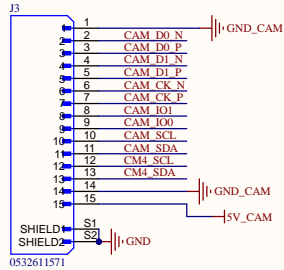
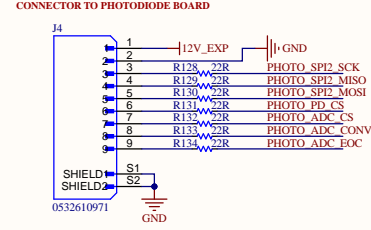
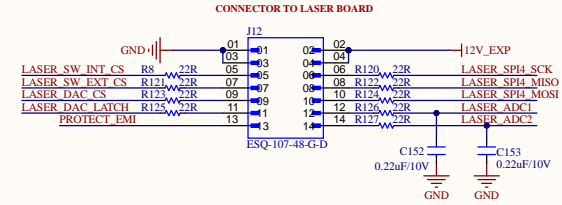
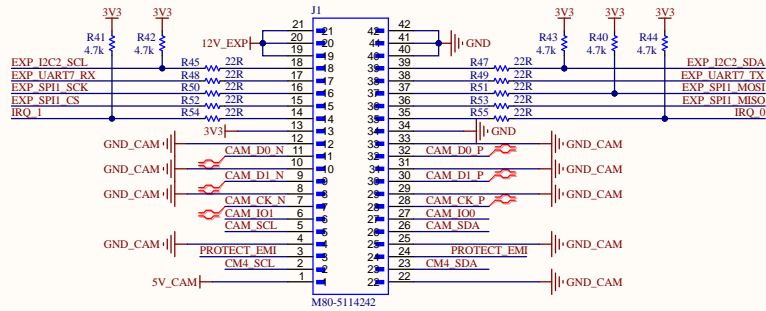
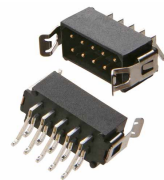
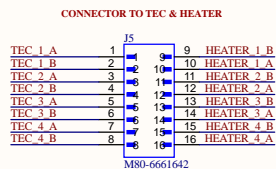


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Design by: SANG HUYNH	Sheet title: Block_Diagram.SchDoc	Sheet 1 of 11
Checked by: BAO BUI Q.	Document No: 1	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 2/18/2025



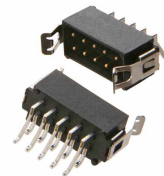
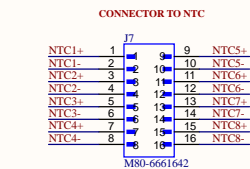
Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: HEADER_1.SchDoc	Sheet 2 of 11
Checked by: BAO BUI Q.	Document No: 2	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/20/2025



illustration

Harwin Inc. M80-6661642

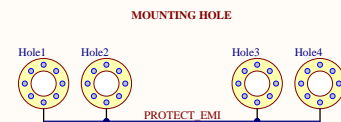
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VOLTAGE RATING: 800V/CONTACT
- ENVIRONMENTAL:
TEMPERATURE RANGE: -55°C TO +125°C
- PHYSICAL:
PITCH-MATING: 0.079" (2.00mm)
- WIRE:
WIRE SIZE: 24 AWG
MAX CURRENT: 2A per Wire
ISULATION MATERIAL: PTFE
- MATING:
Harwin Inc. M80-8881606



