

## Table of Content

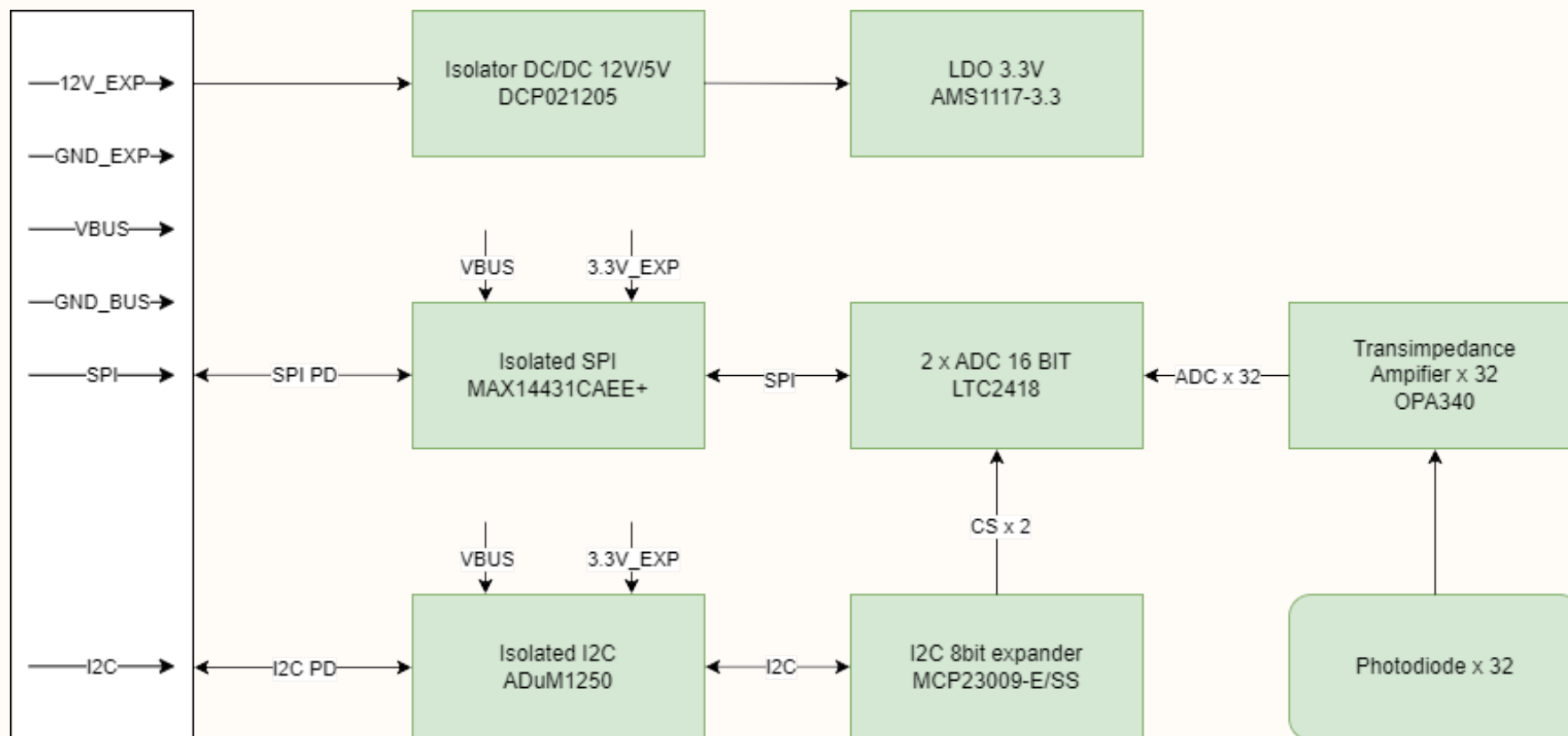
PAGE	COMPONENT/ FUNCTION
001	INDEX
002	BLOCK_DIAGRAM
003	POWER_ISOLATE_AND_LDO
004	COMMUNICATION
005	PHOTODIODE
006	PHOTODIODE (CONT)

