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# NANORACK LASER

## Schematic V1.2.0



Project: BEE-PC1	Sub-system: NANORACK_LASER.PrjPcb	
Design by: Hung Nguyen D.	Sheet title: INDEX.SchDoc	Sheet 1 of 6
Checked by: Bao Bui Q.	Document No: 1	Size: A3
Approved by: Vu Pham	Revision: V1.2.0	Date: 1/10/2025

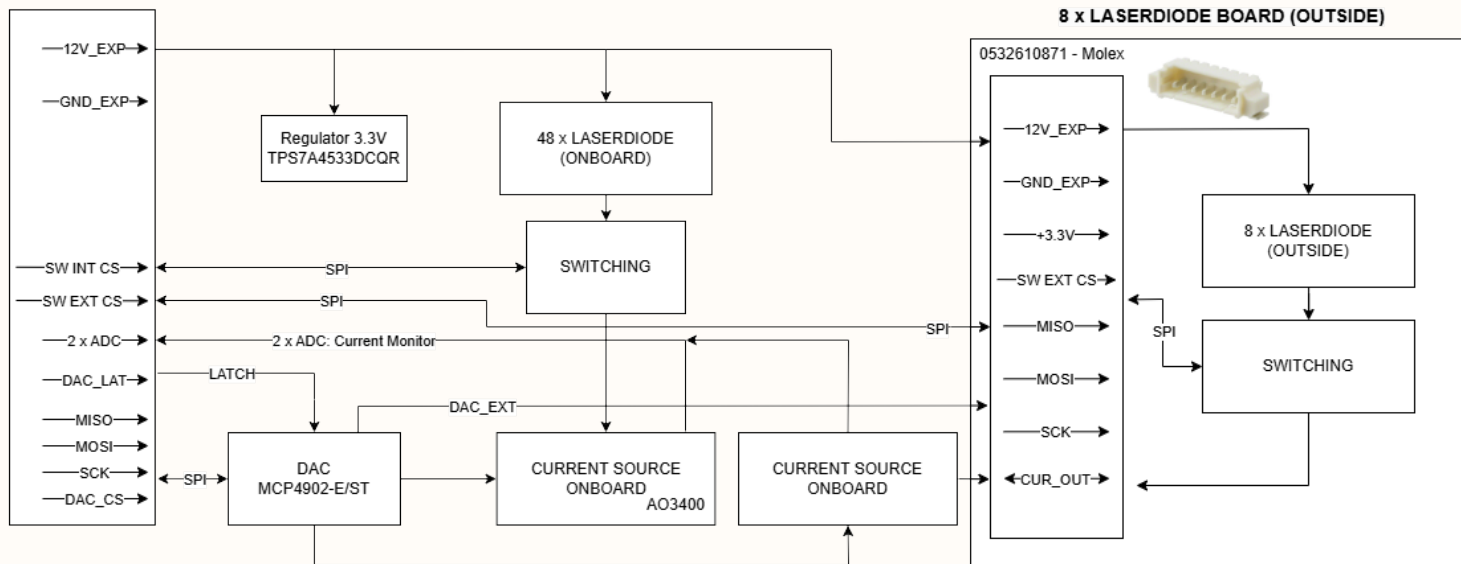
2x7 PIN  
CONNECTOR  
board to board

+12V_EXP	+12V_EXP
GND_EXP	+12V_EXP
GND_EXP	SPI_MISO
SPI_SCK	SPI_MOSI
DAC_CS	SW_INT_CS
DAC_LATCH	SW_EXT_CS
ADC_1	ADC_2

77313-101-14LF - Amphenol ICC (FCI)

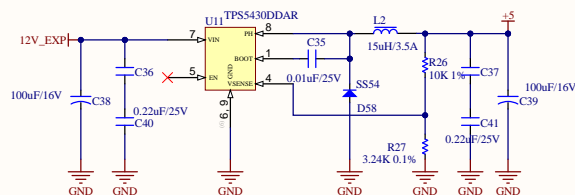


## LASERDIODE

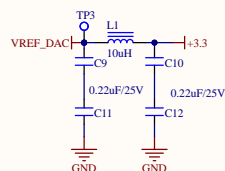


Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_LASER.PrjPcb</b>	
Design by: <b>Hung Nguyen D.</b>	Sheet title: <b>BLOCK_DIAGRAM.SchDoc</b>	Sheet <b>2</b> of <b>6</b>
Checked by: <b>Bao Bui Q.</b>	Document No: <b>2</b>	Size: <b>A3</b>
Approved by: <b>Vu Pham</b>	Revision: <b>V1.2.0</b>	Date: <b>1/8/2025</b>

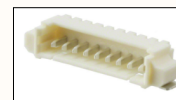
## POWER SWITCH AND LDO



Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_LASER.PrjPcb</b>	
Design by: <b>Hung Nguyen D.</b>	Sheet title: <b>POWER SWITCH AND LDO.SchDoc</b>	Sheet <b>3</b> of <b>6</b>
Checked by: <b>Bao Bui Q.</b>	Document No: <b>3</b>	Size: <b>A3</b>
Approved by: <b>Vu Pham</b>	Revision: <b>V1.2.0</b>	Date: <b>1/10/2025</b>

[illegible]

- ELECTRICAL:  
CURRENT RATING: 1A/CONTACT  
VOLTAGE RATING: 125V/CONTACT
- ENVIRONMENTAL:  
TEMPERATURE RANGE: -40°C TO +105°C
- PHYSICAL:  
PITCH-MATING: 0.049" (1.25mm)
- WIRE:  
WIRE SIZE: 24 AWG  
MAX CURRENT: 1A per Wire  
ISULATION MATERIAL: PTFE
- MATING:  
Molex - 0510210800



