

Table of Content

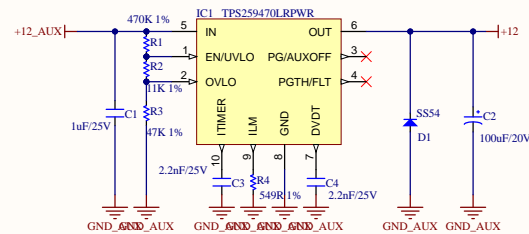
PAGE	COMPONENT/ FUNCTION
001	INDEX
002	BLOCK_DIAGRAM
003	EFUSE_AND_REGULATOR
004	COMMUNICATION
005	CURRENT_SOURCE
006	SWITCHING

NANORACK LASER

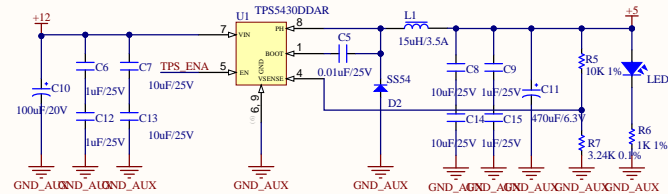
Schematic V1.0.0



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: V1.0.0	Date: 10/3/2024



EFUSE



REGULATOR

$$SR\left(\frac{V}{ms}\right) = \frac{V_{IN}(V)}{t_R(ms)}$$

$$C_{avdt}(pF) = \frac{2000}{SR\left(\frac{V}{ms}\right)}$$

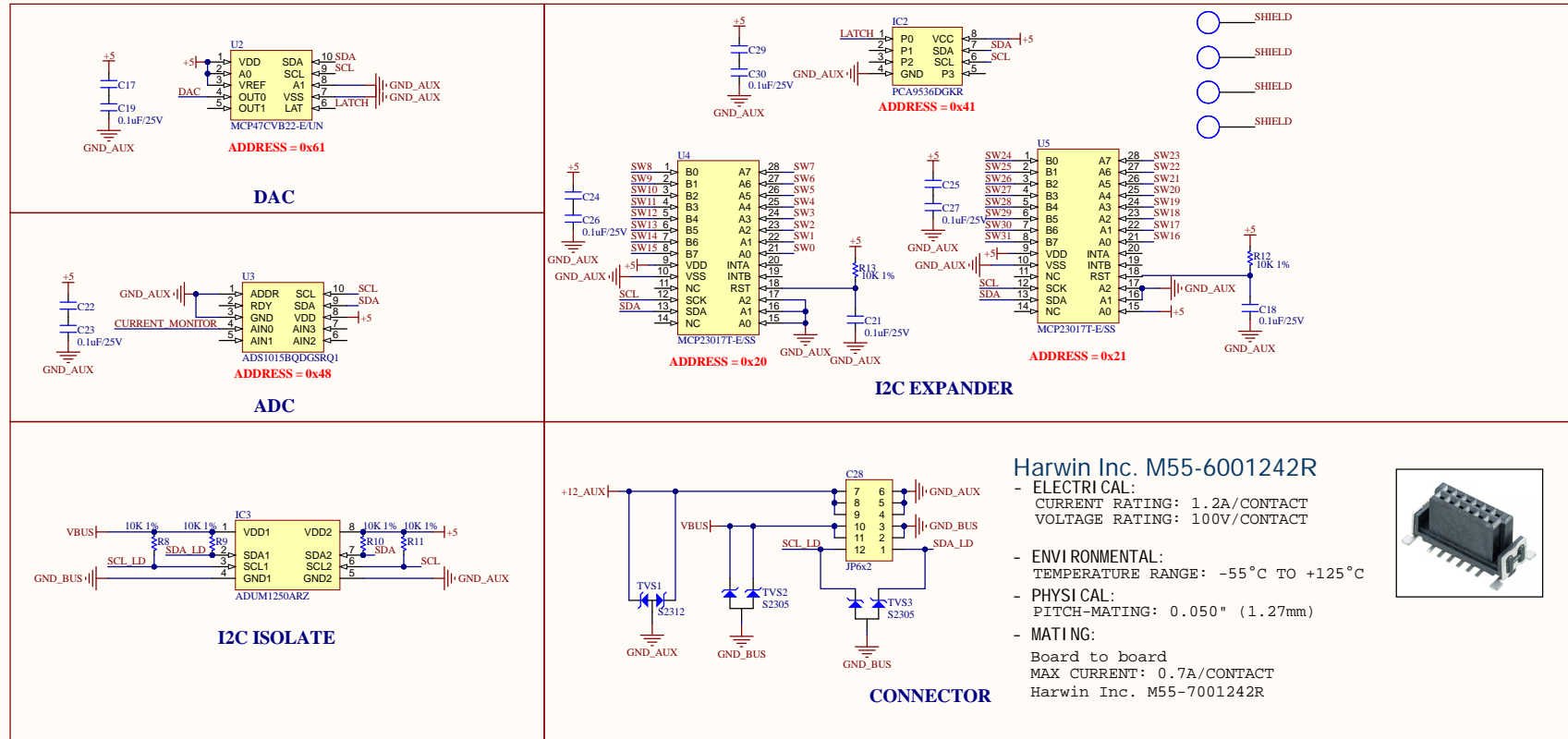
$$I_{INRUSH}(mA) = SR(V/ms) \times C_{OUT}(uF)$$

$$R_{LIM}(\Omega) = \frac{3334}{I_{LIM}(A)}$$

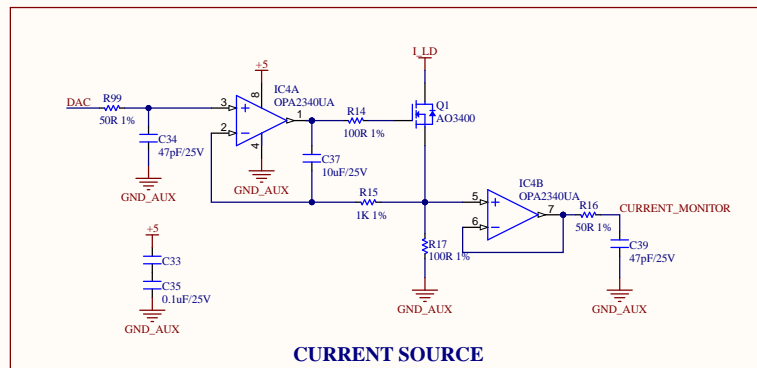
$$R_2 = \frac{R_1 \times 1,221}{V_{OUT} - 1,221}$$



Project: BEE-PC1	Sub-system: NANORACK_LASER.PrjPcb	
Design by: Hung Nguyen D.	Sheet title: EFUSE_AND_REGULATOR.SchDoc	Sheet 3 of 6
Checked by: Bao Bui Q.	Document No: 3	Size: A3
Approved by: Vu Pham	Revision: V1.0.0	Date: 10/4/2024



Project: BEE-PC1	Sub-system: NANORACK_LASER.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



Project: BEE-PC1	Sub-system: NANORACK_LASER.PrjPcb	
Design by: Hung Nguyen D.	Sheet title: CURRENT_SOURCE.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

