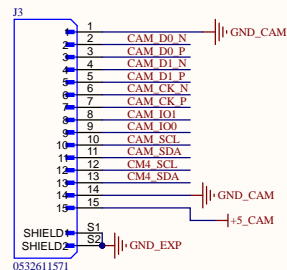
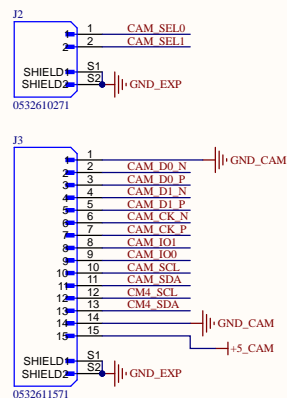
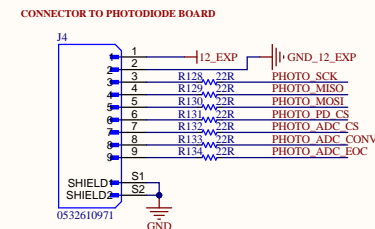
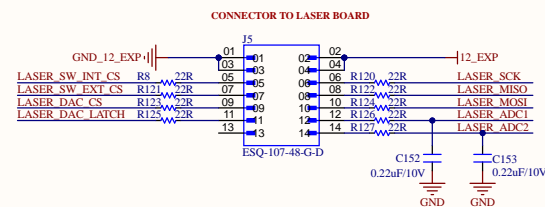
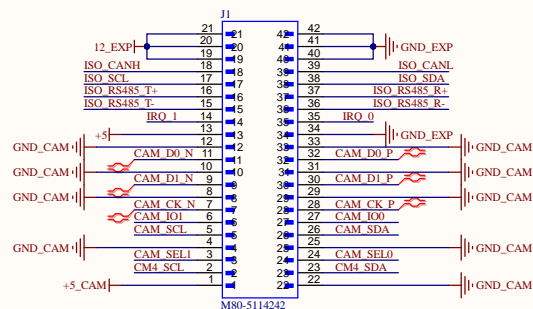


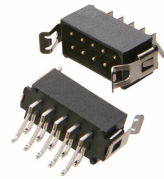
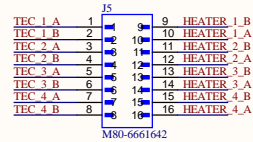
D

Date: 2/18/2025



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: HEADER_1.SchDoc	Sheet 2 of 12
Checked by: BAO BUI Q.	Document No: 2	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025

# CONNECTOR TO TEC & HEATER

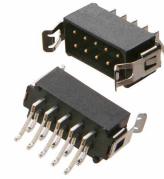
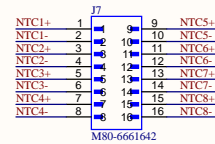


illustration

## Harwin Inc. M80-6661642

- ELECTRICAL:  
CURRENT RATING: 2.2A/CONTACT  
VOLTAGE RATING: 800V/CONTACT
- ENVIRONMENTAL:  
TEMPERATURE RANGE: -55°C TO +125°C
- PHYSICAL:  
PITCH-MATING: 0.079" (2.00mm)
- WIRE:  
WIRE SIZE: 24 AWG  
MAX CURRENT: 2A per Wire  
ISULATION MATERIAL: PTFE
- MATING:  
Harwin Inc. M80-8881606

