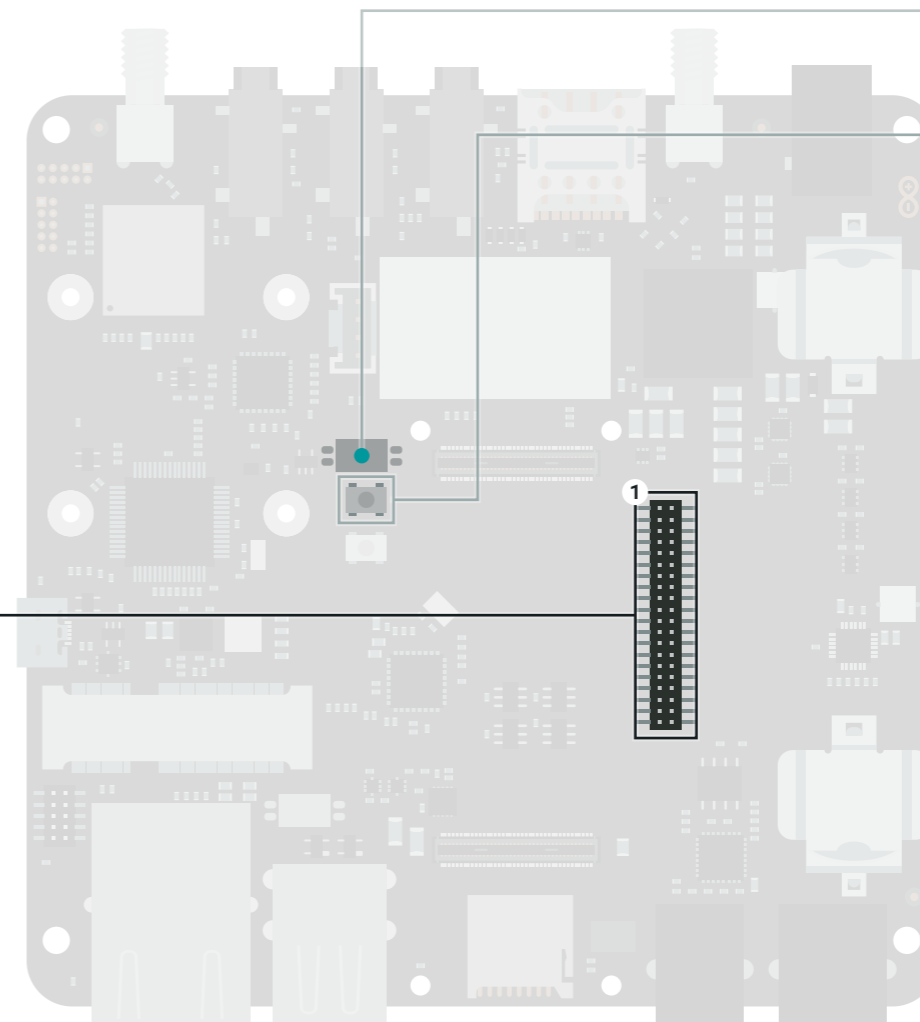
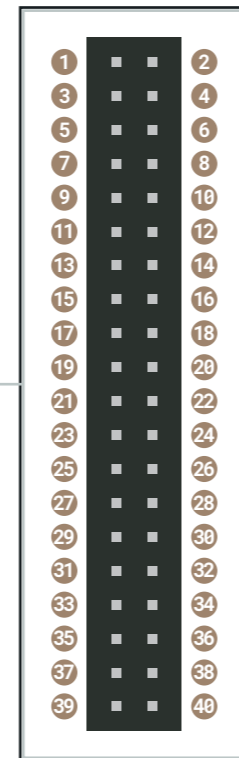


- Ground
- Power
- LED
- Internal Pin
- SWD Pin
- Digital Pin
- Analog Pin
- Other Pin
- High Density Connector

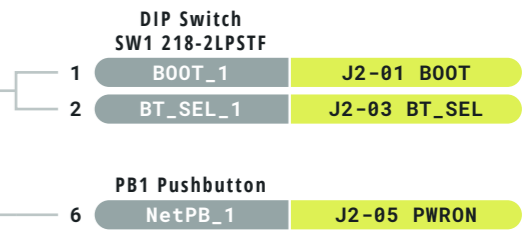
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		J5 HDC Stacker Connector	
		+3V3	1
		GND	2
		J2-71 ANALOG_VREF_P	3
		J2-72 ANALOG_VREF_N	4
Device Name (Linux)	GPIO (Linux)		
/sys/bus/iio/devices/iio:device0/in_voltage0_raw	167	J2-73 ANALOG_A0	5
/sys/bus/iio/devices/iio:device0/in_voltage1_raw	168	J2-75 ANALOG_A1	6
/sys/bus/iio/devices/iio:device0/in_voltage2_raw	169	J2-77 ANALOG_A2	7
/sys/bus/iio/devices/iio:device0/in_voltage3_raw	170	J2-79 ANALOG_A3	8
/sys/bus/iio/devices/iio:device0/in_voltage4_raw	171	J2-74 ANALOG_A4	9
/sys/bus/iio/devices/iio:device0/in_voltage5_raw	172	J2-76 ANALOG_A5	10
/sys/bus/iio/devices/iio:device0/in_voltage6_raw	173	J2-78 ANALOG_A6	11
/sys/bus/iio/devices/iio:device0/in_voltage7_raw	174	J2-80 ANALOG_A7	12
		GND	13
		GND	14
	107	J2-49 SAI CK	15
	137	J2-36 SPI1 CS	16
	106	J2-51 SAI FS	17
	134	J2-38 SPI1 CK	18
	108	J2-53 SAI D0	19
	136	J2-40 SPI1 CIPO	20
	109	J2-55 SAI D1	21
	135	J2-42 SPI1 COPI	22
	178	J1-74 SPDIF_TX	23
/sys/bus/iio/devices/iio:device0/in_voltage1_raw	168	J2-25 SERIAL3_TX	24
	178	J1-76 SPDIF_RX	25
/dev/ttyxc3	156	J2-27 SERIAL3_RX	26
/dev/i2c-1	145	J1-43 I2C1 SDA	27
		J2-29 SERIAL3_RTS	28
/dev/i2c-1	144	J1-45 I2C1 SCL	29
		J2-31 SERIAL3_CTS	30
		+3V8	31
/dev/i2c-3	149	J2-45 I2C2 SDA	32
/sys/class/pwm/pwmchip0/pwm6	189	J2-62 PWM6	33
/dev/i2c-3	148	J2-47 I2C2 SCL	34
/sys/class/pwm/pwmchip0/pwm7	190	J2-64 PWM7	35
		+5V	36
/sys/class/pwm/pwmchip0/pwm8	191	J2-66 PWM8	37
can1 (network)	177	J1-50 CAN0_TX	38
/sys/class/pwm/pwmchip0/pwm9	192	J2-68 PWM9	39
can1 (network)	178	J1-52 CAN0_RX	40



