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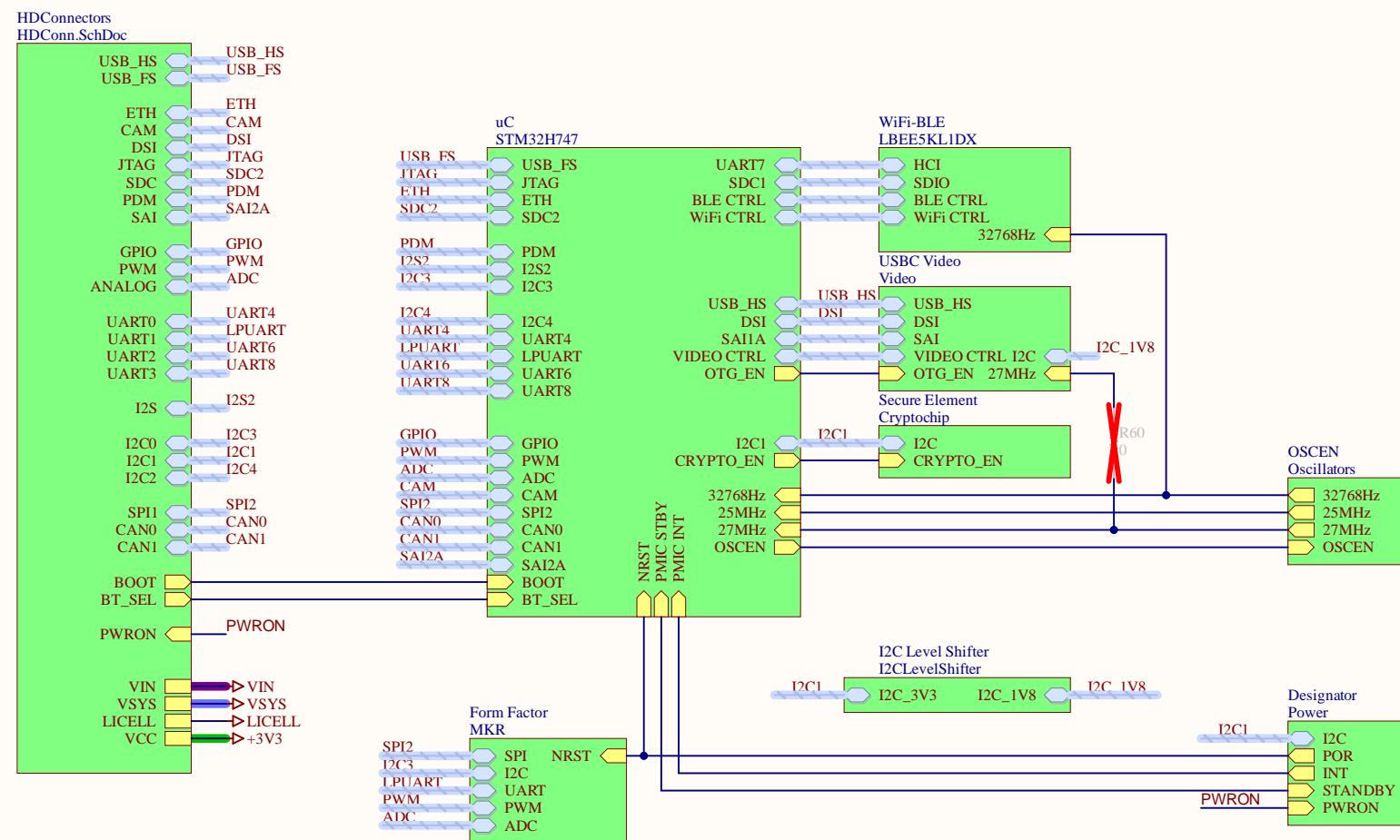
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Title: PortentaH7

