

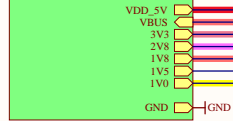
**Project:** *DM1098LUX-D-LITE*  
**Current Revision:** *R1M0E1*

**DM1098LUX-D-LITE**      **Revision History:**

| Date       | Revision         | Reason for Change                      | Changes Implemented                                   |
|------------|------------------|--|---|
| 04/22/2021 | Initial release  |  |   |
| 06/07/2021 | R0M0E0 -> R1M1E1 | 1. USB SS port direction control issue | 1. Switched CC1 CC2 on logic control chip for USB3 SS |

|                                |                       |                            |  |  |
|--------------------------------|-----------------------|----------------------------|--|--|
| Title <i>DM1098LUX-D-LITE</i>  |                       |                            | Luxonis Holding<br>1925 Harmony Park Drive<br>Westminster, CO<br>80234 | Cannot open file<br>C:\Users\BrianLuxonis\Documents\1461 |
| Size: <i>Tabloid</i>           | Number: <i>DXXXX</i>  | Revision: <i>R1M0E1</i>    |  |  |
| Date: <i>07/06/2021</i>        | Time: <i>07:54:38</i> | Sheet <i>1</i> of <i>9</i> | <i>United States</i>   |  |
| Drawn by: <i>David Malovrh</i> |                       |                            |  |  |

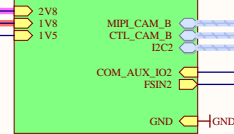
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DM1098LUXD-LITE\_Power\_Supply.SchDoc



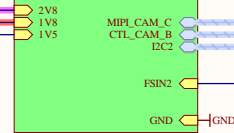
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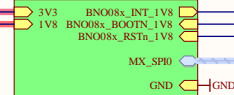
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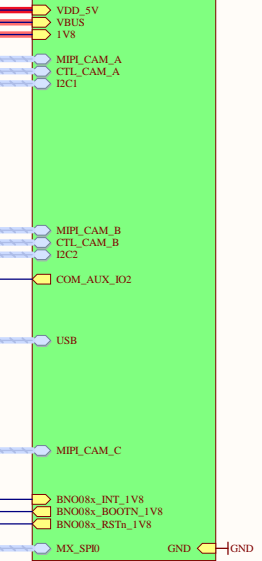
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U\_DM1098LUXD-LITE\_IMU  
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U\_DM1098LUXD-LITE\_Connector  
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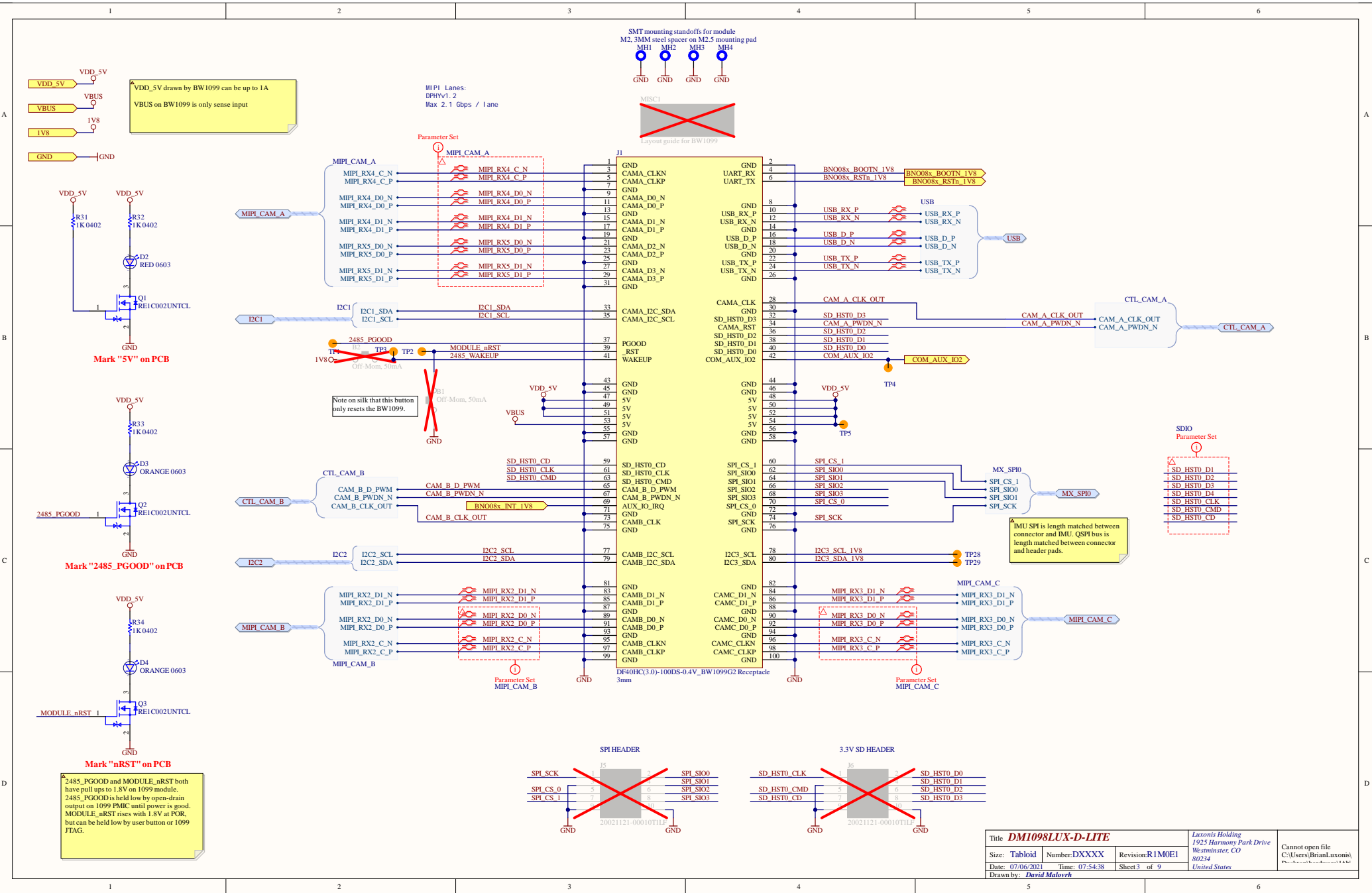
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Mounting slots created on PCB  
w/primitives.

