

# OPT8241-CDK-EVM IB 10-50 REV2P0V1

This schematic is provided 'as is'  
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The author accepts no liability if it causes any damage  
to your system or any other equipment.

For evaluation only; not FCC approved for resale.

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Revision Date

Op1 18-Dec-14  
Added inverter to Illum\_EN path  
Corrected voltage levels in page 6 and 9  
Removed an unconnected resistor in page 9

Revision Date

Op2 18-Dec-14  
Changed inverter reference designator.  
Added manufacturer part numbers.

Revision Date

Op3 22-Dec-14  
Removed Buck power supply.  
Changed inductor and diode part numbers in the Boost page.  
Changed package of MOS Driver in the Laser and LED drivers.

Revision Date

Op4 13-Jan-14  
Removed comparator from Quad laser page.  
Added EEPROM for board ID.  
Fixed all single point nets.  
Fixed duplicate part references.

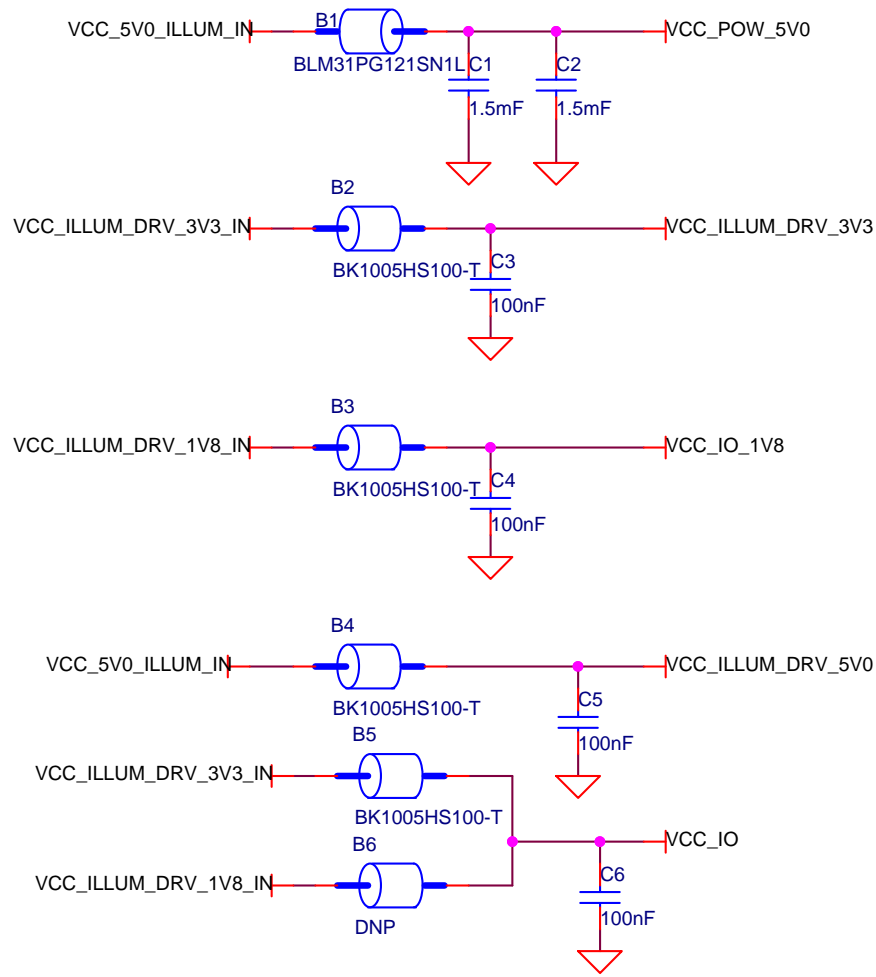
Revision Date

2p0 4-May-15  
Added 0 ohm resistor in quad laser path.  
Removed an inductor from Quad laser page.  
Power switching MOS changed to CSD16301Q2.  
Comparator added for temperature feedback loop.  
Red signage LED to show that laser is turned on added.  
Laser power supply current is controllablenow.  
Reduced the current limit to 2.2A nominal as we were meeting spec at a current lower than 2.5A.