ID: SL-ABX00046

Revision: V4.10

Date: 5/16/2023

Time: 5:08:29 PM

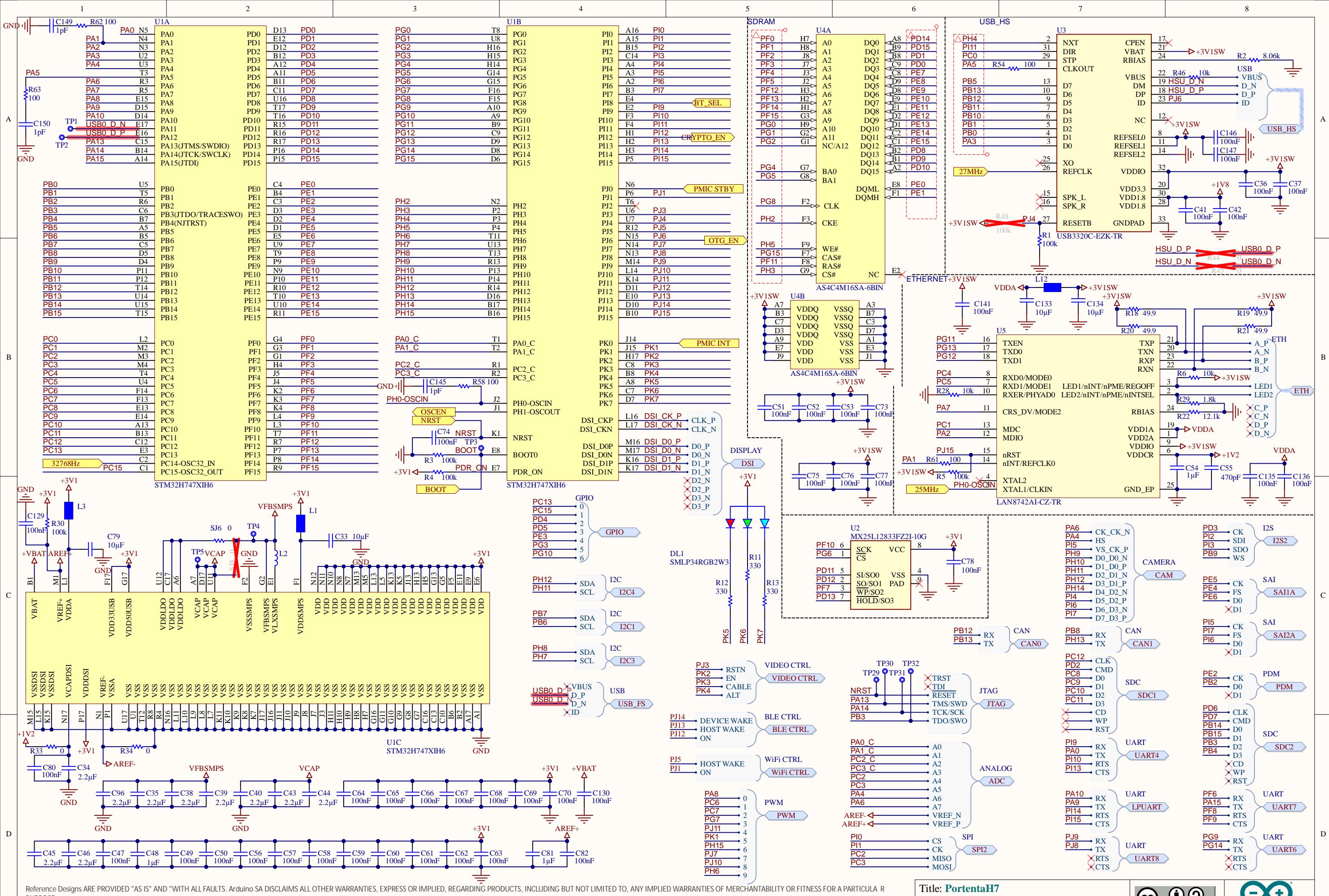
Sheet 1 of 10

File: TopView.SchDoc

Author: Arturo Guadalupi

RevAuthor: Dario Pennisi





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Title: PortentaH7

ID: SL-ABX00046

Revision: V4.10

Date: 5/16/2023 Time: 5:08:33 PM

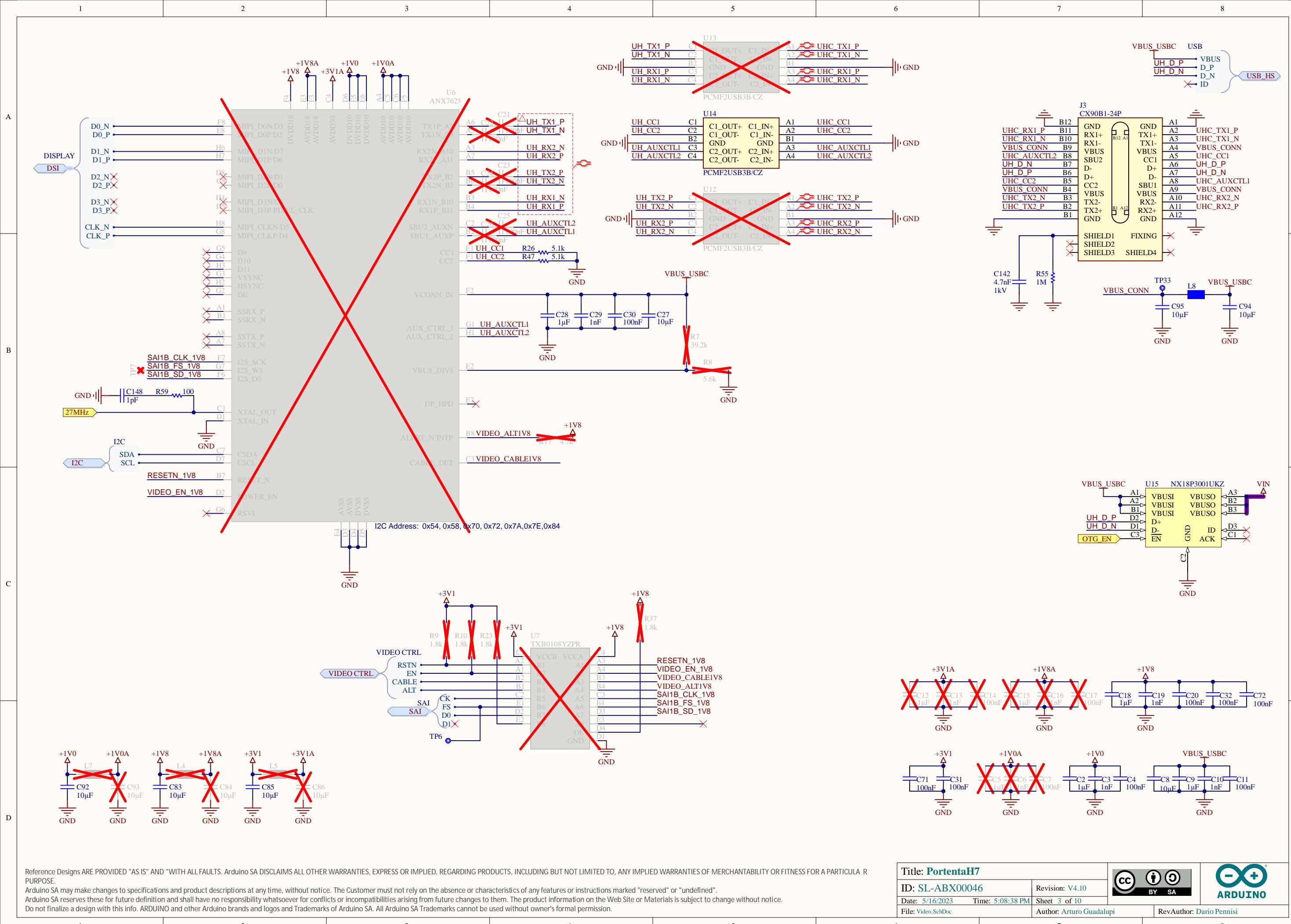
Sheet 2 of 10