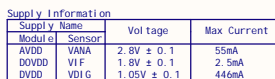


|                                |                      |                         |  |   |
|--------------------------------|----------------------|-------------------------|--|---|
| Title <b>DM1098LUX-D-LITE</b>  |                      |                         | Laxsonis Holding<br>1925 Harmony Park Drive<br>Westminster, CO<br>80234<br>United States | Cannot open file<br>C:\Users\BrianLaxsonis\Documents\1446 |
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| Date: 07/06/2021               | Time: 07:54:38       | Sheet 2 of 9            |  |   |
| Drawn by: <b>David Malovrh</b> |                      |                         |  |   |

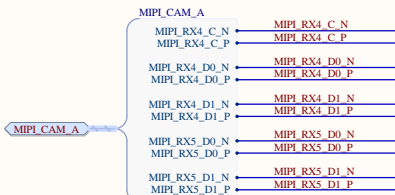
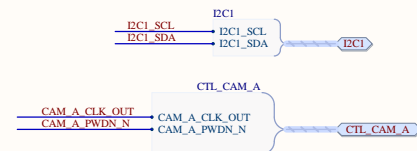
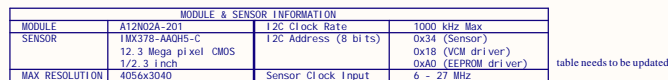


|                                |                       |                         |  |   |
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| Title <b>DM1098LUX-D-LITE</b>  |                       |                         | <i>Luxonis Holding</i><br><i>1925 Harmony Park Drive</i>       | Cannot open file<br>C:\Users\BrianLuxonis\<br>Project\kdm1098\Title |
| Size: <b>Tabloid</b>           | Number: <b>DXXXX</b>  | Revision: <b>R1M0E1</b> | <i>Westminster, CO</i><br><i>80234</i><br><i>United States</i> |   |
| Date: <i>07/06/2021</i>        | Time: <i>07:54:38</i> | Sheet 3 of 9            |  |   |
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|                                |                       |                            |  |   |
|--------------------------------|-----------------------|----------------------------|--|---|
| Title <b>DM1098LUX-D-LITE</b>  |                       |                            | <i>Luxonis Holding</i><br><i>1925 Harmony Park Drive</i> | Cannot open file<br>C:\Users\Brian\Luxonis\Private\DM1098LUX-D-LITE |
| Size: <b>Tabloid</b>           | Number: <b>DXXXX</b>  | Revision: <b>R1M0E1</b>    | <i>Westminster, CO</i><br><i>80234</i>                   |   |
| Date: <b>07/06/2021</b>        | Time: <b>07:54:38</b> | Sheet <b>4</b> of <b>9</b> | <i>United States</i>                                     |   |
| Drawn by: <i>David Malowrh</i> |                       |                            |  |   |