## NANORACK PHOTODIODE

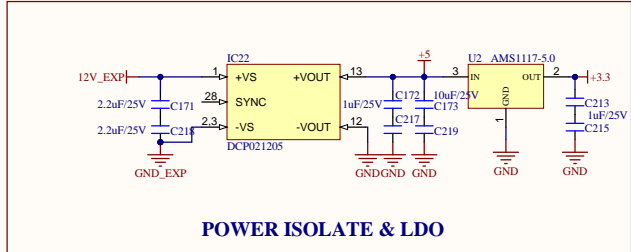
### Schematic V1.0.0



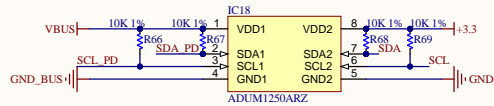
Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_PHOTODIODE.PrjPcb</b>	
Design by: <b>Hung Nguyen D.</b>	Sheet title: <b>INDEX.SchDoc</b>	Sheet <b>1</b> of <b>6</b>
Checked by: <b>Bao Bui Q.</b>	Document No: <b>1</b>	Size: <b>A3</b>
Approved by: <b>Vu Pham</b>	Revision: <b>V1.0.0</b>	Date: <b>10/3/2024</b>



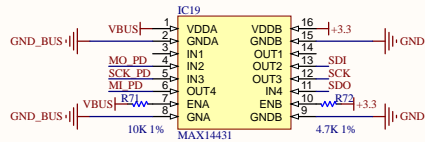
Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_PHOTODIODE.PrjPcb</b>	
Design by: <b>Hung Nguyen D.</b>	Sheet title: <b>BLOCK_DIAGRAM.SchDoc</b>	Sheet <b>2</b> of <b>6</b>
Checked by: <b>Bao Bui Q.</b>	Document No: <b>2</b>	Size: <b>A3</b>
Approved by: <b>Vu Pham</b>	Revision: <b>V1.0.0</b>	Date: <b>10/3/2024</b>



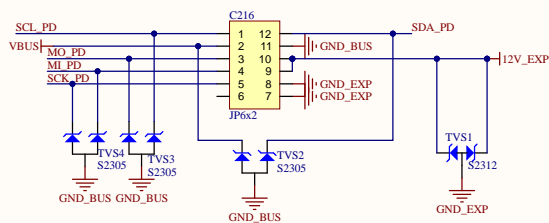
Project: <b>BEE-PC1</b>	Sub-system: <b>NANORACK_PHOTODIODE.PrjPcb</b>	
Design by: <b>Hung Nguyen D.</b>	Sheet title: <b>POWER_ISOLATE_AND_LDO.SchDoc</b>	Sheet <b>3</b> of <b>6</b>
Checked by: <b>Bao Bui Q.</b>	Document No: <b>3</b>	Size: <b>A3</b>
Approved by: <b>Vu Pham</b>	Revision: <b>V1.0.0</b>	Date: <b>10/3/2024</b>



ISOLATED I2C



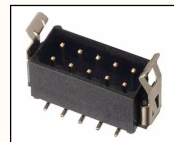
ISOLATED SPI



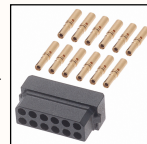
CONNECTOR

### Harwin Inc. M80-8281242

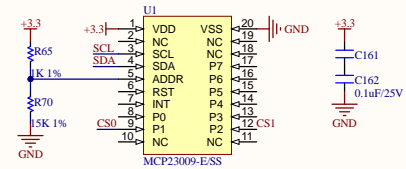
- ELECTRICAL:  
CURRENT RATING: 2.2A/CONTACT  
VOLTAGE RATING: 800V/CONTACT
- ENVIRONMENTAL:  
TEMPERATURE RANGE: -55°C TO +125°C
- PHYSICAL:  
PITCH-MATING: 0.079" (2.00mm)
- WIRE:  
WIRE SIZE: 24 AWG  
MAX CURRENT: 1A per Wire  
ISULATION MATERIAL: PTFE
- MATING:  
Harwin Inc. M80-8881205



- MATING -

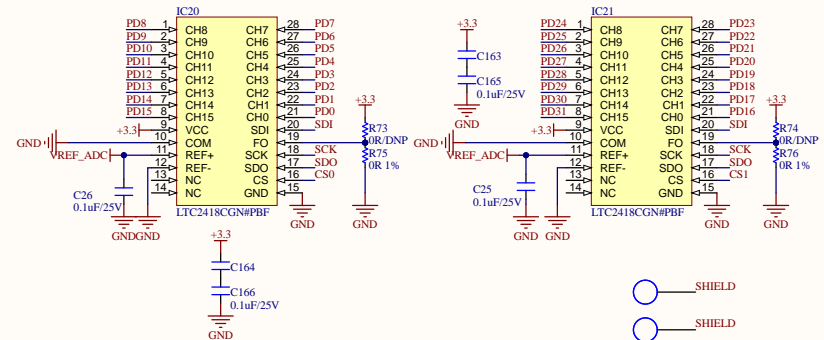


M80-8881205

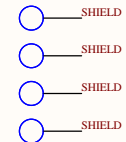


ADDRESS = 0x27

I2C EXPANDER



2 x ADC 16 CHANNEL



Project: BEE-PC1	Sub-system: NANORACK_PHOTODIODE.PrjPcb	
Design by: Hung Nguyen D.	Sheet title: COMMUNICATION.SchDoc	Sheet 4 of 6
Checked by: Bao Bui Q.	Document No: 4	Size: A3
Approved by: Vu Pham	Revision: V1.0.0	Date: 10/4/2024