File: STM32H747.SchDoc

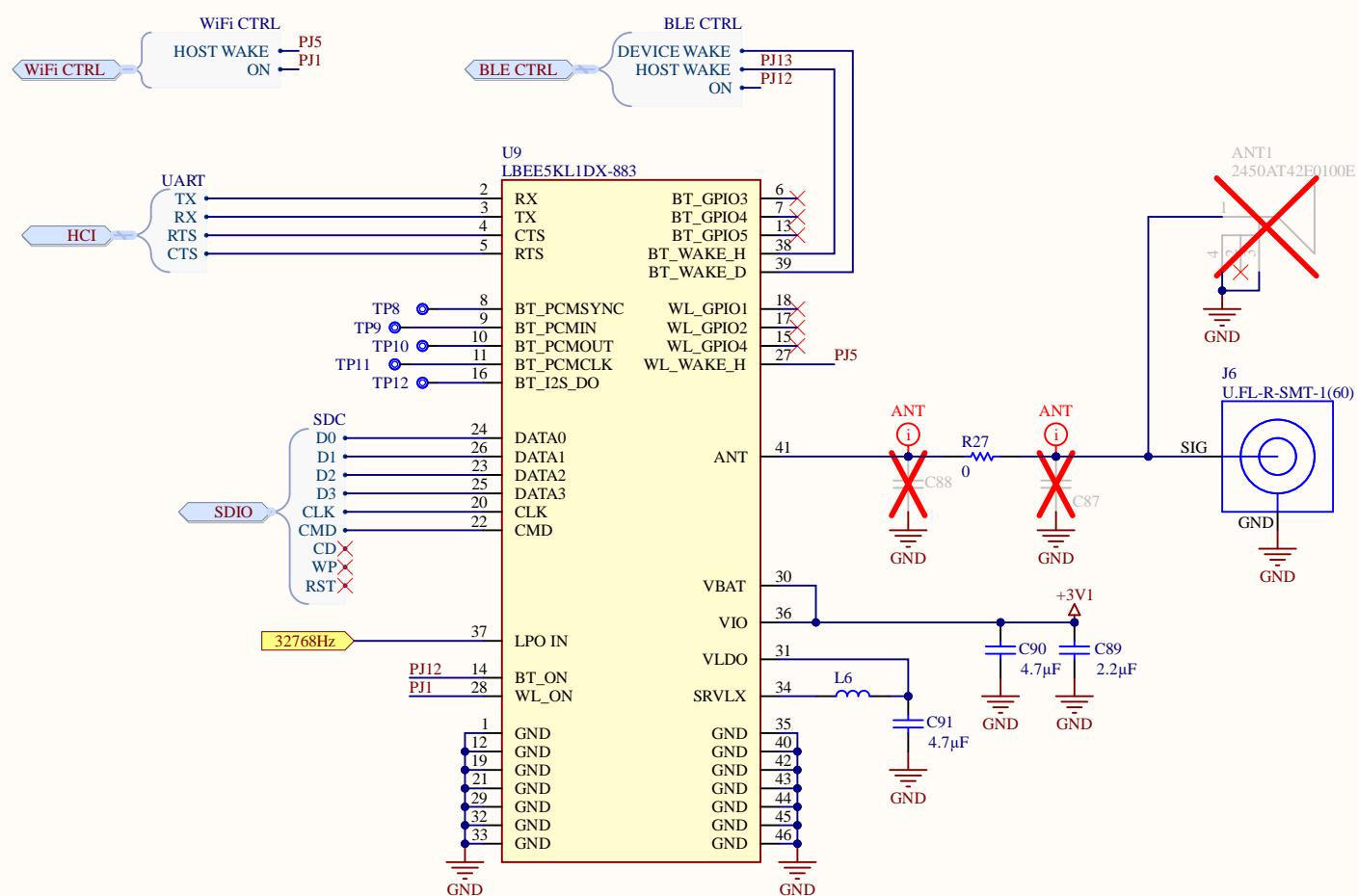
Author: Arturo Guadalupe

RevAuthor: Dario Pennisi





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Title: PortentaH7

ID: SL-ABX00046

Revision: V4.10

Date: 5/16/2023

Time: 5:08:43 PM

Sheet 4 of 10

File: LBEE5KL1DX.SchDoc

Author: Arturo Guadalupe

RevAuthor: Dario Pennisi