# CONNECTOR TO NTC



illustration

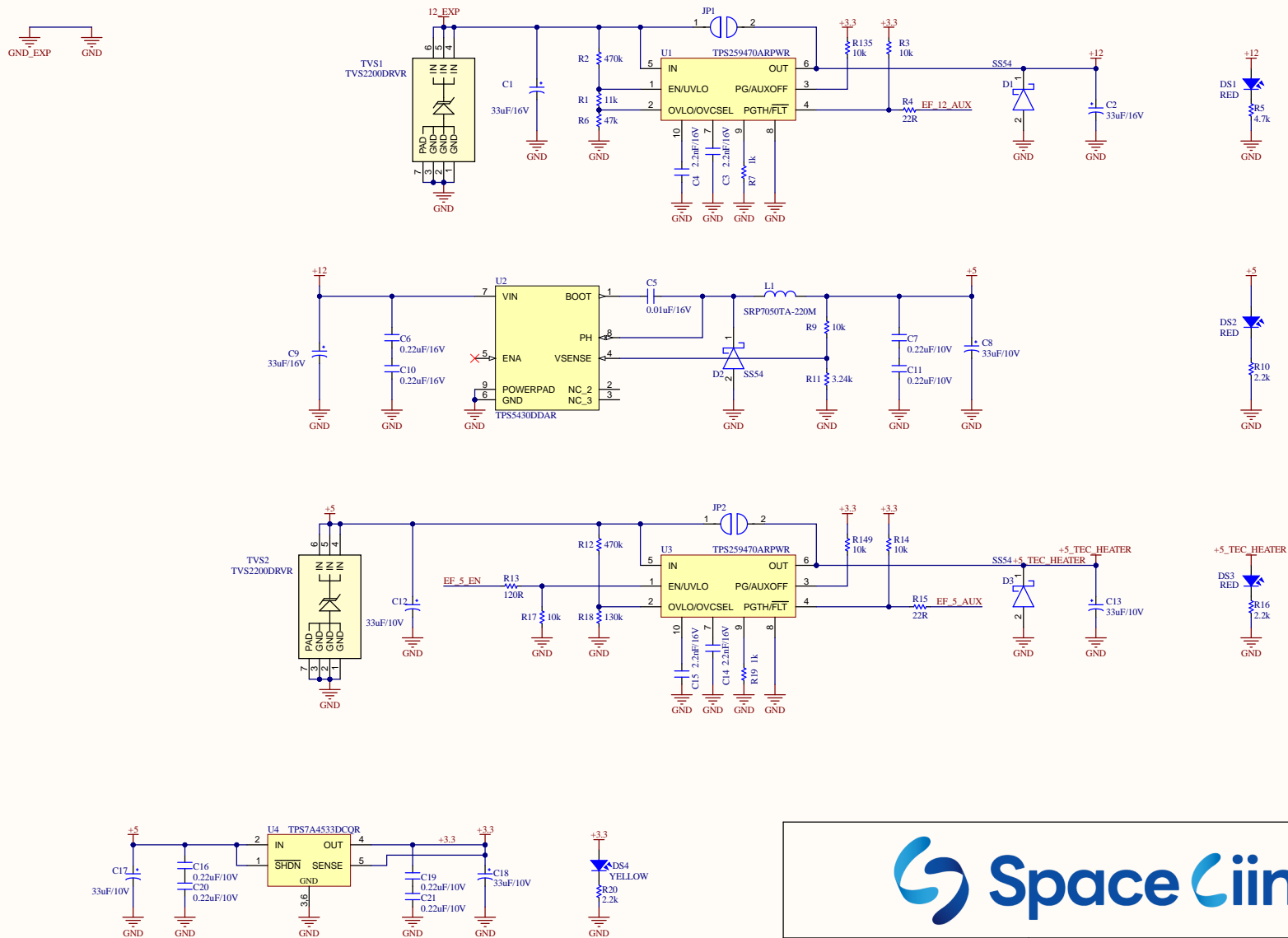
## Harwin Inc. M80-6661642

- ELECTRICAL:  
CURRENT RATING: 2.2A/CONTACT  
VOLTAGE RATING: 800V/CONTACT
- ENVIRONMENTAL:  
TEMPERATURE RANGE: -55°C TO +125°C
- PHYSICAL:  
PITCH-MATING: 0.079" (2.00mm)
- WIRE:  
WIRE SIZE: 24 AWG  
MAX CURRENT: 2A per Wire  
ISULATION MATERIAL: PTFE
- MATING:  
Harwin Inc. M80-8881606

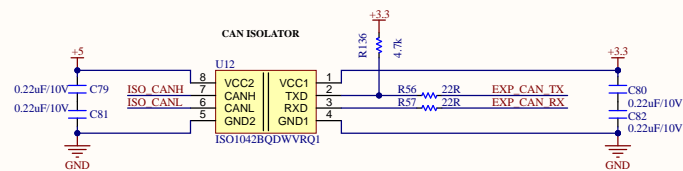
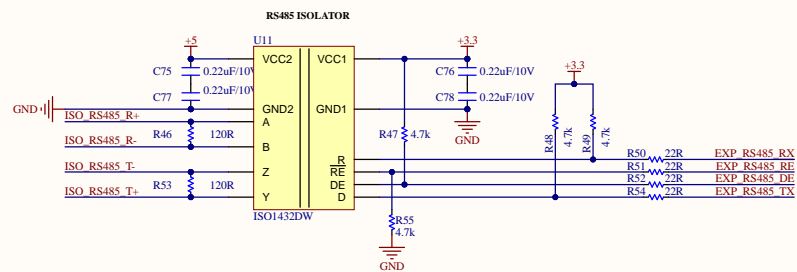
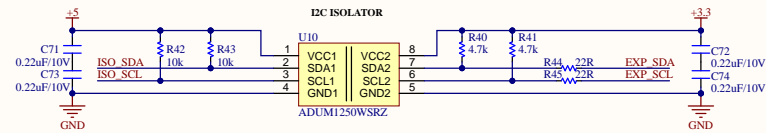
# MOUNTING HOLE