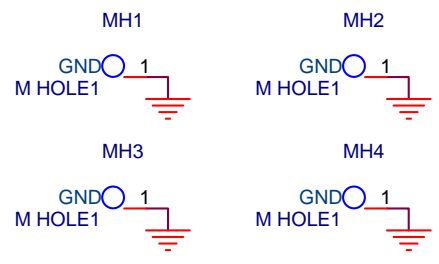
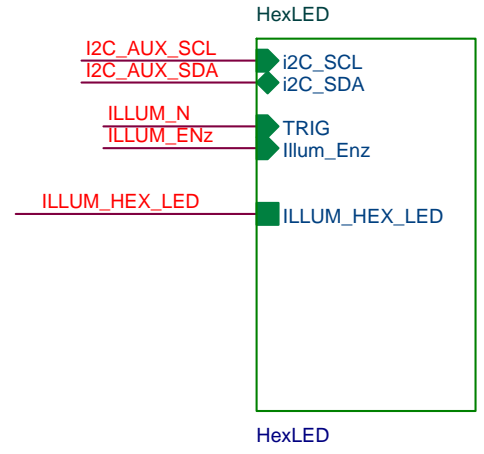
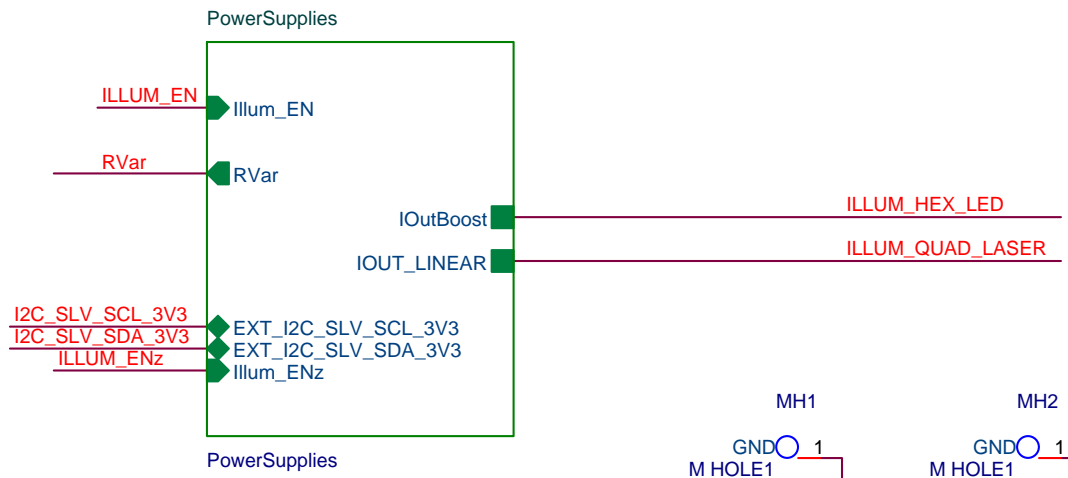
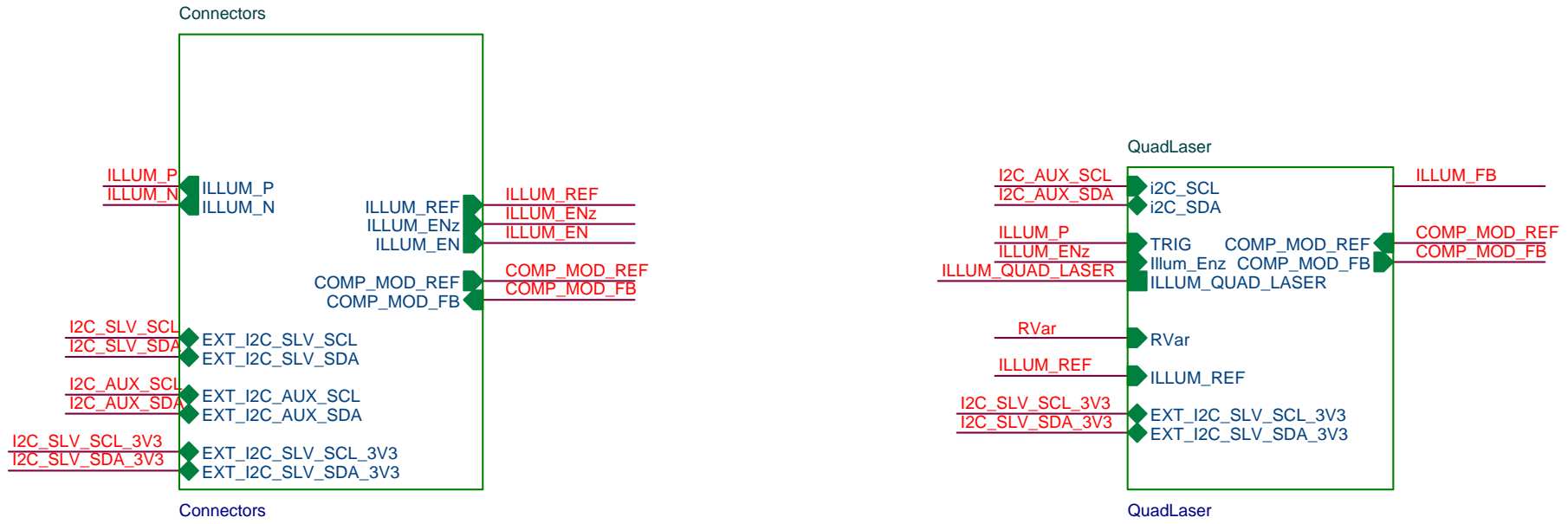
Revision Date