TOP VIEW



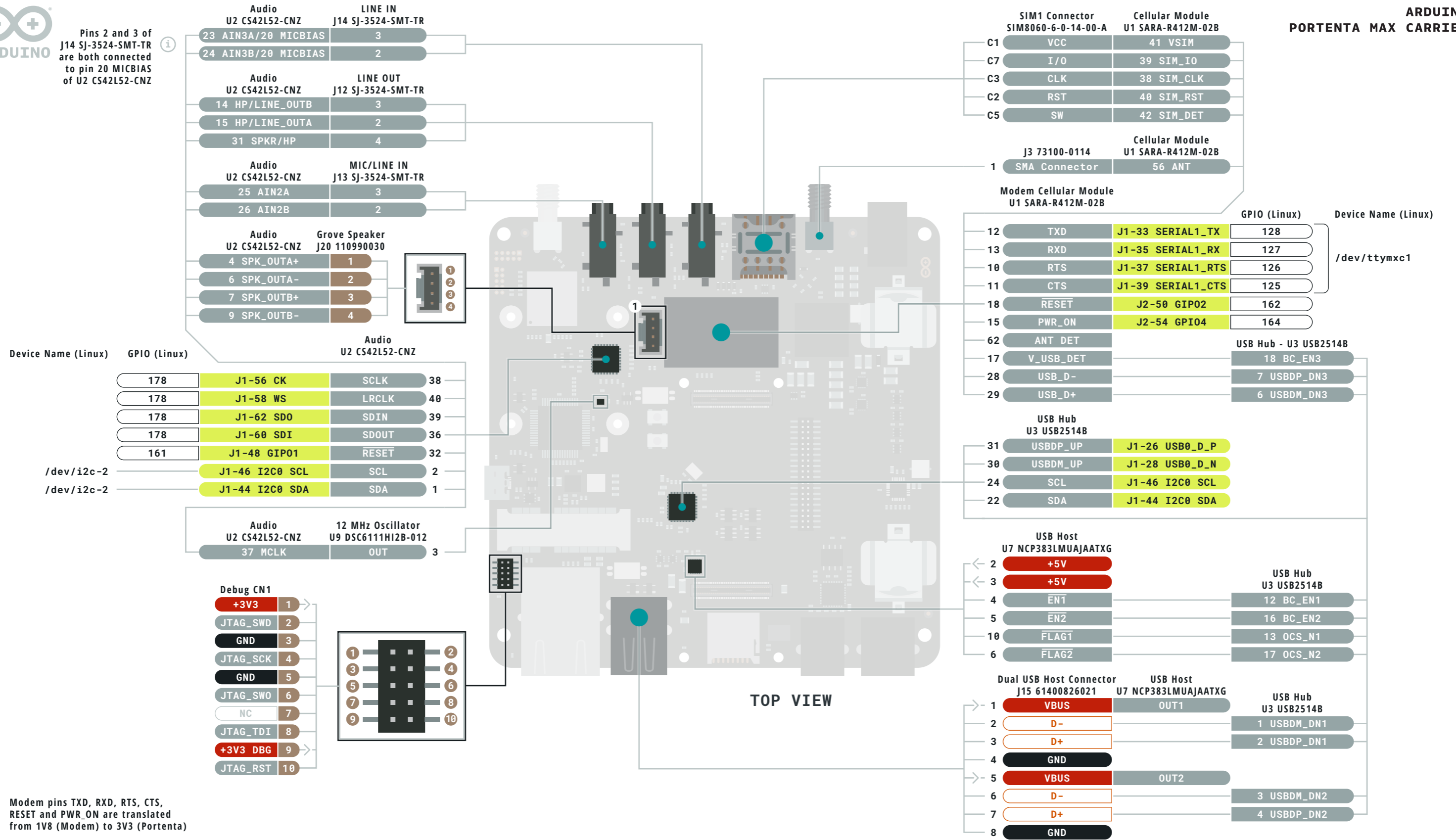
- Ground
- Power
- LED
- Internal Pin
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- Analog Pin
- Other Pin
- High Density Connector

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Pins 2 and 3 of J14 SJ-3524-SMT-TR are both connected to pin 20 MICBIAS of U2 CS42L52-CNZ