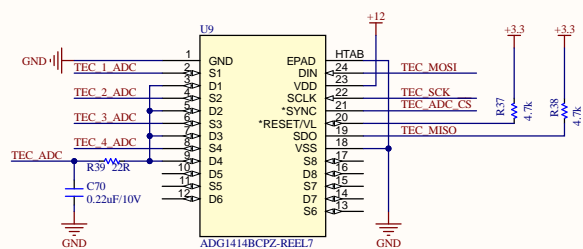
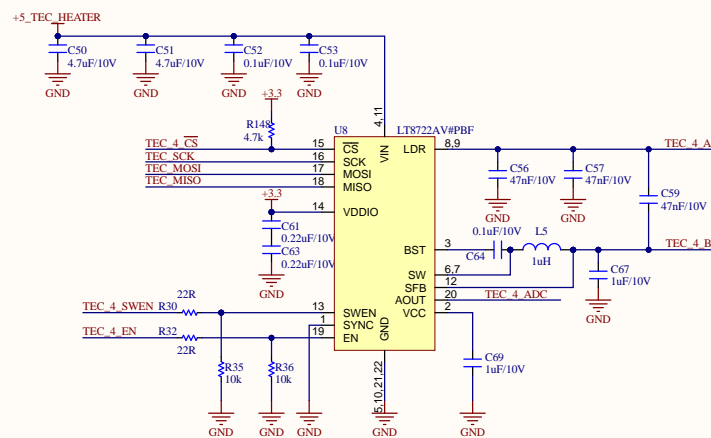
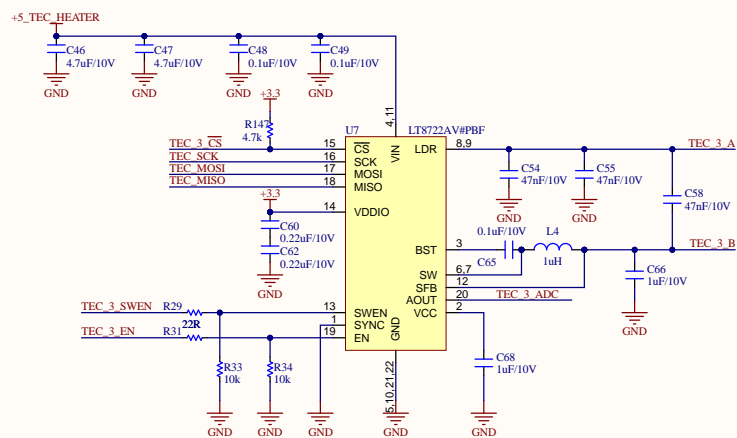
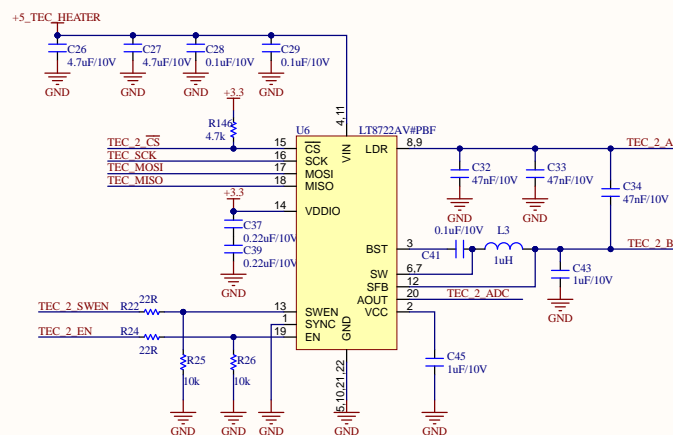
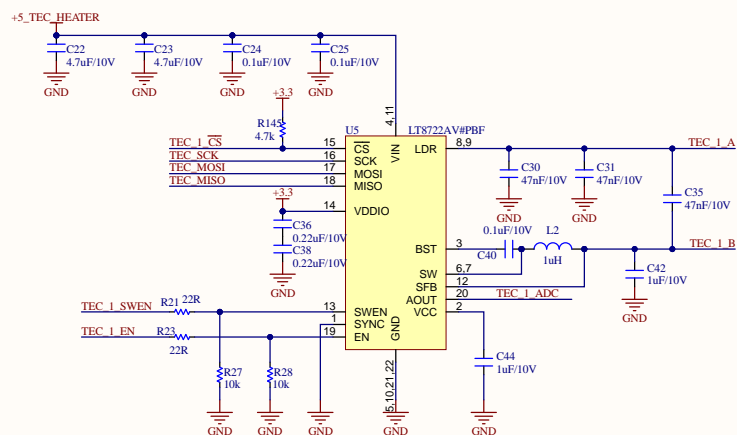
Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: HEADER_2.SchDoc	Sheet 3 of 12
Checked by: BAO BUI Q.	Document No: 3	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025