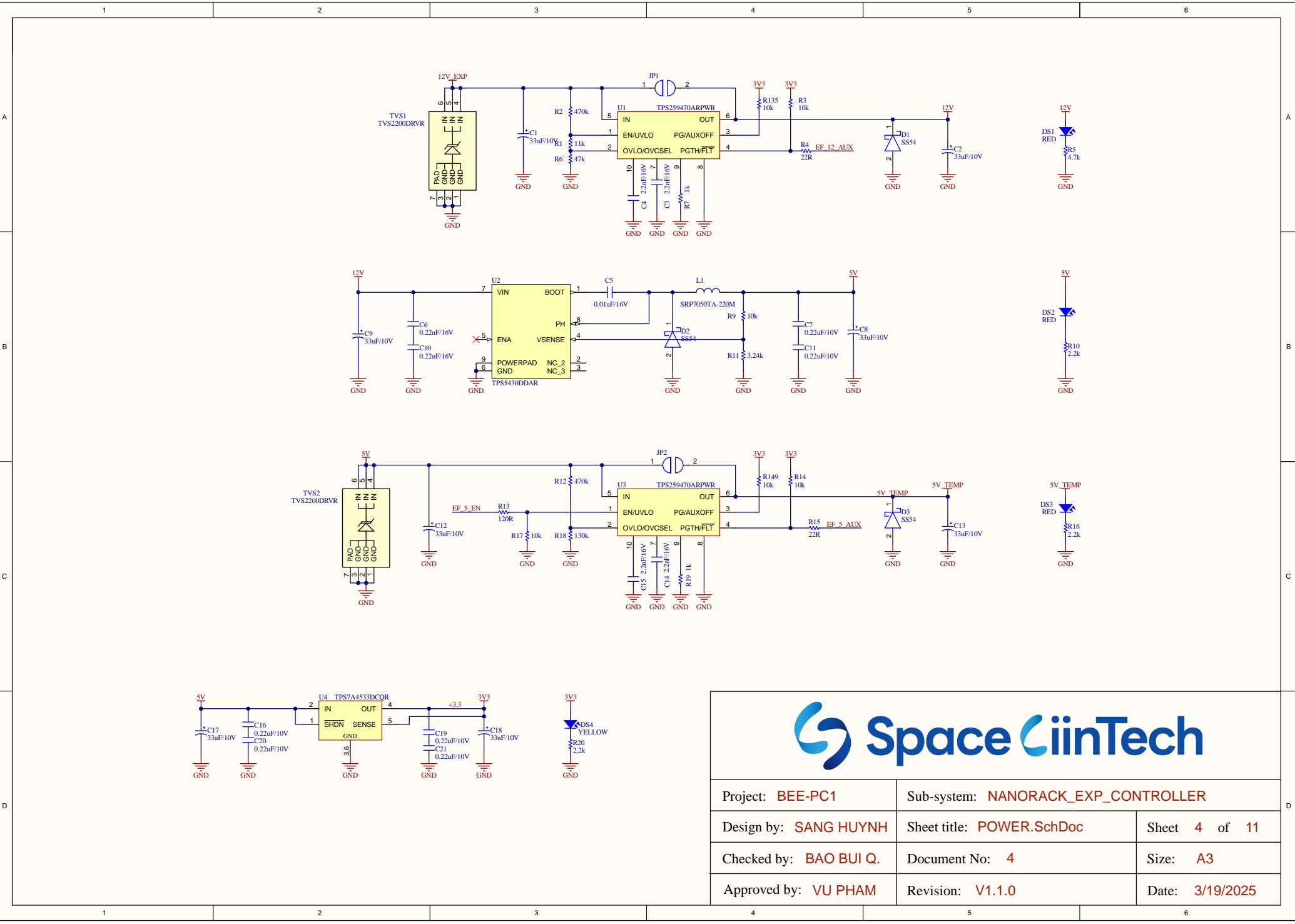
illustration

Harwin Inc. M80-6661642

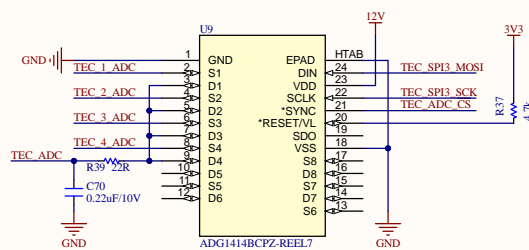
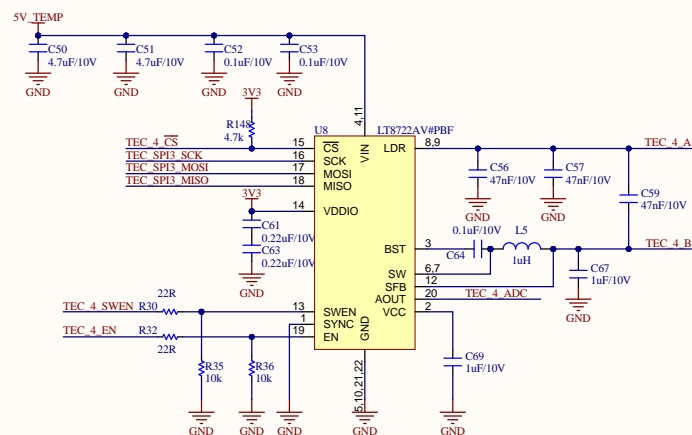
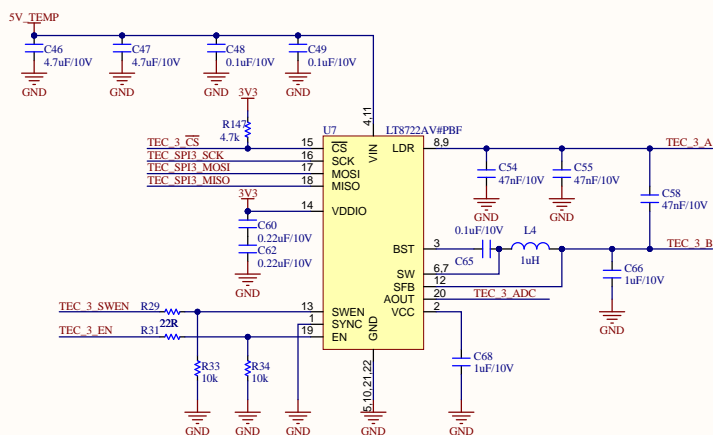
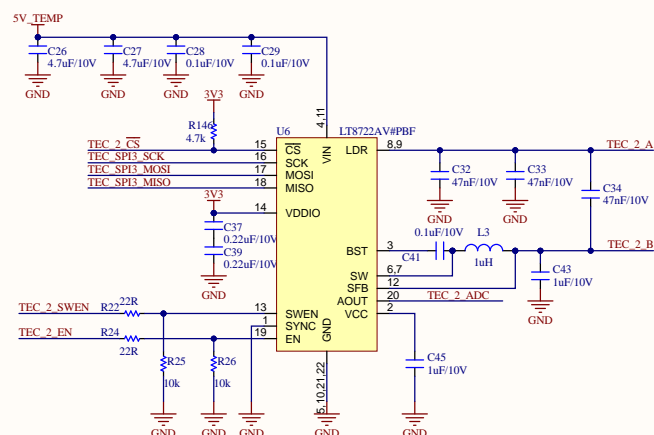
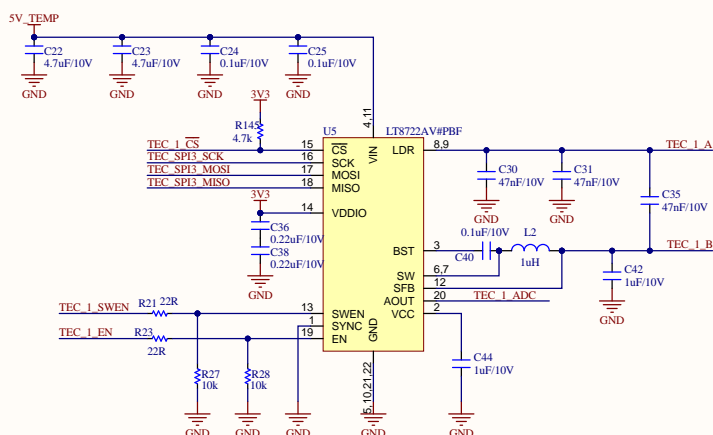
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CURRENT RATING: 2.2A/CONTACT
VOLTAGE RATING: 800V/CONTACT
- ENVIRONMENTAL:
TEMPERATURE RANGE: -55°C TO +125°C
- PHYSICAL:
PITCH-MATING: 0.079" (2.00mm)
- WIRE:
WIRE SIZE: 24 AWG
MAX CURRENT: 2A per Wire
ISULATION MATERIAL: PTFE
- MATING:
Harwin Inc.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