2p0v1  
Increased all mounting hole sizes. No electrical or functional changes.

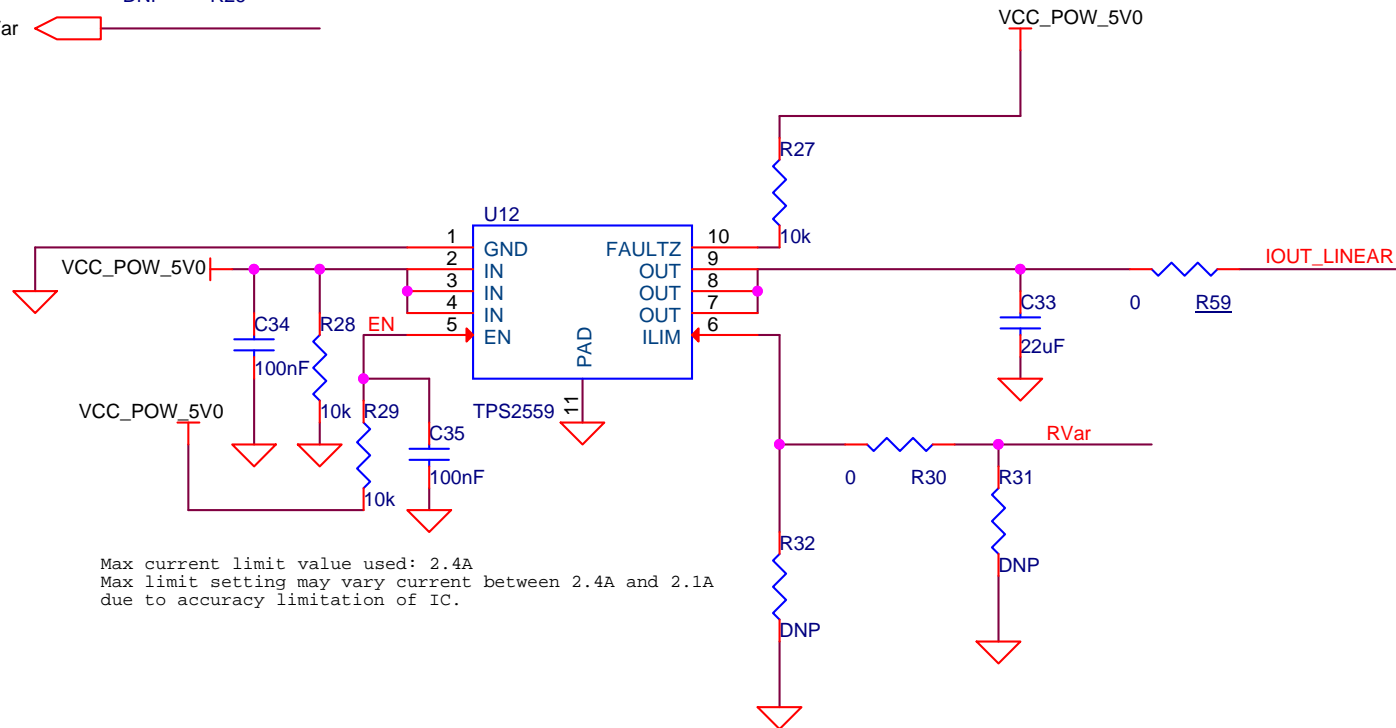