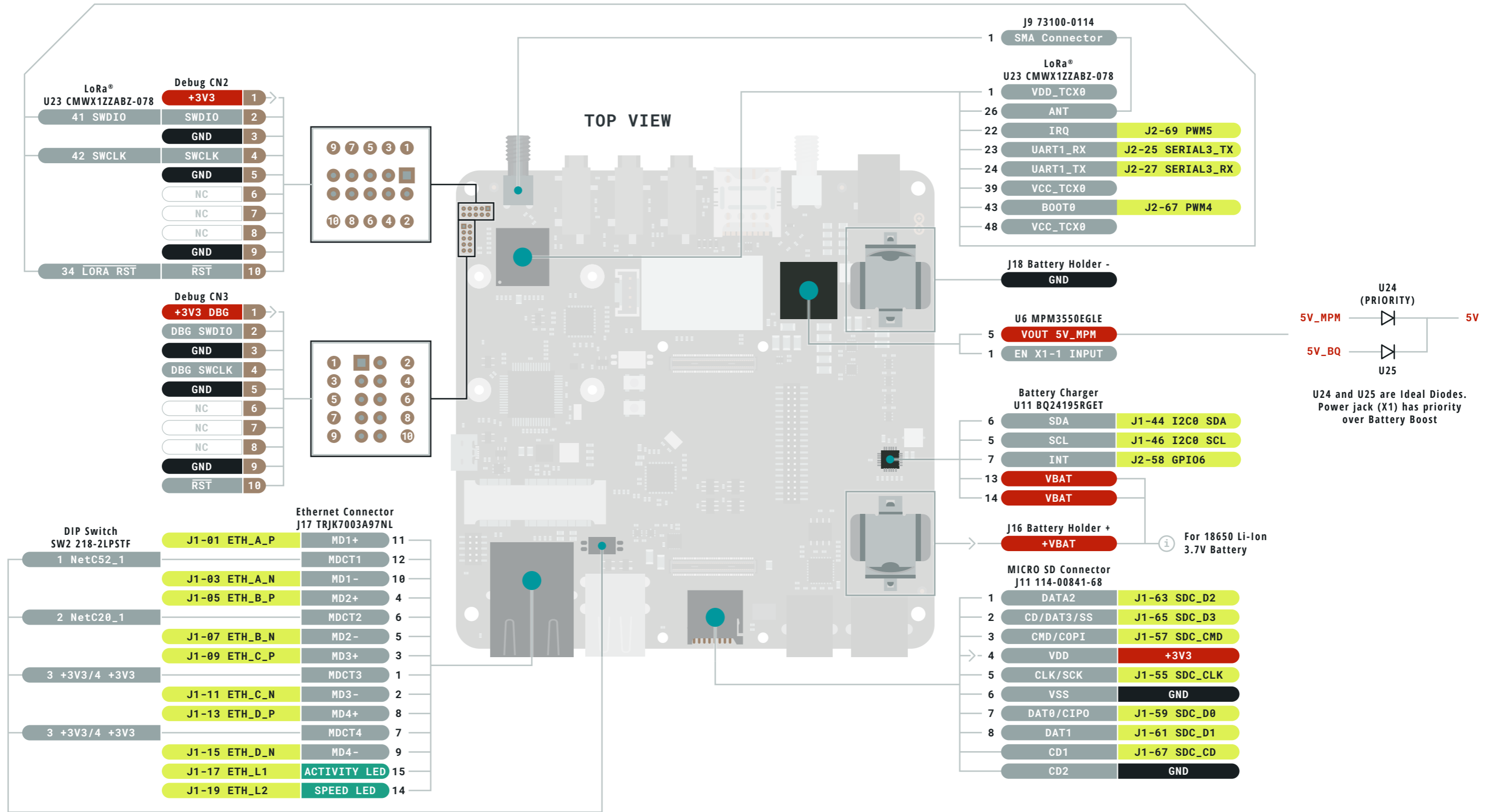


Modem pins TXD, RXD, RTS, CTS, RESET and PWR_ON are translated from 1V8 (Modem) to 3V3 (Portenta)

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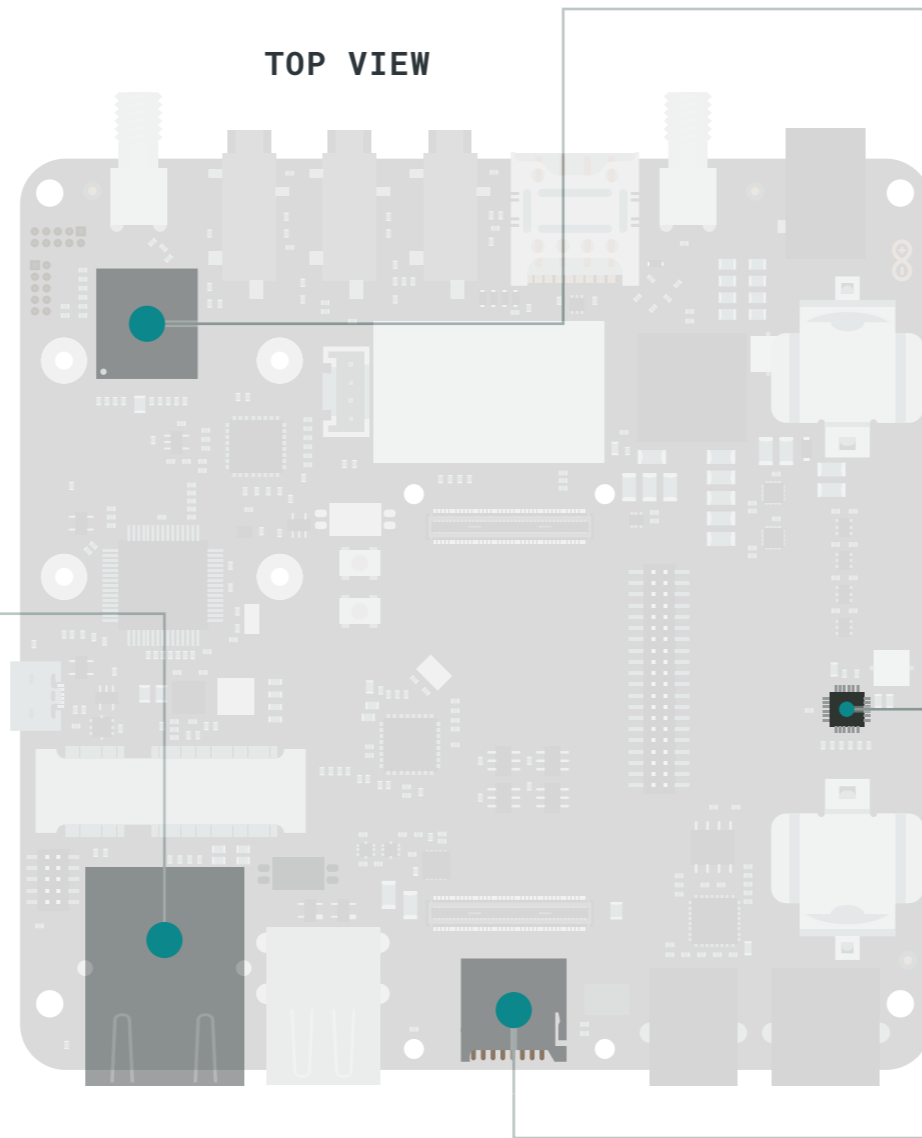
- Ground
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TOP VIEW



Device Name (Linux)	Ethernet Connector J17 TRJK7003A97NL	Pin
eth0 (network)	J1-01 ETH_A_P MD1+	11
	MDCT1	12
eth0 (network)	J1-03 ETH_A_N MD1-	10
	J1-05 ETH_B_P MD2+	4
eth0 (network)	MDCT2	6
	J1-07 ETH_B_N MD2-	5
eth0 (network)	J1-09 ETH_C_P MD3+	3
	MDCT3	1
eth0 (network)	J1-11 ETH_C_N MD3-	2
	J1-13 ETH_D_P MD4+	8
eth0 (network)	MDCT4	7
	J1-15 ETH_D_N MD4-	9
eth0 (network)	J1-17 ETH_L1 ACTIVITY LED	15
	J1-19 ETH_L2 SPEED LED	14

LoRa® U23 CMWX1ZZABZ-078		GPIO (Linux)	Device Name (Linux)
1	VDD_TCX0		
26	ANT		
22	IRQ	J2-69 PWM5	
23	UART1_RX	J2-25 SERIAL3_TX	157
24	UART1_TX	J2-27 SERIAL3_RX	156
39	VCC_TCX0		
43	B00T0	J2-67 PWM4	187
48	VCC_TCX0		