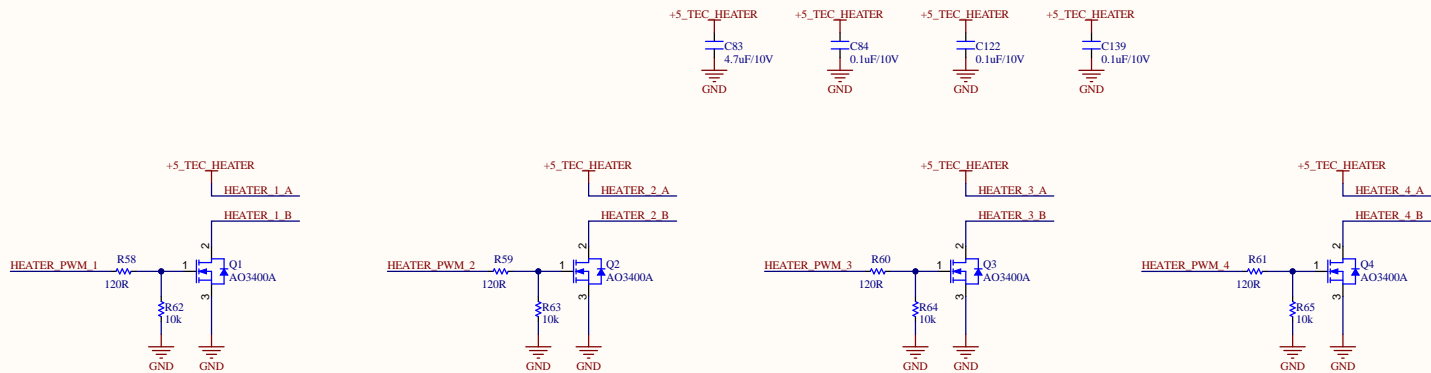
Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_EXP_CONTROLLER</b>	
Design by: <b>SANG HUYNH</b>	Sheet title: <b>POWER.SchDoc</b>	Sheet <b>4</b> of <b>12</b>
Checked by: <b>BAO BUI Q.</b>	Document No: <b>4</b>	Size: <b>A3</b>
Approved by: <b>VU PHAM</b>	Revision: <b>V1.1.0</b>	Date: <b>2/18/2025</b>