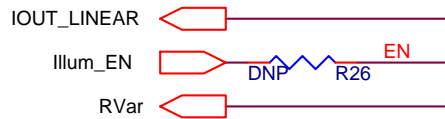
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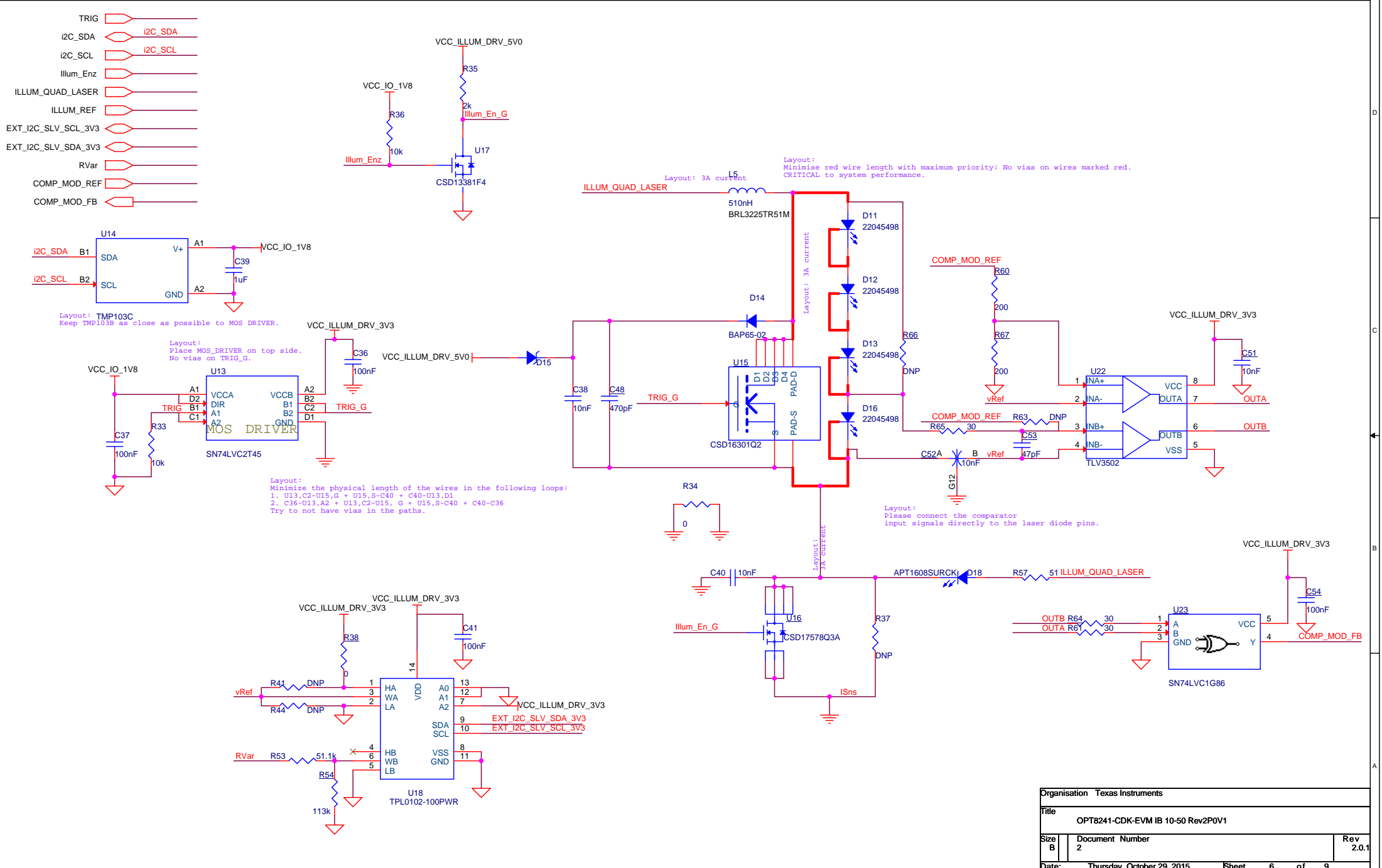
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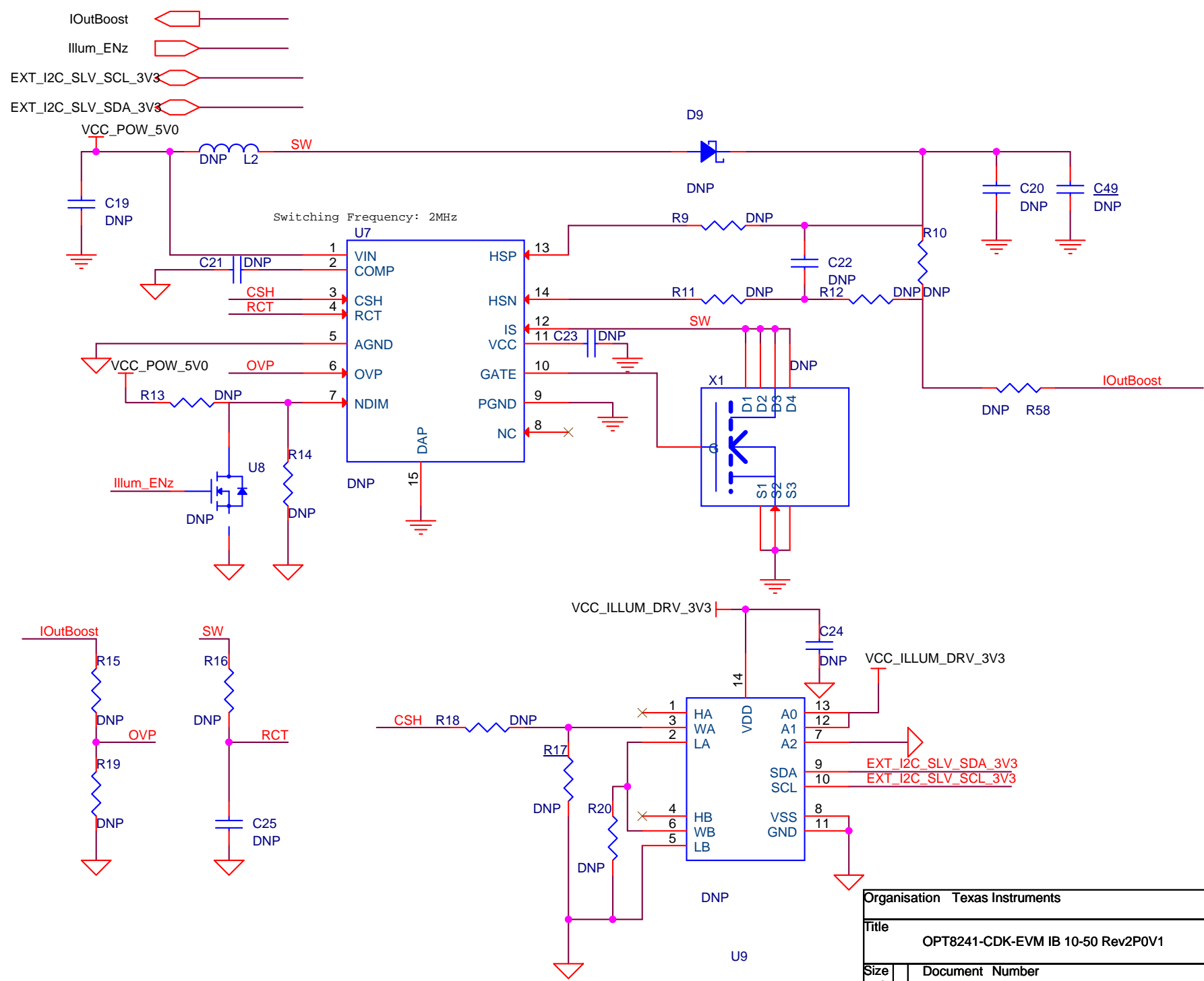