Battery Charger U11 BQ24195RGET		GPIO (Linux)	Device Name (Linux)
6	SDA	J1-44 I2C0 SDA	/dev/mmcblk1
5	SCL	J1-46 I2C0 SCL	/dev/mmcblk1
7	INT	J2-58 GPIO6	166
13	VBAT		
14	VBAT		

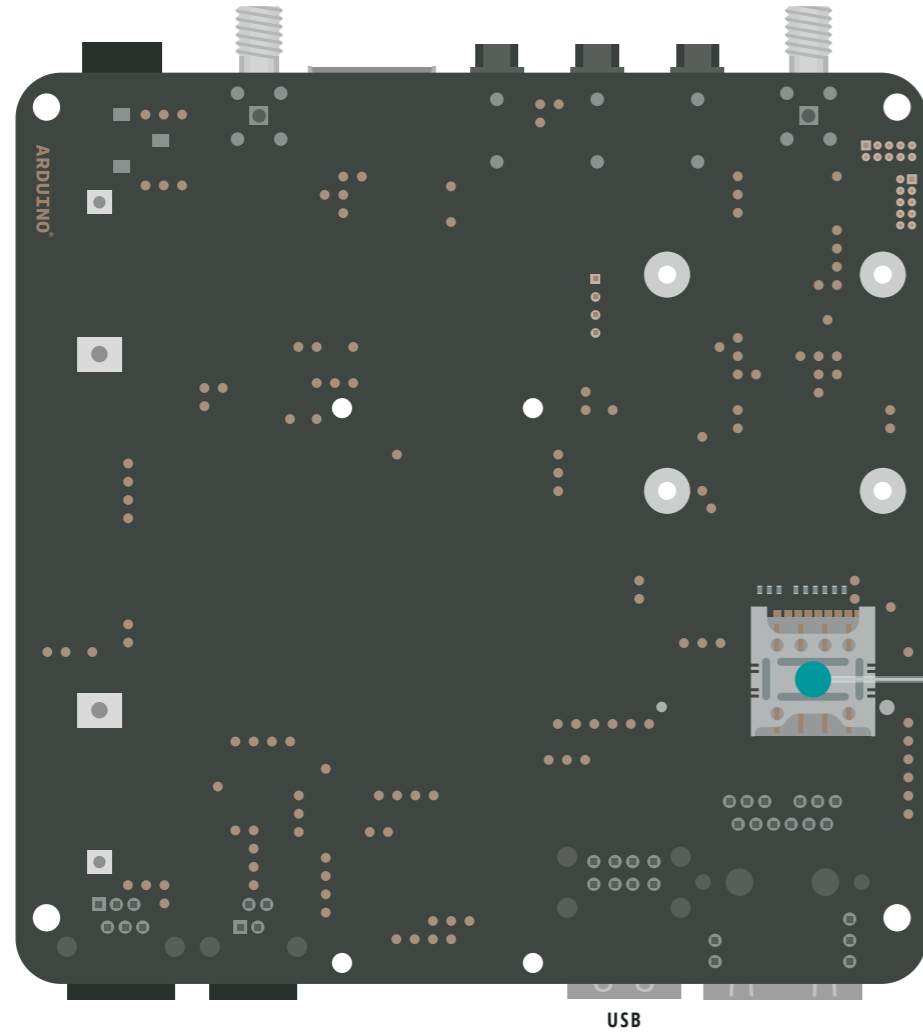
MICRO SD Connector J11 114-00841-68		Device Name (Linux)
1	DATA2 J1-63 SDC_D2	/dev/mmcblk1
2	CD/DAT3/SS J1-65 SDC_D3	
3	CMD/COPI J1-57 SDC_CMD	
4	VDD +3V3	/dev/mmcblk1
5	CLK/SCK J1-55 SDC_CLK	/dev/mmcblk1
6	VSS GND	
7	DAT0/CIPO J1-59 SDC_D0	/dev/mmcblk1
8	DAT1 J1-61 SDC_D1	
	CD1 J1-67 SDC_CD	
	CD2 GND	

- Ground
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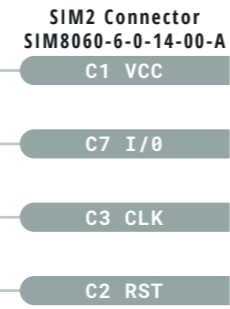
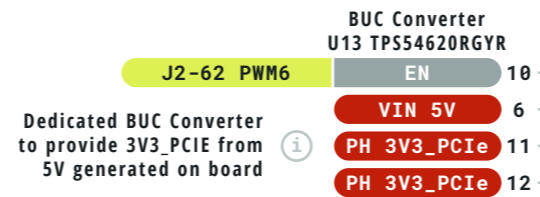
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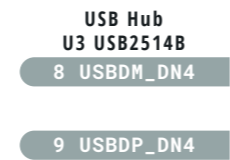
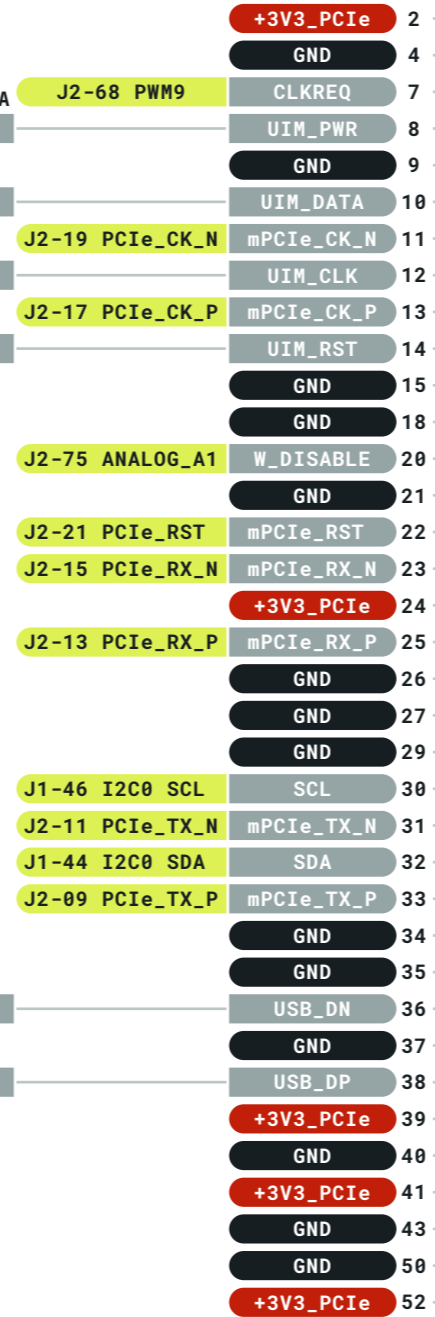
BOTTOM VIEW