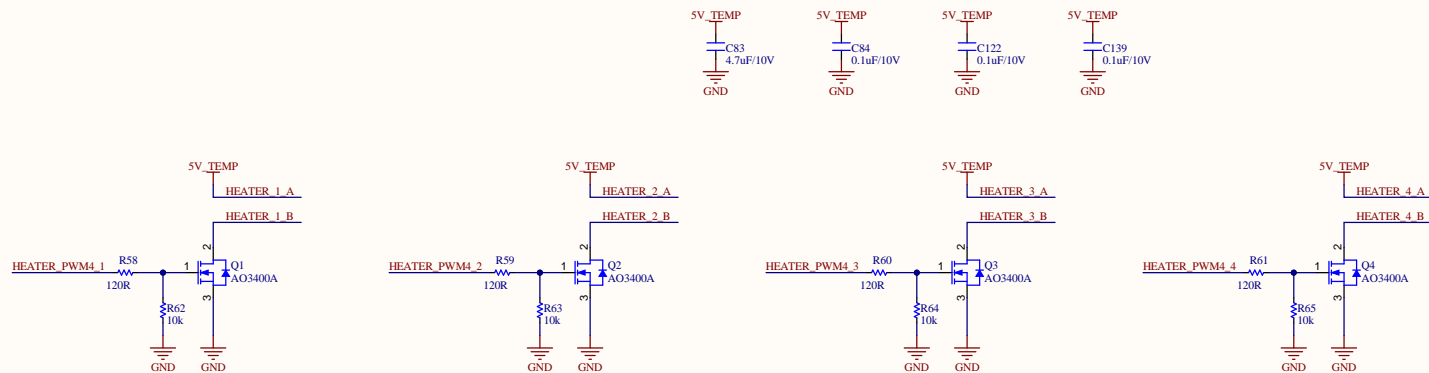
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Design by: SANG HUYNH	Sheet title: HEADER_2.SchDoc	Sheet 3 of 11
Checked by: BAO BUI Q.	Document No: 3	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025



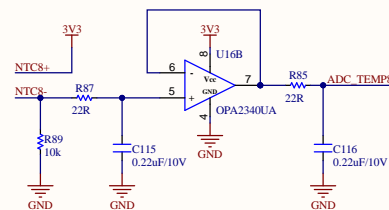
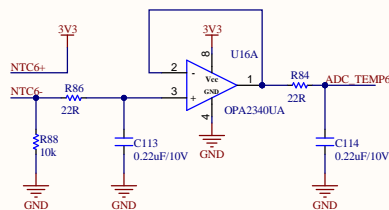
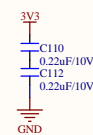
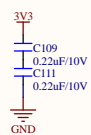
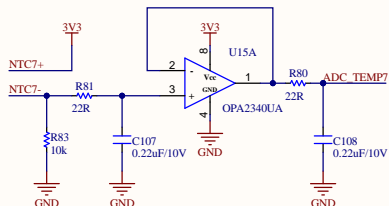
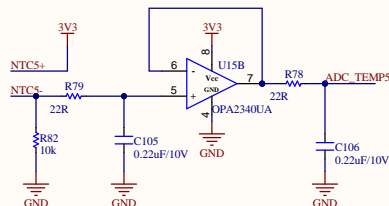
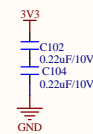
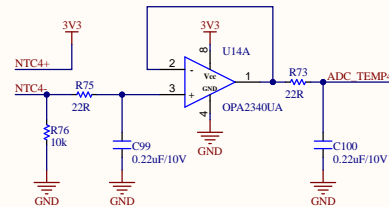
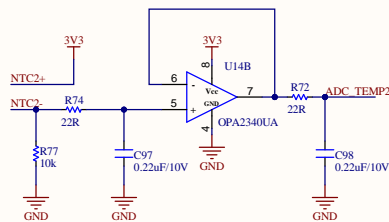
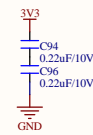
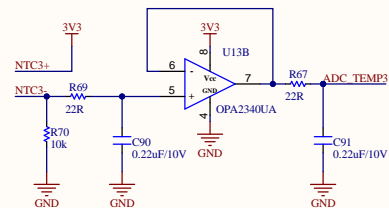
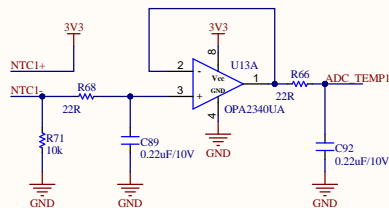
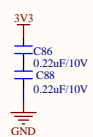
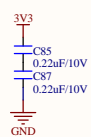
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Design by: SANG HUYNH	Sheet title: POWER.SchDoc	Sheet 4 of 11
Checked by: BAO BUI Q.	Document No: 4	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025