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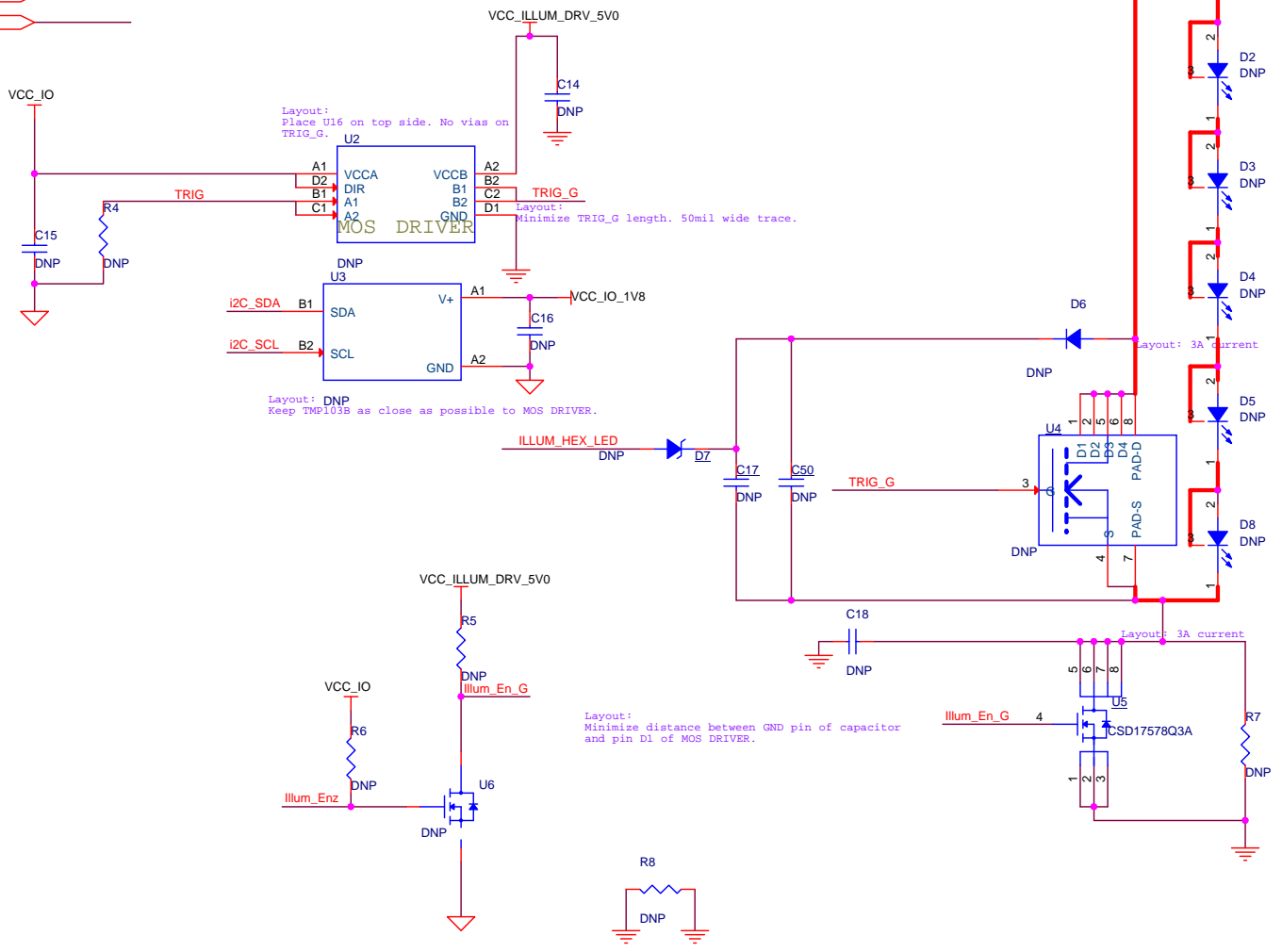