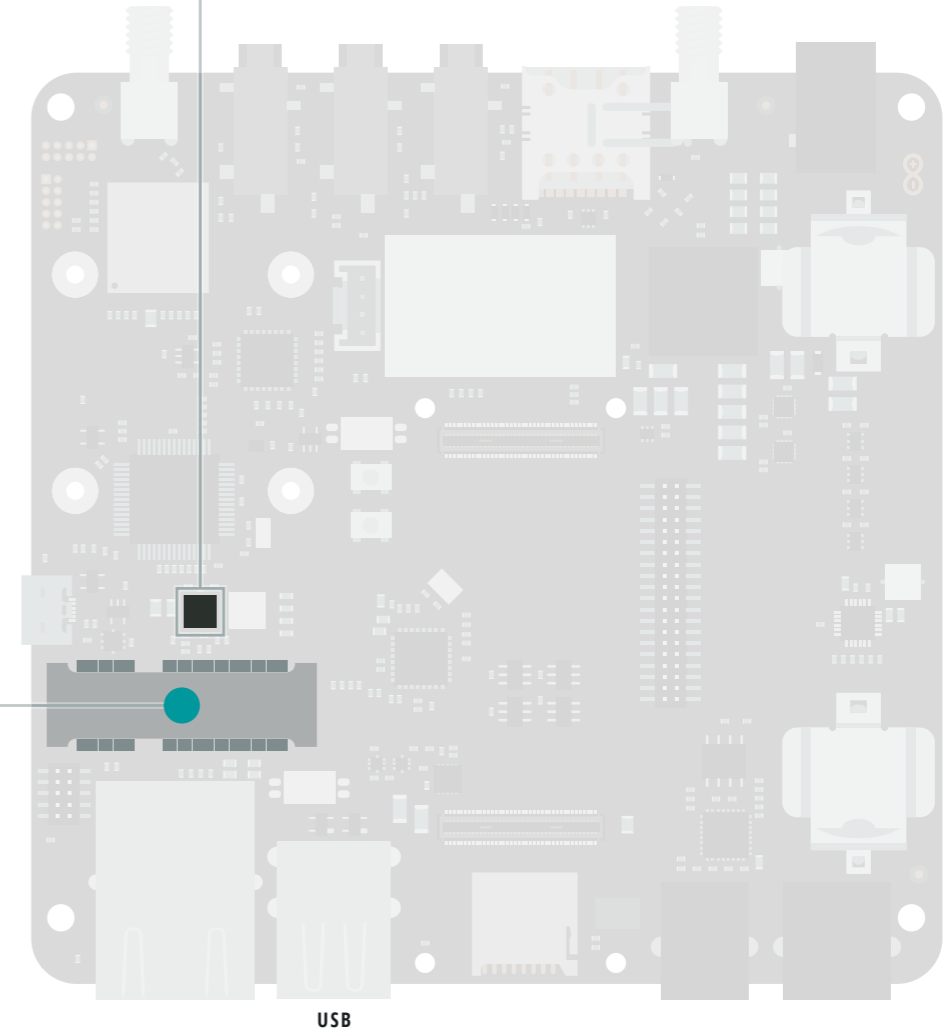
USB



Mini PCIe Connector
J8 1759546-1



TOP VIEW



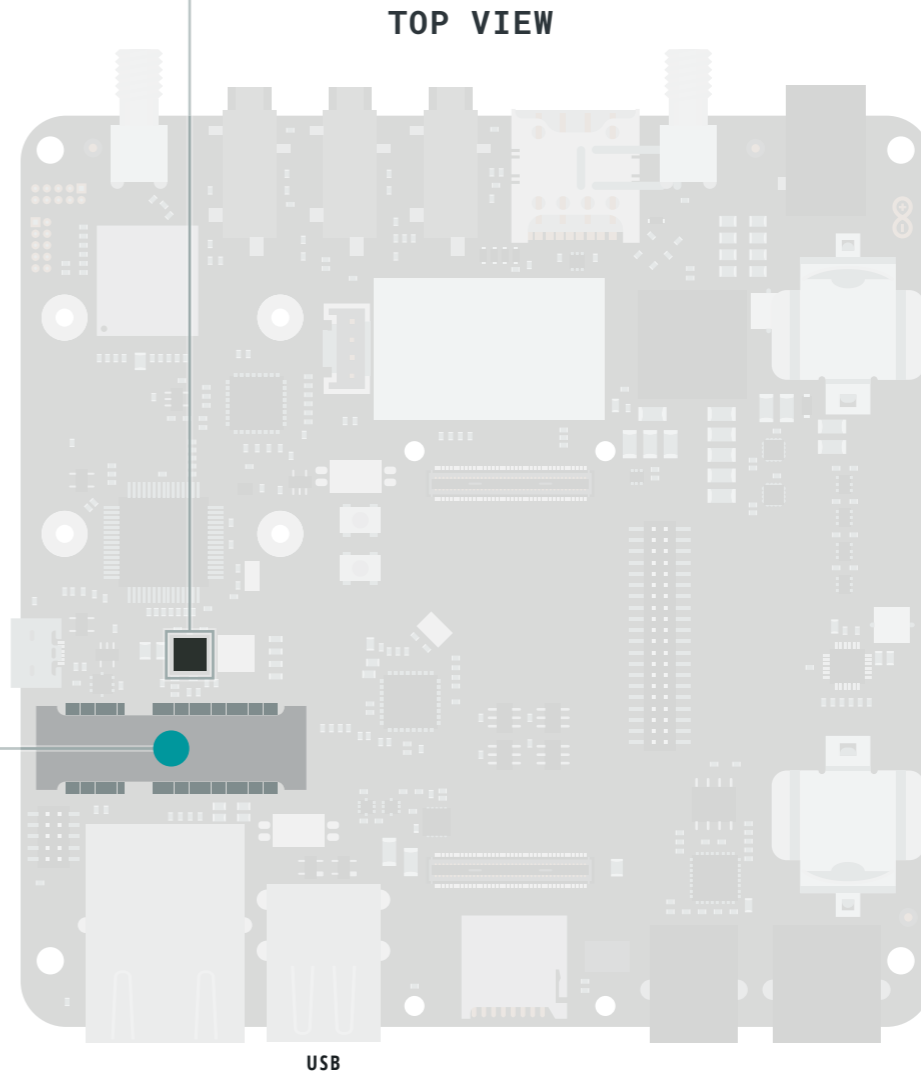
USB

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- Power
- LED
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Device Name (Linux)	GPIO (Linux)	Pin	Function	Pin	Function	
/sys/class/pwm/pwmchip0/pwm6	189	J2-62 PWM6	EN	10	BUC Converter U13 TPS54620RGYR	
			VIN 5V	6		
			PH 3V3_PCIE	11		
			PH 3V3_PCIE	12		
Dedicated BUC Converter to provide 3V3_PCIE from 5V generated on board						
/sys/class/pwm/pwmchip0/pwm9	192	J2-68 PWM9	+3V3_PCIE	2	Mini PCIe Connector J8 1759546-1	
			GND	4		
			CLKREQ	7		
			UIM_PWR	8		
			GND	9		
			UIM_DATA	10		
		J2-19 PCIe_CK_N	mPCIe_CK_N	11		
			UIM_CLK	12		
		J2-17 PCIe_CK_P	mPCIe_CK_P	13		
			UIM_RST	14		
			GND	15		
			GND	18		
		168	J2-75 ANALOG_A1	W_DISABLE	20	
			GND	21		
		89	J2-21 PCIe_RST	mPCIe_RST	22	
		J2-15 PCIe_RX_N	mPCIe_RX_N	23		
		J2-13 PCIe_RX_P	mPCIe_RX_P	25		
		GND	26			
		GND	27			
		GND	29			
/dev/i2c-2	J1-46 I2C0_SCL	SCL	30			
	J2-11 PCIe_TX_N	mPCIe_TX_N	31			
/dev/i2c-2	J1-44 I2C0_SDA	SDA	32			
	J2-09 PCIe_TX_P	mPCIe_TX_P	33			
		GND	34			
		GND	35			
		USB_DN	36			
		GND	37			
		USB_DP	38			
		+3V3_PCIE	39			
		GND	40			
		+3V3_PCIE	41			
		GND	43			
		GND	50			
		+3V3_PCIE	52			