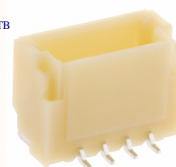
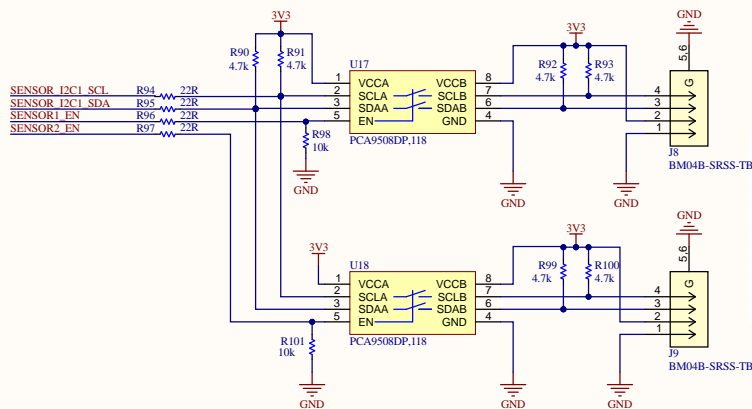
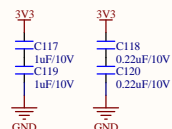
Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: TEC_DRV.SchDoc	Sheet 5 of 11
Checked by: BAO BUI Q.	Document No: 5	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: HEATER.SchDoc	Sheet 6 of 11
Checked by: BAO BUI Q.	Document No: 6	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025

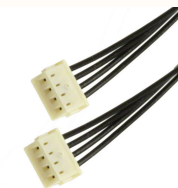


Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: NTC.SchDoc	Sheet 7 of 11
Checked by: BAO BUI Q.	Document No: 7	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025



JST Sales America Inc. BM04B-SRSS-TB

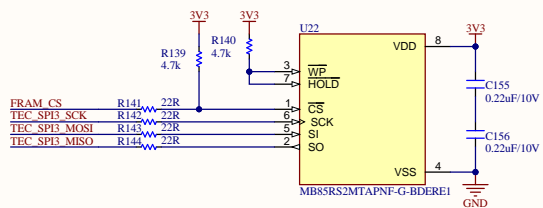
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VOLTAGE RATING: 50V AC/DC/CONTACT
- ENVIRONMENTAL:
TEMPERATURE RANGE: -25°C ~ 85°C
- PHYSICAL:
PITCH-MATING: 0.039" (1.00mm)
- WIRE:
WIRE SIZE: 26 AWG
MAX CURRENT: 0.1A per Wire
ISULATION MATERIAL: PTFE
- MATING:
JST Sales America Inc.
A04SR04SR30K152B