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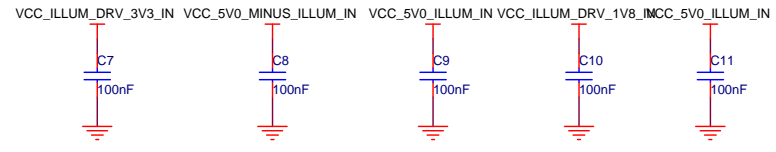
- TRIG
- i2C\_SDA
- i2C\_SCL
- Illum\_Enz
- ILLUM\_HEX\_LED



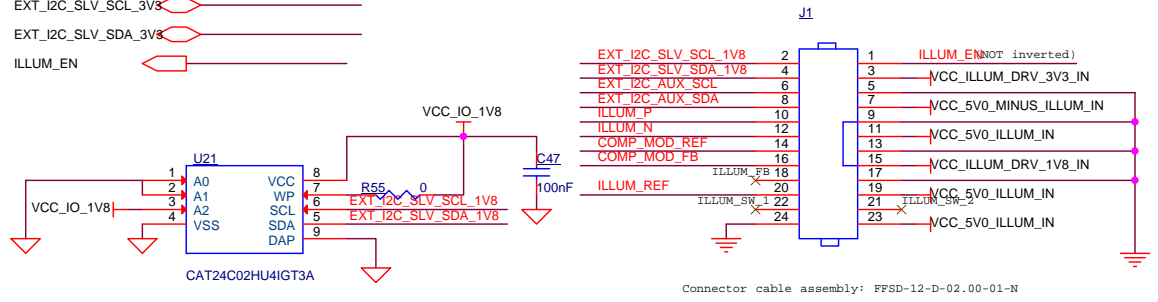
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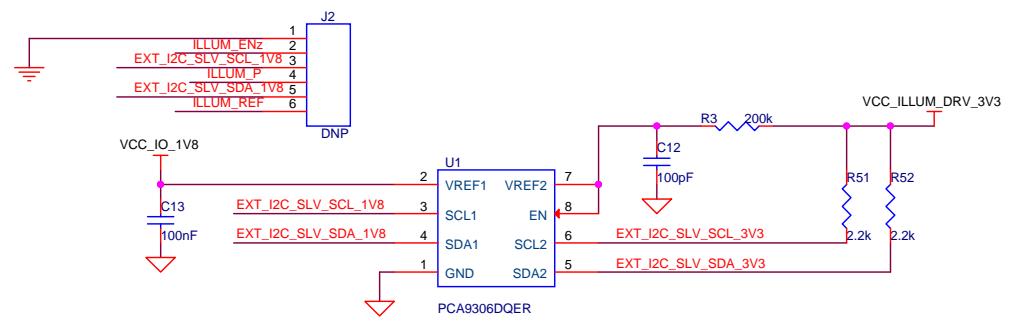
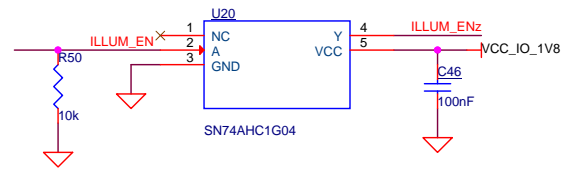
- EXT\_I2C\_SLV\_SCL  EXT\_I2C\_SLV\_SCL\_1V8
- EXT\_I2C\_SLV\_SDA  EXT\_I2C\_SLV\_SDA\_1V8
- EXT\_I2C\_AUX\_SCL  \_\_\_\_\_
- EXT\_I2C\_AUX\_SDA  \_\_\_\_\_
- ILLUM\_P  \_\_\_\_\_
- ILLUM\_N  \_\_\_\_\_
- ILLUM\_ENz  \_\_\_\_\_
- ILLUM\_REF  \_\_\_\_\_
- COMP\_MOD\_REF  \_\_\_\_\_
- COMP\_MOD\_FB  \_\_\_\_\_
- EXT\_I2C\_SLV\_SCL\_3V3  \_\_\_\_\_
- EXT\_I2C\_SLV\_SDA\_3V3  \_\_\_\_\_
- ILLUM\_EN  \_\_\_\_\_



3V3 and 1V8 powered from main power supply to ensure power to EEPROMs etc if illum supply cuts off. Use judiciously.



Connector cable assembly: FFD5-12-D-02.00-01-N



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