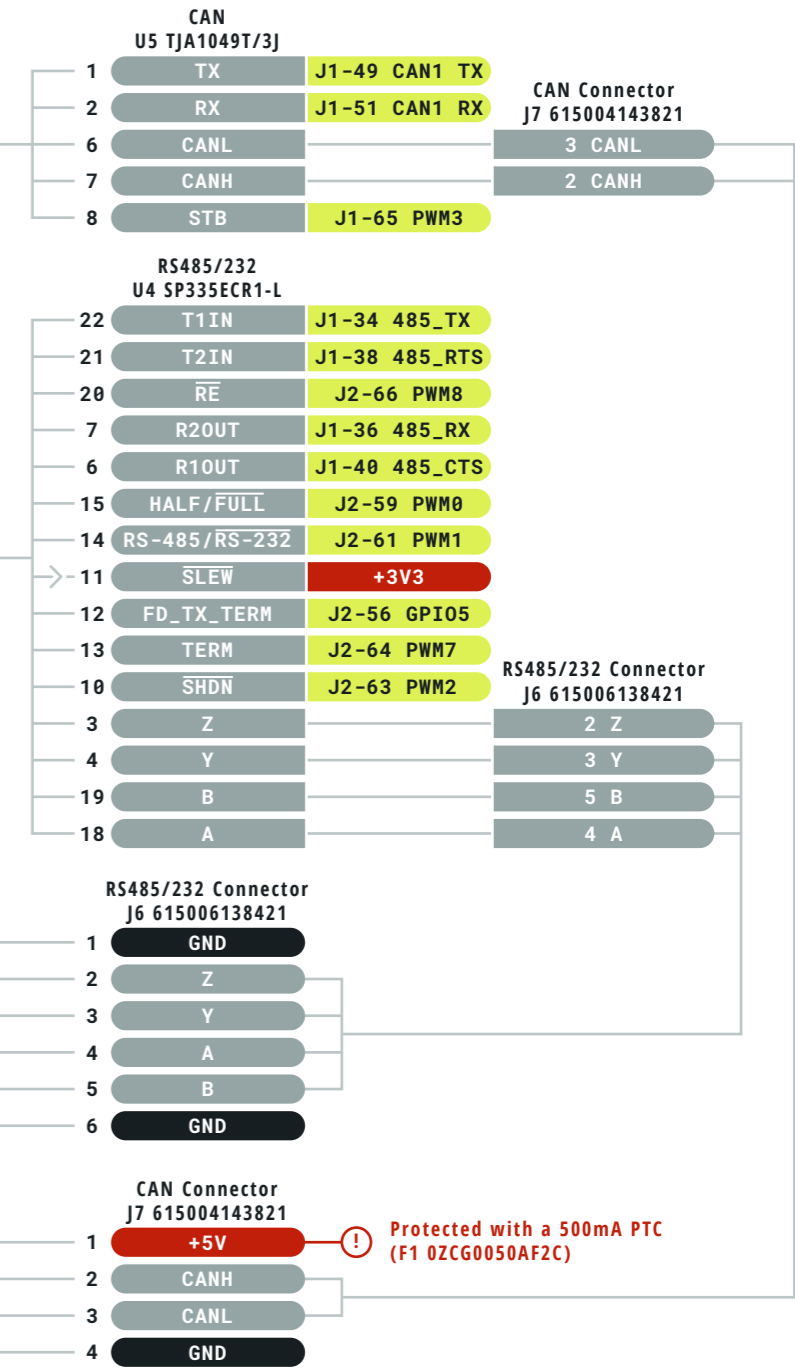
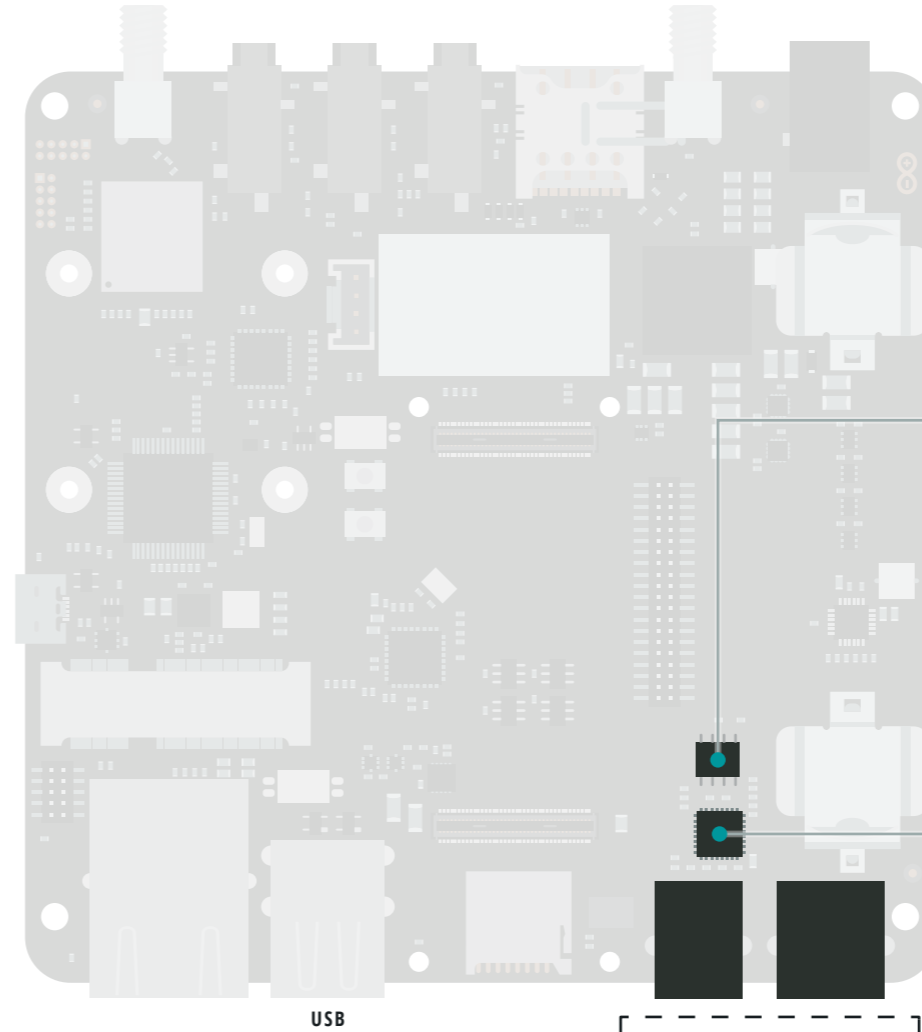