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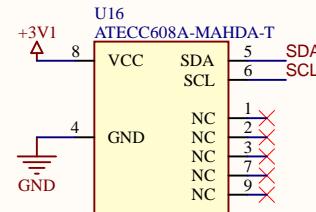
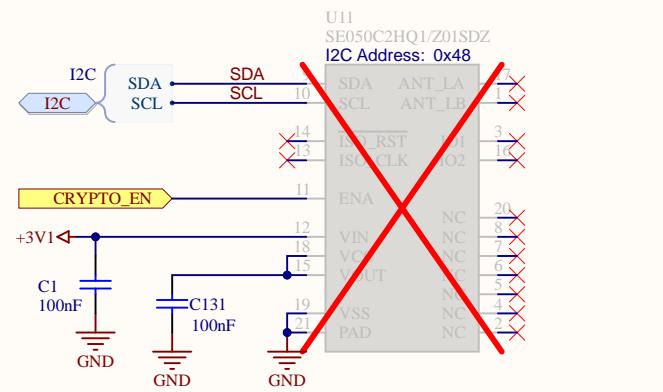
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Title: PortentaH7

ID: SL-ABX00046

Date: 5/16/2023 Time: 5:08:47 PM Sheet 5 of 10



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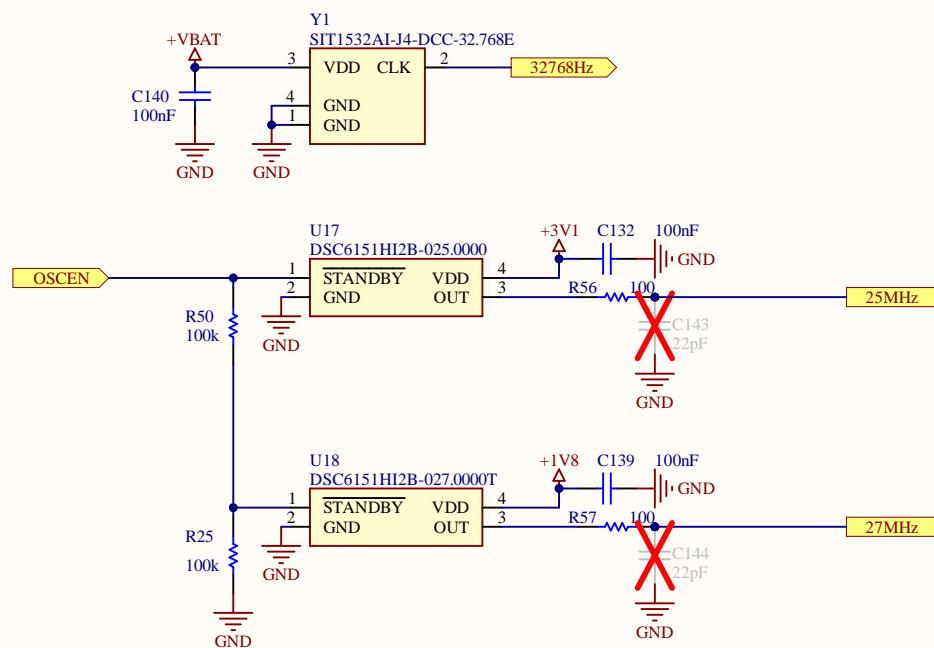
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Title: PortentaH7