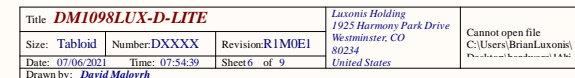
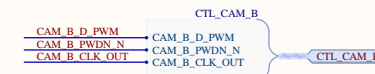


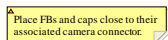
Note: It is still a limitation that the clock source for the cameras must be shared between CAMA/C and CAMB/D.





current consumption not updated  
test if it works without 1V5

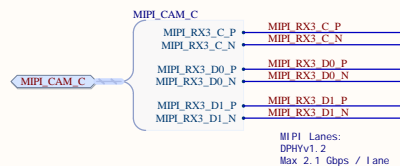




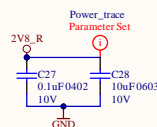
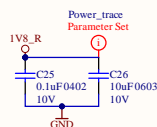
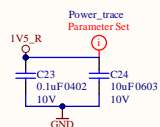
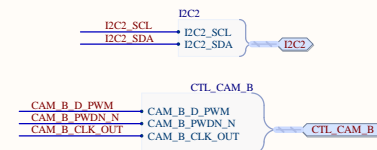
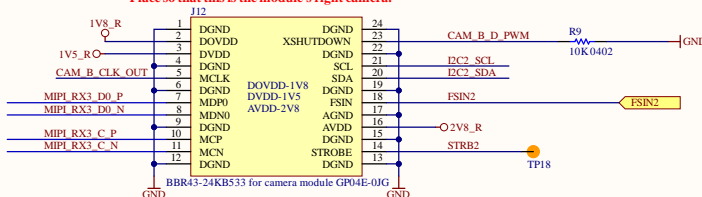
### Supply Information

| Supply Name |         | Voltage | Max Current |
|-------------|---------|---------|-------------|
| Module      | Sensor  |         |             |
| DOVDD       | VDD-I/O | 1.8V    | 2.5mA       |
| DVDD        | VDD-D   | 1.5V    | 52mA        |
| AVDD        | VDD-A   | 2.8V    | 42mA        |

current consumption not updated  
test if it works without IV5



**Mark "RIGHT" on PCB**  
**Place so that this is the module's right camera.**



Because the stereo pair of OV9282 modules hard wired to CAM\_B (below) no additional reset circuitry is required to account for different conditions. This means that "CAM1" (Left) is reset via CAM\_PWDN, and "CAM2" (Right), is reset via CAM\_PWM. This also means that the signal CAM\_AUX\_I01 is no longer required here, as that was only possible if the stereo pair were connected to CAM\_C or CAM\_D

0V9282 sensor I2C address may be changed via I2C protocol. Therefore, in order to assign different I2C address to the sensors on the same I2C bus, one needs to hold the reset of all sensors except one and assign a unique I2C address to the active sensor. This routine should be applied for all sensors in the initialization routine.

| CAM NO | CAMERA CONNECTOR |          |              |             |
|--------|------------------|----------|--------------|-------------|
|        | CAM_A            | CAM_B    | CAM_C        | CAM_D       |
| CAM 1  | CAM_PWDN         | CAM_PWDN | CAM_PWDN     | CAM_PWDN    |
| CAM 2  | CAM_PWM          | CAM_PWM  | CAM_AUX I/O1 | CAM_AUX I/O |

|                                |                       |                            |  |   |
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| Size: <b>Tabloid</b>           | Number: <b>DXXXX</b>  | Revision: <b>R1M0E1</b>    |  |   |
| Date: <b>07/06/2021</b>        | Time: <b>07:54:39</b> | Sheet <b>7</b> of <b>9</b> |  |   |
| Drawn by: <b>David Malorch</b> |                       |                            |  |   |

inrush current limiter

|                                 |                      |                         |   |  |   |
|---------------------------------|----------------------|-------------------------|---|--|---|
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| Size: <b>Tabloid</b>            | Number: <b>DXXXX</b> | Revision: <b>R1M0E1</b> |   |  |   |
| Date: 07/06/2021                | Time: 07:54:39       | Sheet 8 of 9            |   |  |   |
| Drawn by: <b>David Malovich</b> |                      |                         |   |  |   |