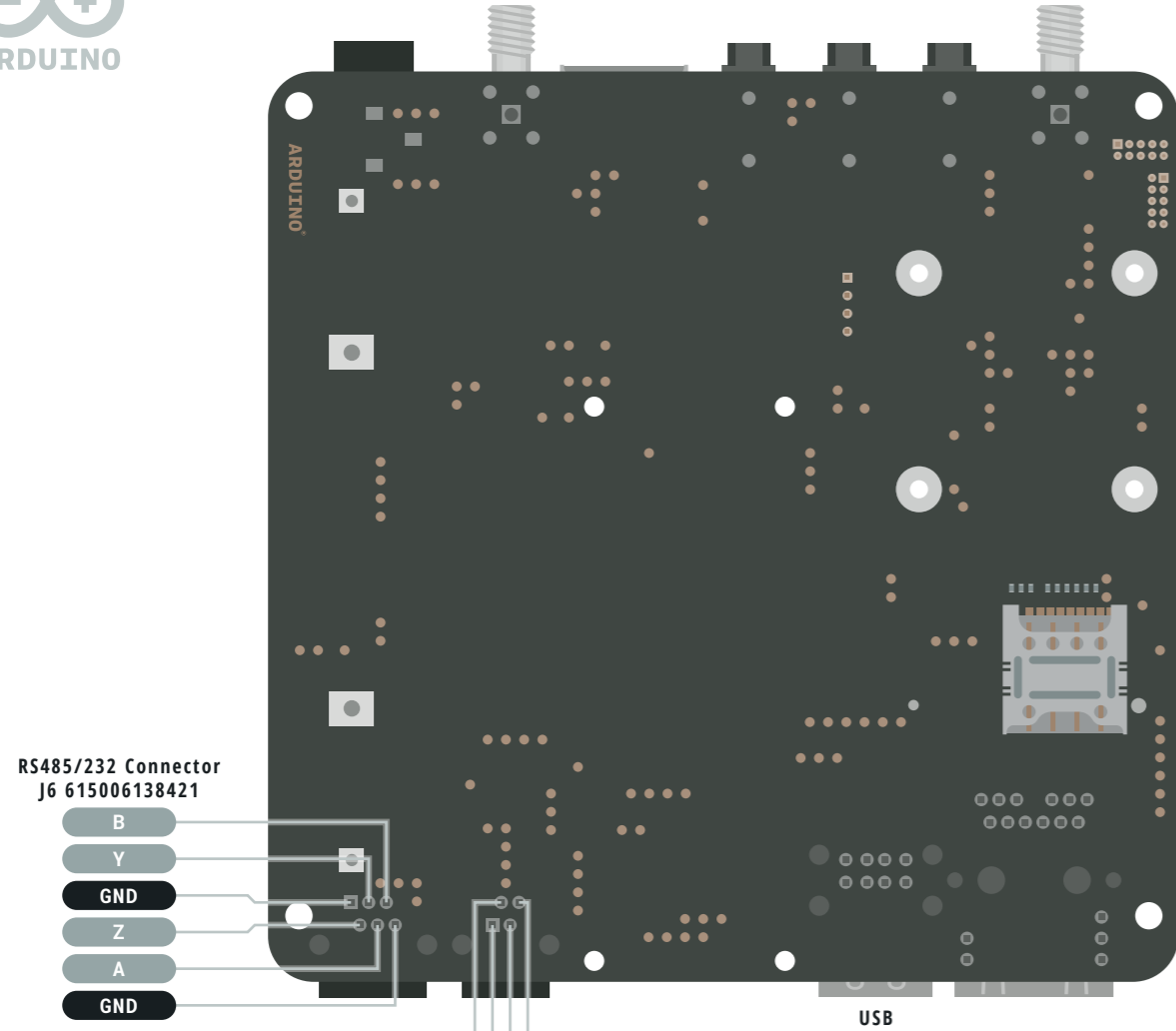