A

B

C

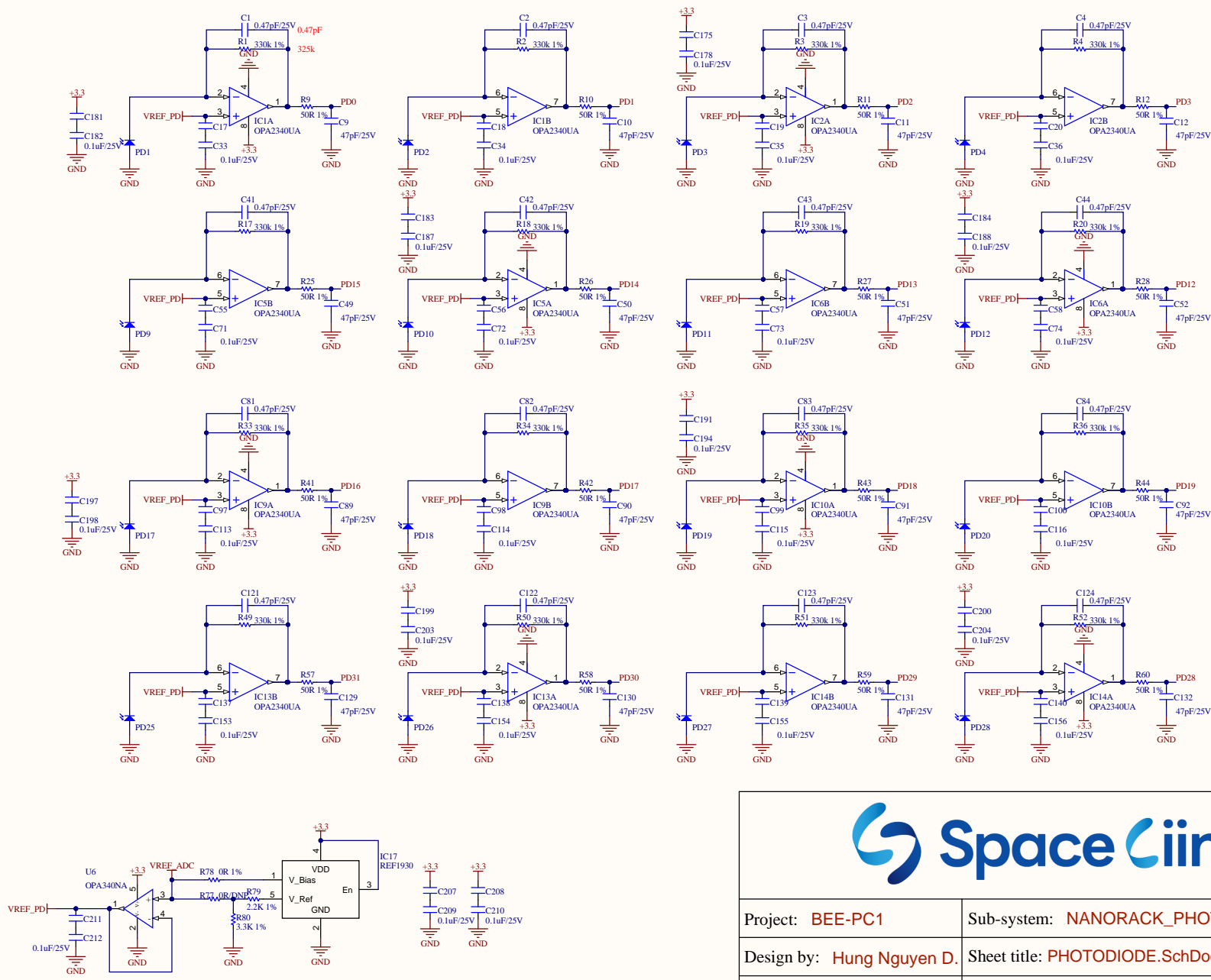
D

A

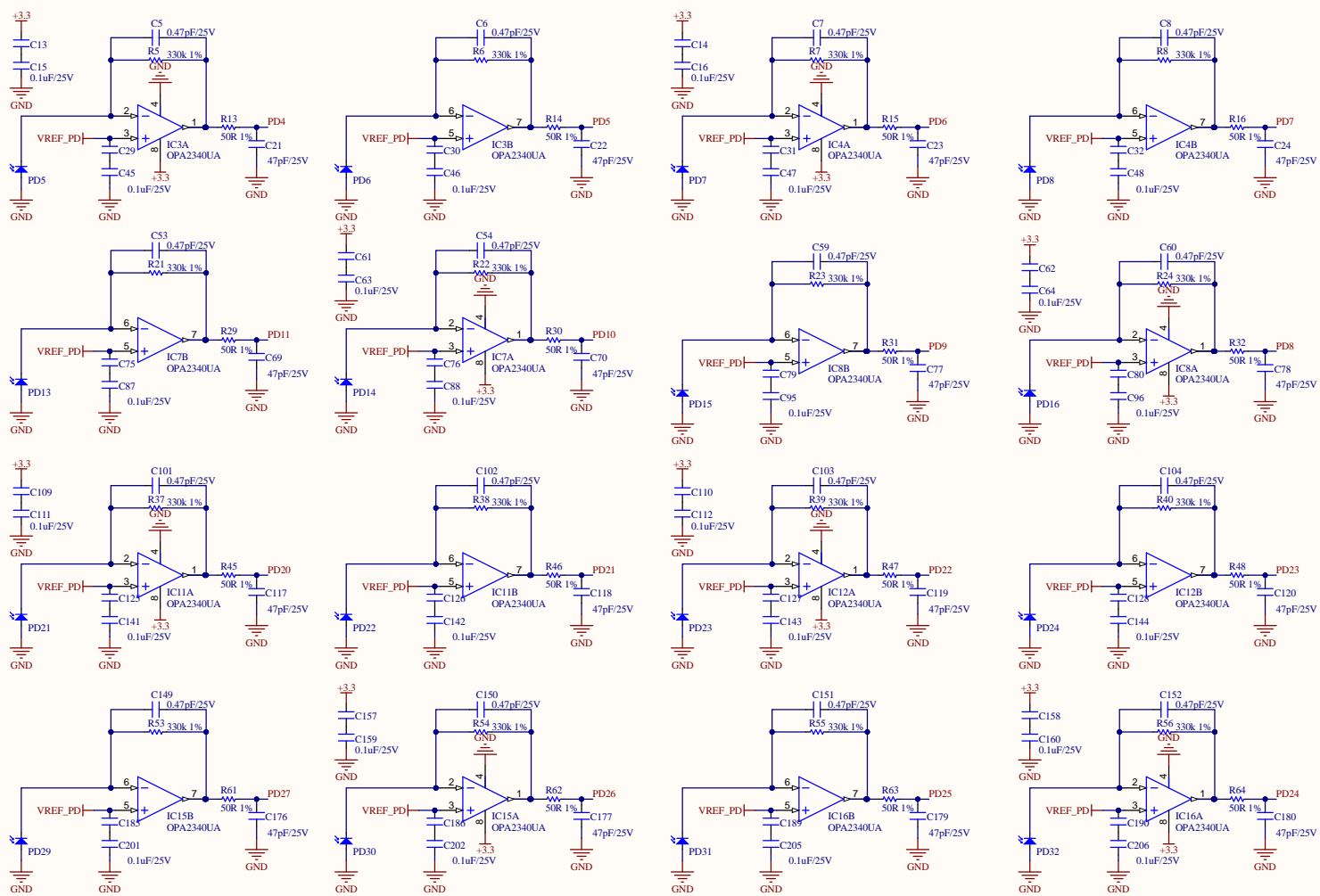
B

C

D



Project: BEE-PC1		Sub-system: NANORACK_PHOTODIODE.PrjPcb	
Design by: Hung Nguyen D.		Sheet title: PHOTODIODE.SchDoc	Sheet 5 of 6
Checked by: Bao Bui Q.		Document No: 5	Size: A3
Approved by: Vu Pham		Revision: V1.0.0	Date: 10/4/2024



Project: BEE-PC1	Sub-system: NANORACK_PHOTODIODE.PrjPcb	
Design by: Hung Nguyen D.	Sheet title: PHOTODIODE (CONT).SchDoc	Sheet 6 of 6
Checked by: Bao Bui Q.	Document No: 6	Size: A3
Approved by: Vu Pham	Revision: V1.0.0	Date: 10/4/2024