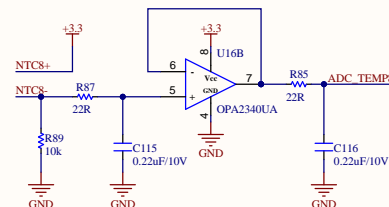
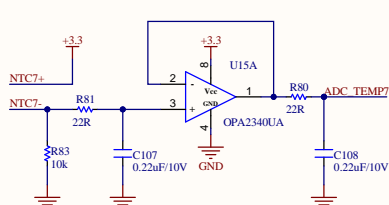
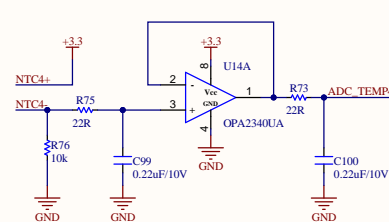
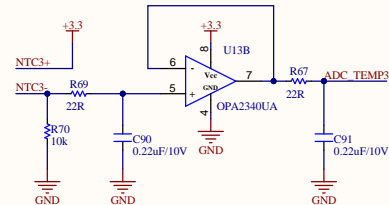
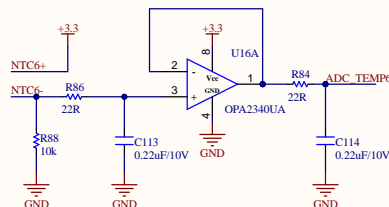
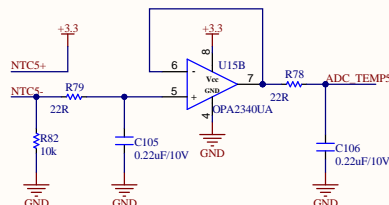
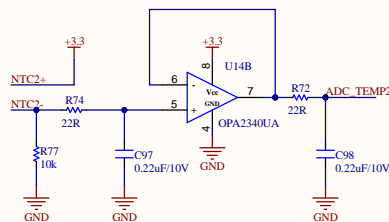
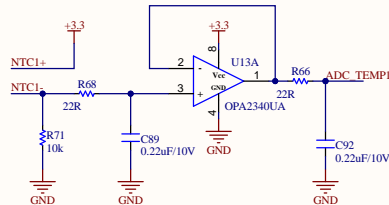
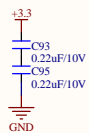
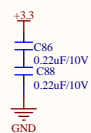
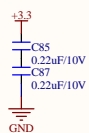
Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: EXP_OBC_COMM.SchDoc	Sheet 5 of 12
Checked by: BAO BUI Q.	Document No: 5	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: TEC_DRV.SchDoc	Sheet 6 of 12
Checked by: BAO BUI Q.	Document No: 6	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025

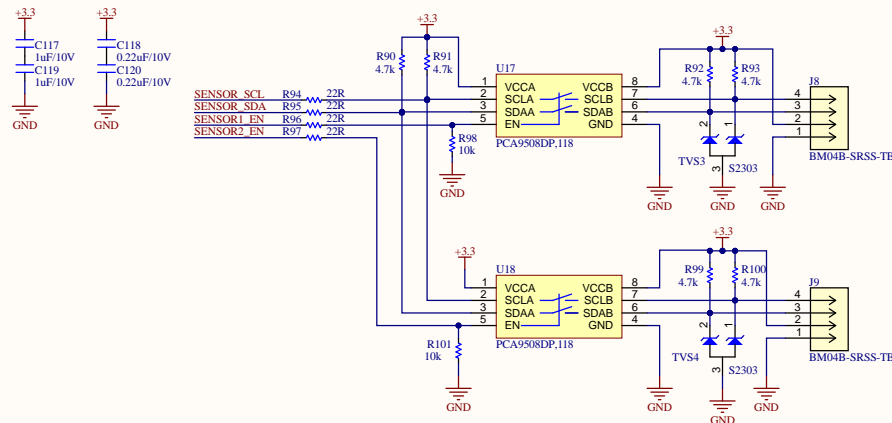


Project: BEE-PC1		Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: HEATER.SchDoc	Sheet 7 of 12	
Checked by: BAO BUI Q.	Document No: 7	Size: A3	
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025	



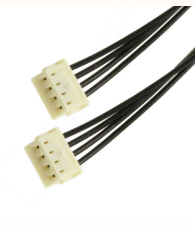
Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: NTC.SchDoc	Sheet 8 of 12
Checked by: BAO BUI Q.	Document No: 8	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025



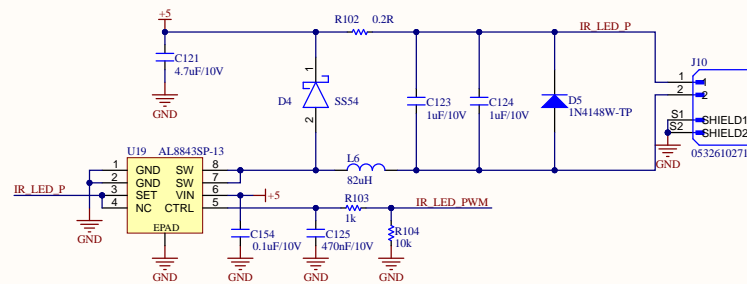


### JST Sales America Inc. BM04B-SRSS-TB

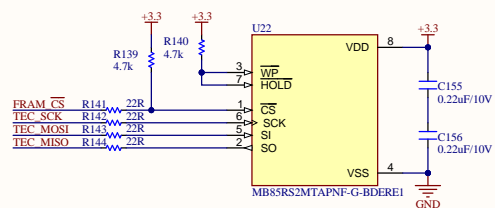
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CURRENT RATING: 1.0A AC/DC/CONTACT  
VOLTAGE RATING: 50V AC/DC/CONTACT
- ENVIRONMENTAL:  
TEMPERATURE RANGE: -25°C ~ 85°C
- PHYSICAL:  
PITCH-MATING: 0.039" (1.00mm)
- WIRE:  
WIRE SIZE: 26 AWG  
MAX CURRENT: 0.1A per Wire  
ISULATION MATERIAL: PTFE
- MATING:  
JST Sales America Inc.  
A04SR04SR30K152B