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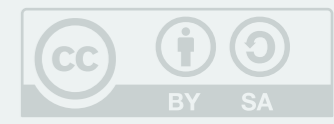
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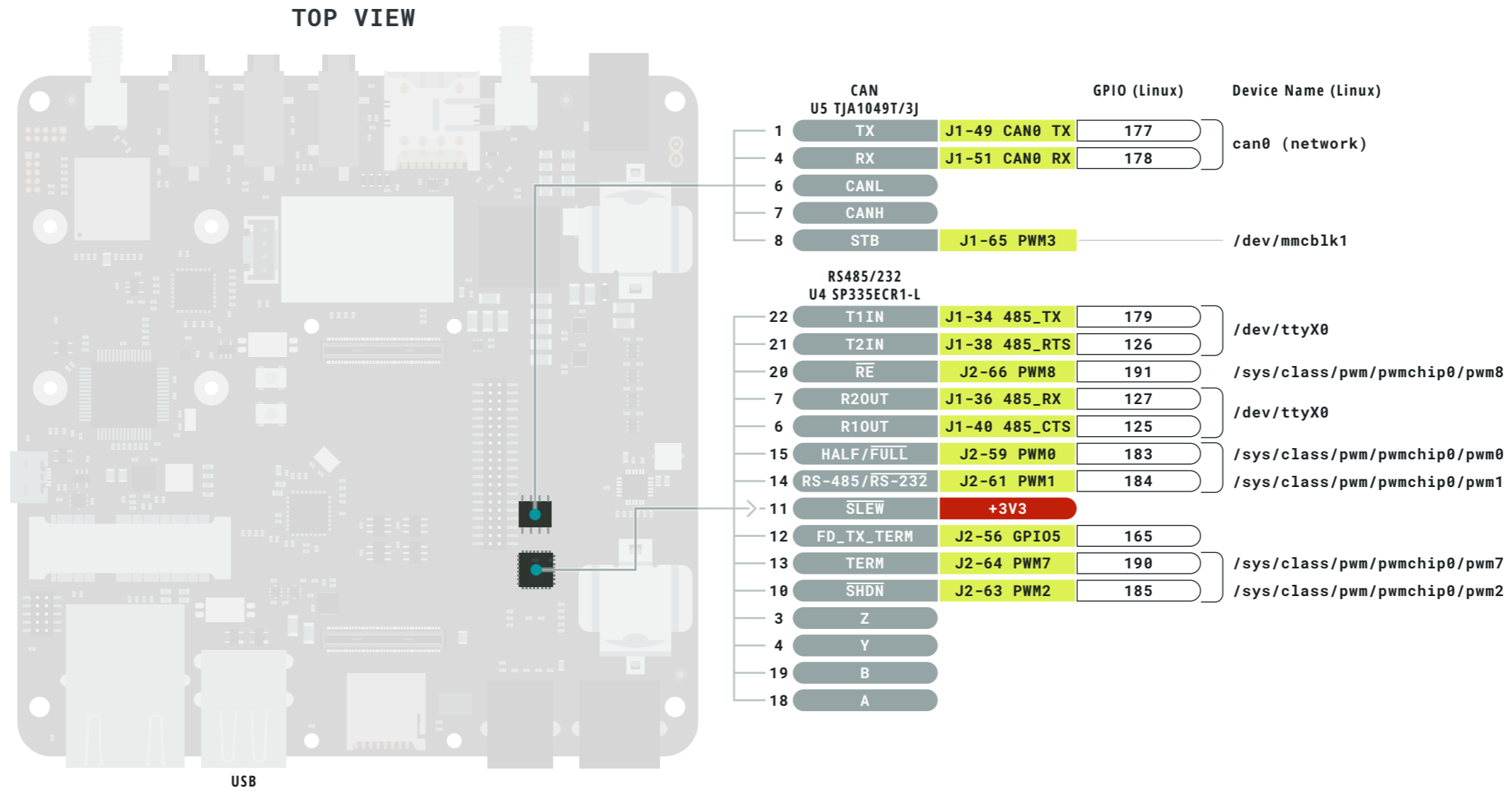
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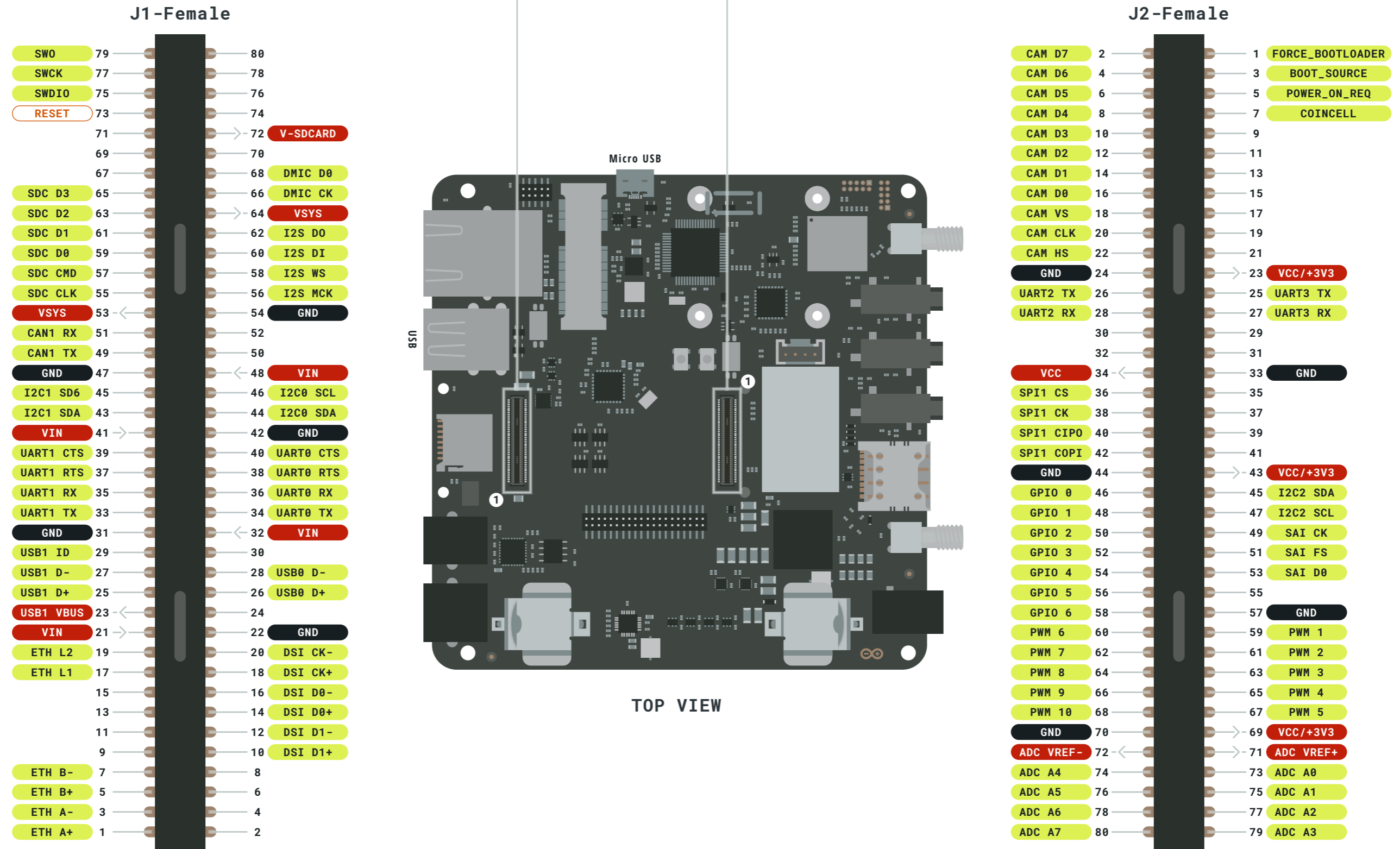
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