- MATING -



0510210800

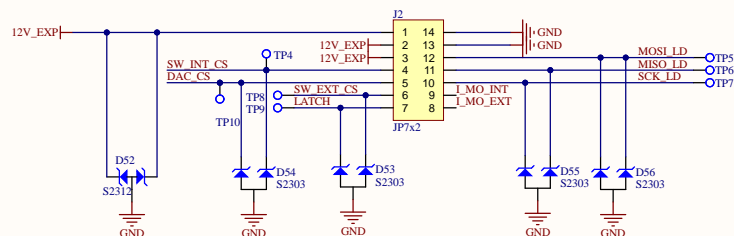
SHIELD

SHIELD

SHIELD

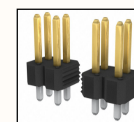
SHIELD

check spacer



- ELECTRICAL:  
CURRENT RATING: 3A/CONTACT  
VOLTAGE RATING: 1500VAC/CONTACT
- ENVIRONMENTAL:  
TEMPERATURE RANGE: -65°C TO +130°C
- PHYSICAL:  
PITCH-MATING: 0.1" (2.54mm)
- MATING:  
MAX CURRENT: 5.7A/CONTACT

Samtec Inc. - ESO-107-37-G-D



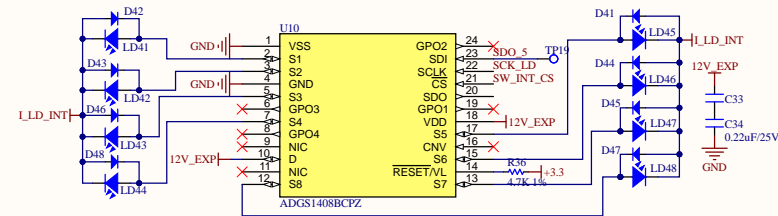
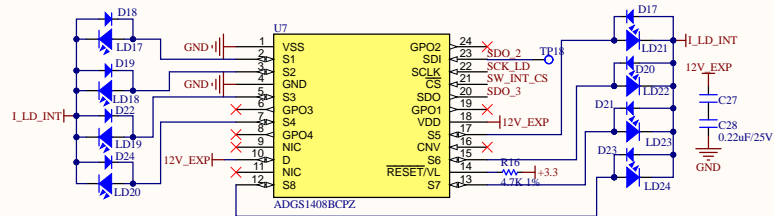
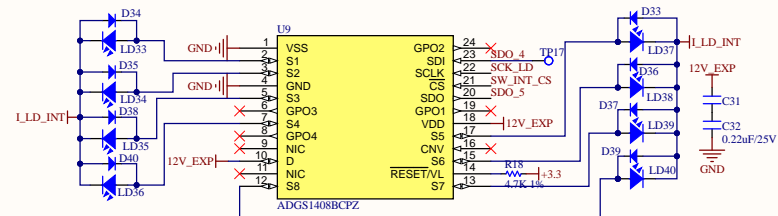
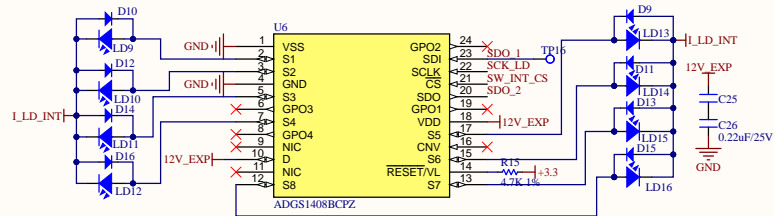
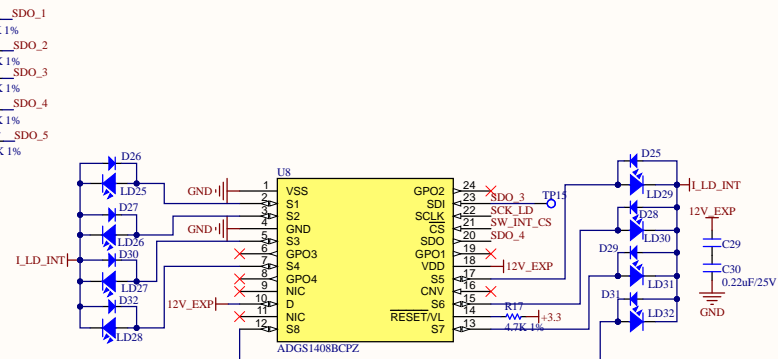
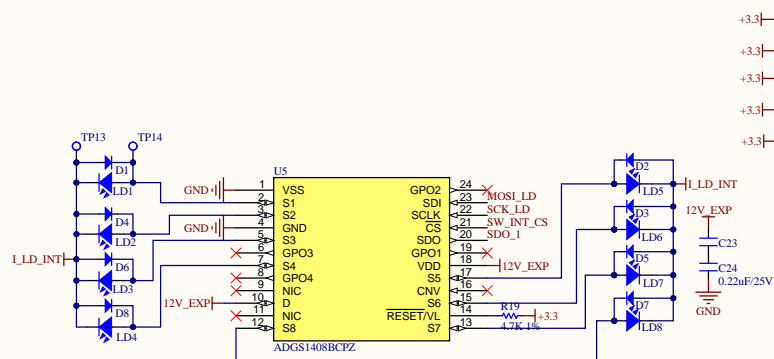
Sub-system: NANORACK\_LASER.PrjPcb

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Size: A3

Date: 1/9/2025





Project: BEE-PC1	Sub-system: NANORACK_LASER.PrjPcb	
Design by: Hung Nguyen D.	Sheet title: SWITCHING.SchDoc	Sheet 6 of 6
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