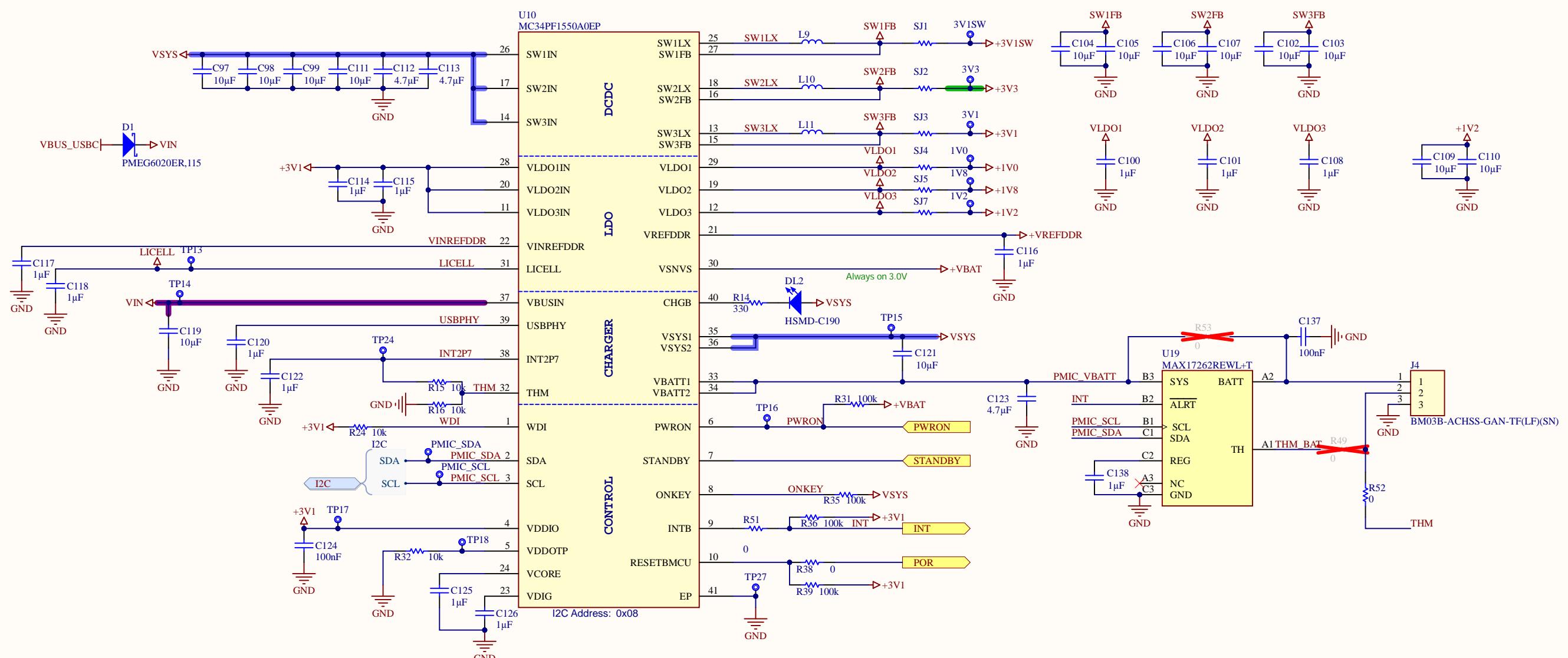
ID: SL-ABX00046

Revision: V4.10

Date: 5/16/2023 Time: 5:08:51 PM Sheet 6 of 10

File: Oscillators.SchDoc





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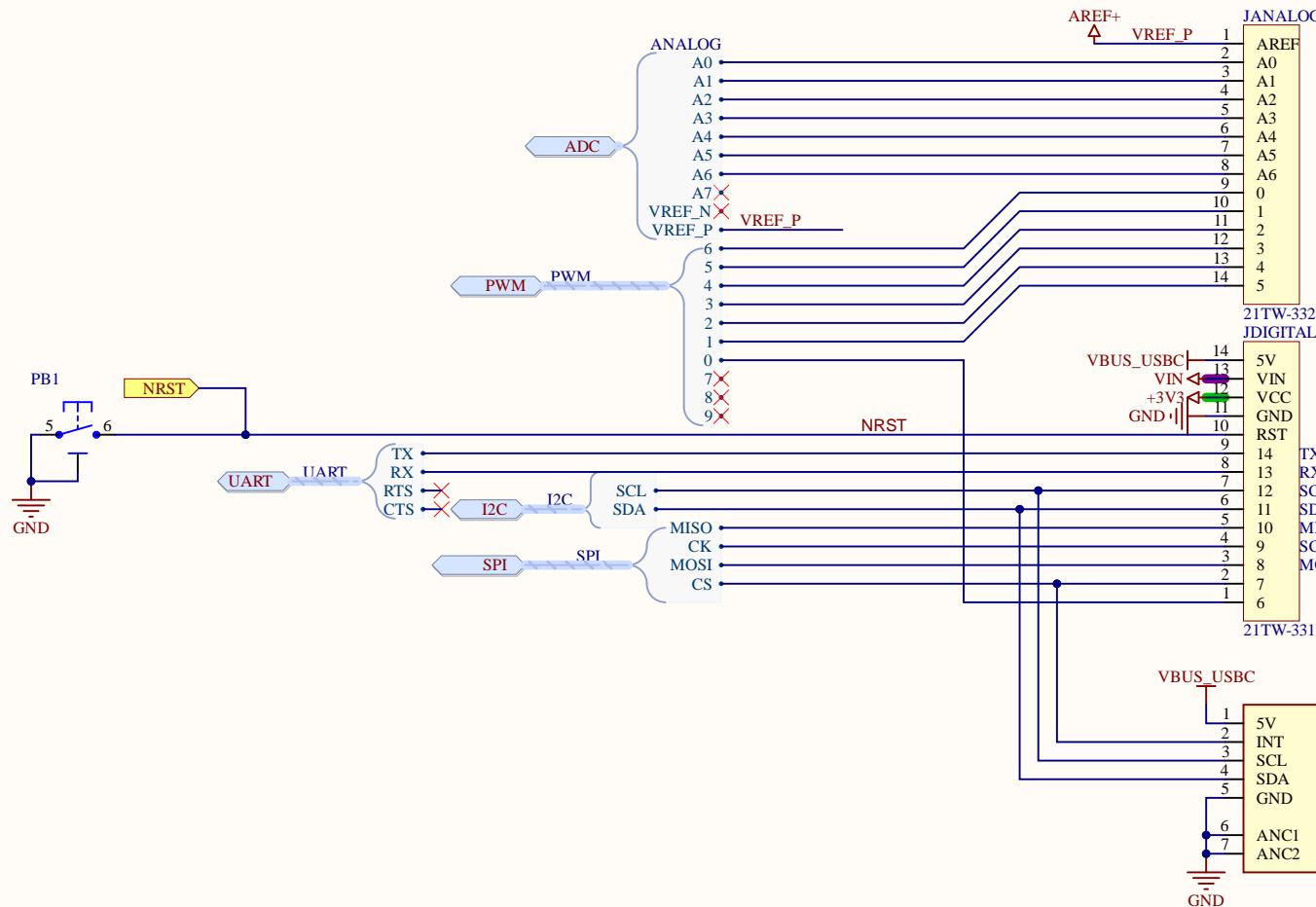
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Title: PortentaH7