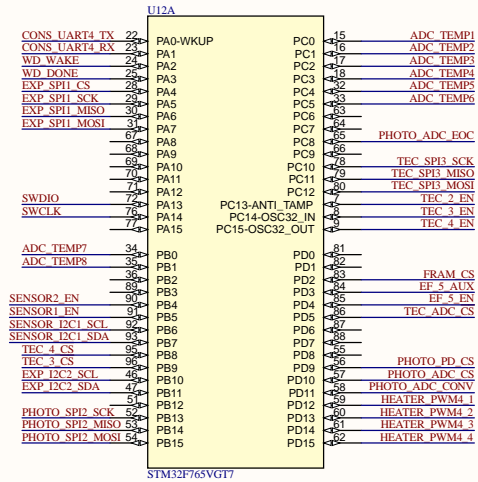
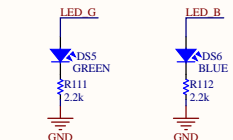
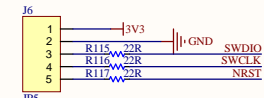
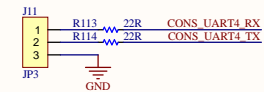
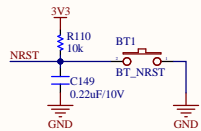
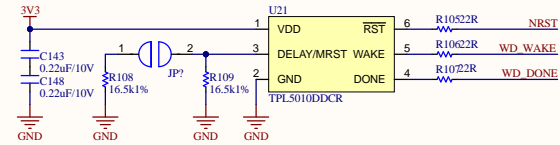
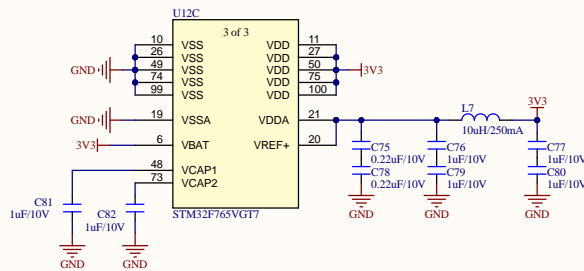
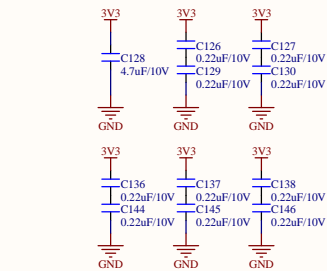
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Design by: SANG HUYNH	Sheet title: I2C_Sensor.SchDoc	Sheet 8 of 11
Checked by: BAO BUI Q.	Document No: 8	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/20/2025



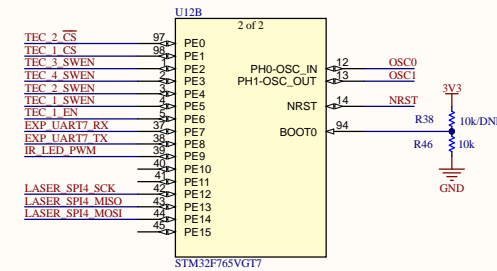
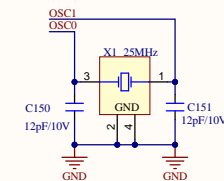
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Design by: SANG HUYNH	Sheet title: IR_LED.SchDoc	Sheet 9 of 11
Checked by: BAO BUI Q.	Document No: 9	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: FRAM.SchDoc	Sheet 10 of 11
Checked by: BAO BUI Q.	Document No: 10	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/19/2025



IRQ_0
IRQ_1
LED_G
LED_B
EF_I2_AUX
LASER_DAC_CS
LASER_SW_EXT_CS
LASER_SW_INT_CS
LASER_DAC_LATCH
EF_5_EN
PHOTO_PD_CS
PHOTO_ADC_CS
PHOTO_ADC_CONV



Project: BEE-PC1	Sub-system: NANORACK_EXP_CONTROLLER	
Design by: SANG HUYNH	Sheet title: MCU.SchDoc	Sheet 11 of 11
Checked by: BAO BUI Q.	Document No: 11	Size: A3
Approved by: VU PHAM	Revision: V1.1.0	Date: 3/20/2025