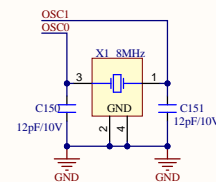
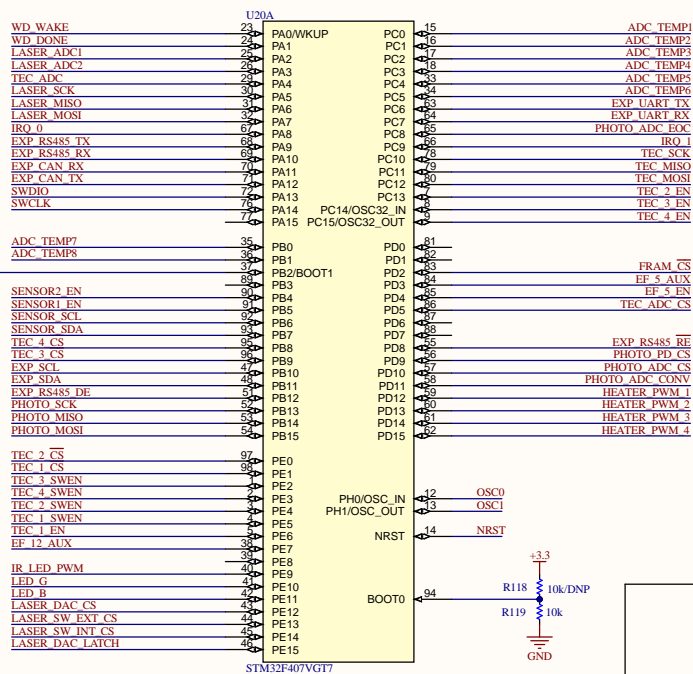
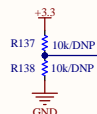
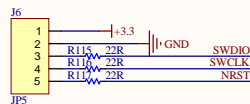
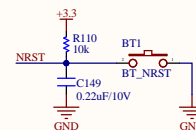
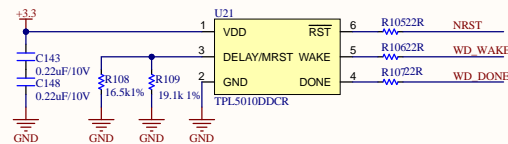
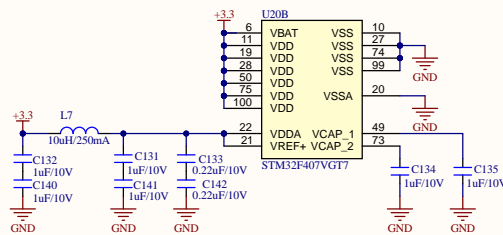
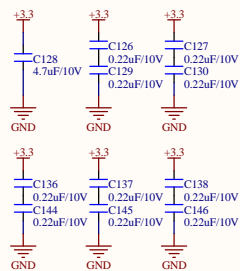
Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_EXP_CONTROLLER</b>	
Design by: <b>SANG HUYNH</b>	Sheet title: <b>I2C_Sensor.SchDoc</b>	Sheet <b>9</b> of <b>12</b>
Checked by: <b>BAO BUI Q.</b>	Document No: <b>9</b>	Size: <b>A3</b>
Approved by: <b>VU PHAM</b>	Revision: <b>V1.1.0</b>	Date: <b>2/18/2025</b>



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: IR_LED.SchDoc	Sheet 10 of 12
Checked by: BAO BUI Q.	Document No: 10	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025



Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_EXP_CONTROLLER</b>	
Design by: <b>SANG HUYNH</b>	Sheet title: <b>FRAM.SchDoc</b>	Sheet <b>11</b> of <b>12</b>
Checked by: <b>BAO BUI Q.</b>	Document No: <b>11</b>	Size: <b>A3</b>
Approved by: <b>VU PHAM</b>	Revision: <b>V1.1.0</b>	Date: <b>2/18/2025</b>



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: MCU.SchDoc	Sheet 12 of 12
Checked by: BAO BUI Q.	Document No: 12	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025