ID: SL-ABX00046

Revision: V4.10

Date: 5/16/2023

Time: 5:09:00 PM

Sheet 8 of 10

File: MKR.SchDoc

Author: Arturo Guadalupe

RevAuthor: Dario Pennisi



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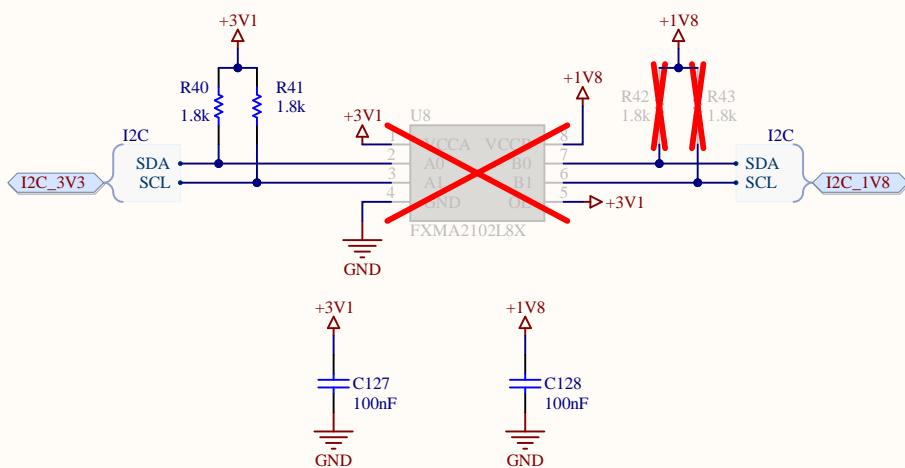
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Title: PortentaH7

ID: SL-ABX00046

Revision: V4.10

Date: 5/16/2023

Time: 5:09:05 PM

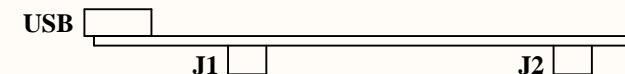
Sheet 9 of 10

File: I2CLevelShifter.SchDoc

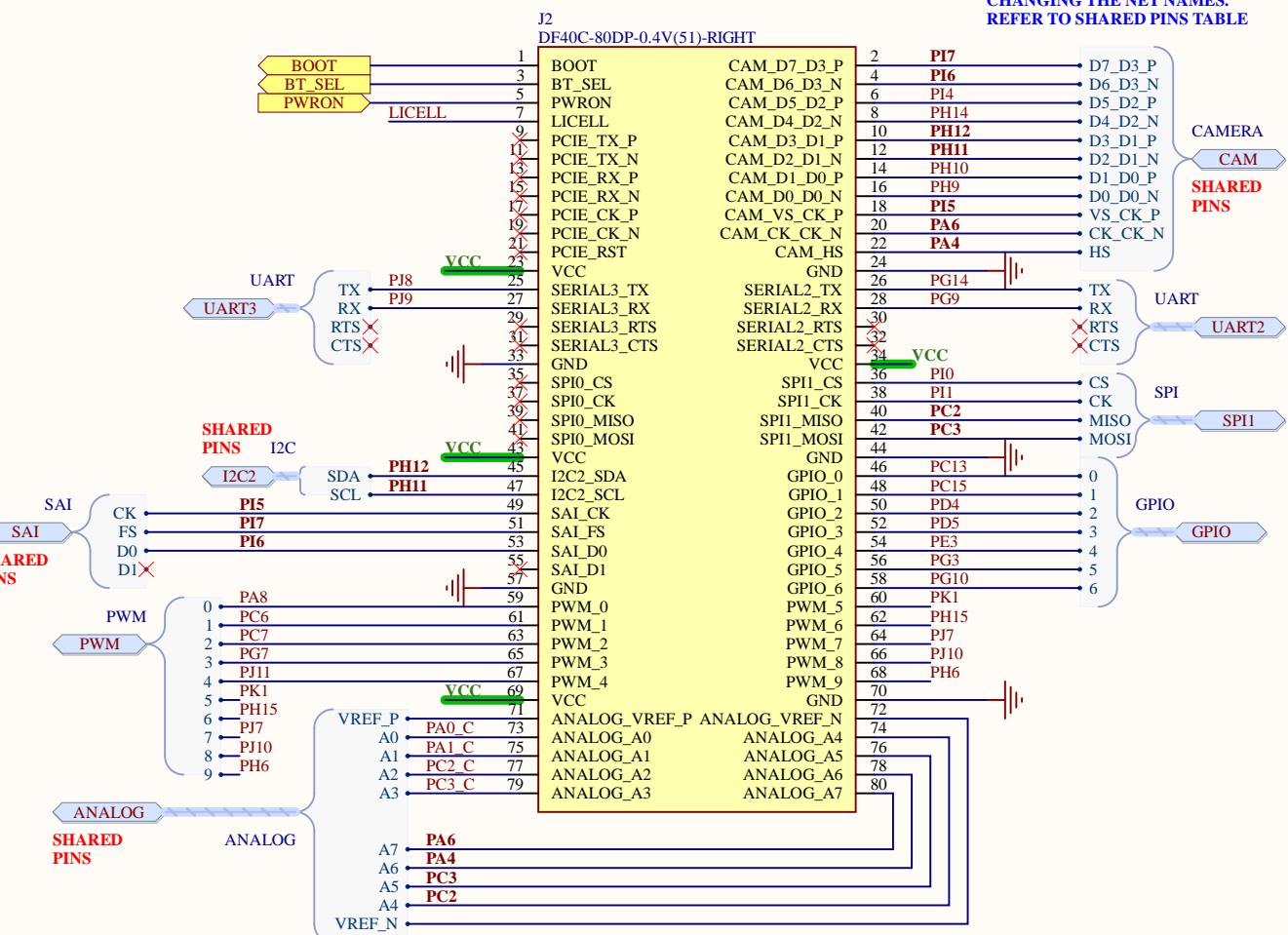
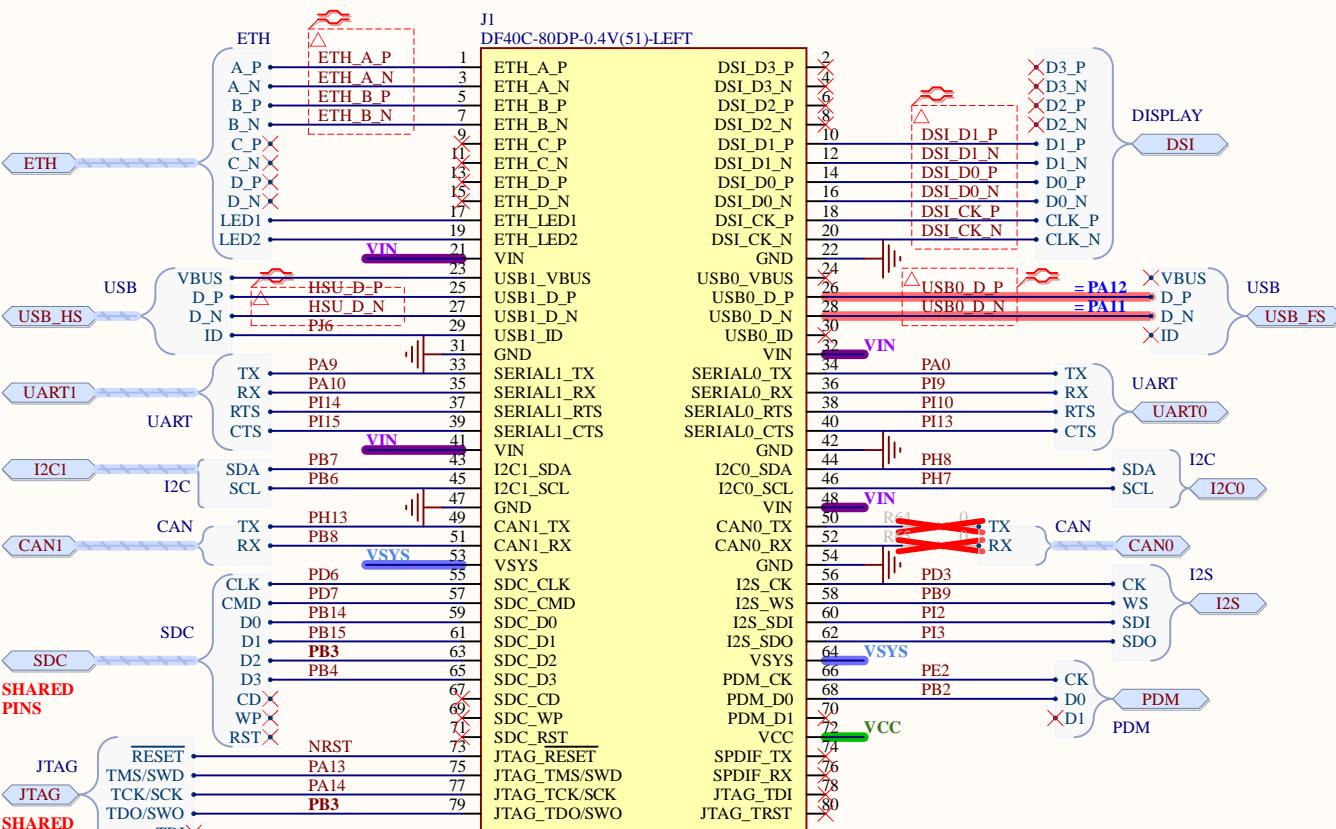
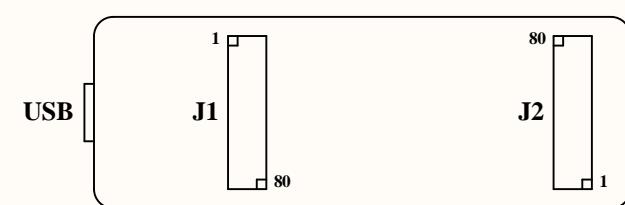
Author: Arturo Guadalupi



Board side view



Board BOTTOM view



SHARED PINS TABLE

| NET | BUS 1 | BUS 2 |
|------|--------|--------|
| PB3 | JTAG | SDC2 |
| PH11 | CAM | I2C4 |
| PH12 | CAM | I2C4 |
| PI5 | CAM | SAI2A |
| PI6 | CAM | SAI2A |
| PI7 | CAM | SAI2A |
| PA4 | CAM | ANALOG |
| PA6 | CAM | ANALOG |
| PC2 | ANALOG | SPI2 |
| PC3 | ANALOG | SPI2 |

POWER NETS TABLE

| NET | TYPE | RANGES | DESCRIPTION |
|--------|---------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| VIN | PORTENTA INPUT | 4.1V to 6V. | Default 3.3V, PMIC (U10) programmable output. |
| VCC | PORTENTA OUTPUT | 1.1V to 3.3V in steps, max 1A. | Default 3.3V, PMIC (U10) programmable output. |
| VSYS | PORTENTA RESERVED OUTPUT | RESERVED, DO NOT USE 3.5V to 4.2V, max 600mA. | Default 4.2V, PMIC (U10) programmable output which is also the input voltage of the bucks inside the PMIC itself. |
| LICELL | PORTENTA INPUT | Coin cell max 3.6V, max 46uA. | Max 4uA with PMIC (U10) in coin cell mode, max 46uA with PMIC in standby/suspend mode. |

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Title: HD Connectors

ID: SI-ABX00046

ID: SL-ABA00040 Revision: V4.10 Date: 5/16/2023 Time: 5:09:09 PM Sheet 10 of 10



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