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Revisions			
Rev	Description	Date	Approved
A	Initial release	AUG 24 2024	Jonson Chen
A1	1.Change PFC Current Sample isolation using HCNR201-500E replace AMCI351DWVR 2.Fix Connection of ENC_IND	SEP 10 2024	Jonson Chen
A2	1.AGND Line to GND by L5, Remove C48 For ISP 2.Fix Net Label P3_7/PWM0_B3-PFC_BT 3.Delete D3, Add MCU Power LED,ADD L6, D2, J12 4.Exchange PFC Sample Pin with Temp_IPM and U_DC布, Exchange P2_3 and P2_6 for MC3_I_DC布 5.Exchange P3_21/SMART_P21-MC3_PWM_BT P3_22/SMART_P22-MC3_PWM_BB PIN On J8 6.Exchange Function of P1_4 P1_5 For CMPO	March 10 2025	Jonson Chen

X-MCXA34X-3MC

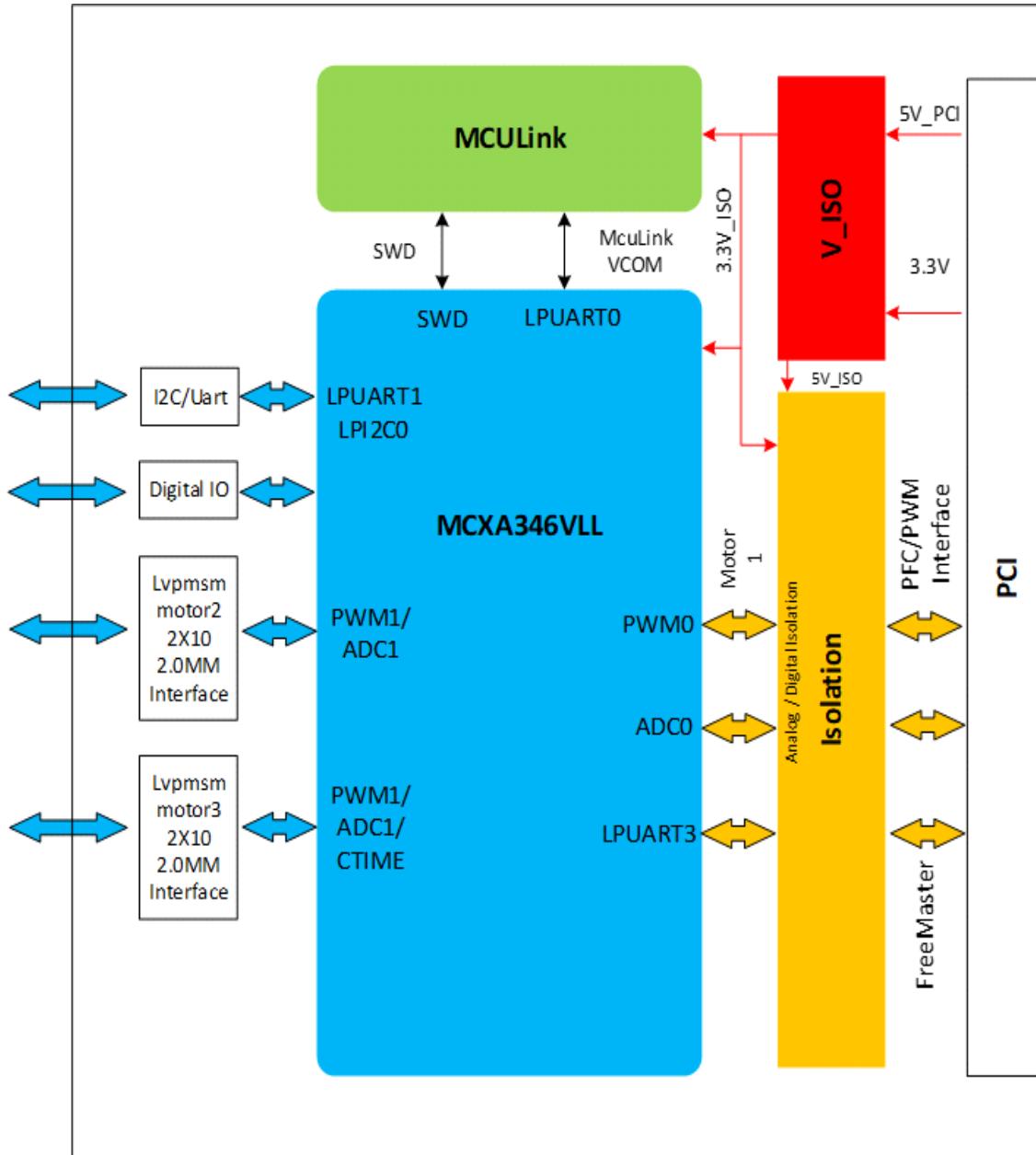
High-Voltage Development Platform Controller Card, MCXA346 MCU



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Designer: Yuexing Zou	Drawing Title: X-MCXA34X-3MC
Drawn by: Yuexing Zou	Page Title: Cover
Approved: Jonson Chen	Size: C Document Number: SCH-95101 PDF: SPF-95101 Rev: A2
Date: Friday, August 08, 2025	Sheet: 1 of 8

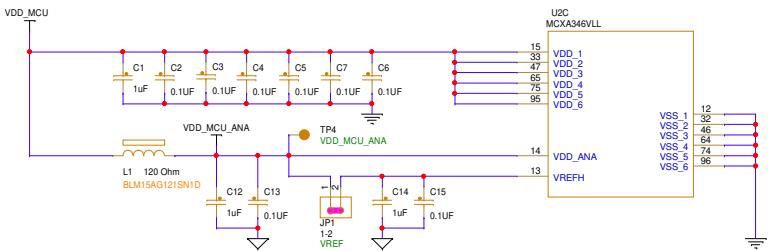
MCXA34X-3MC



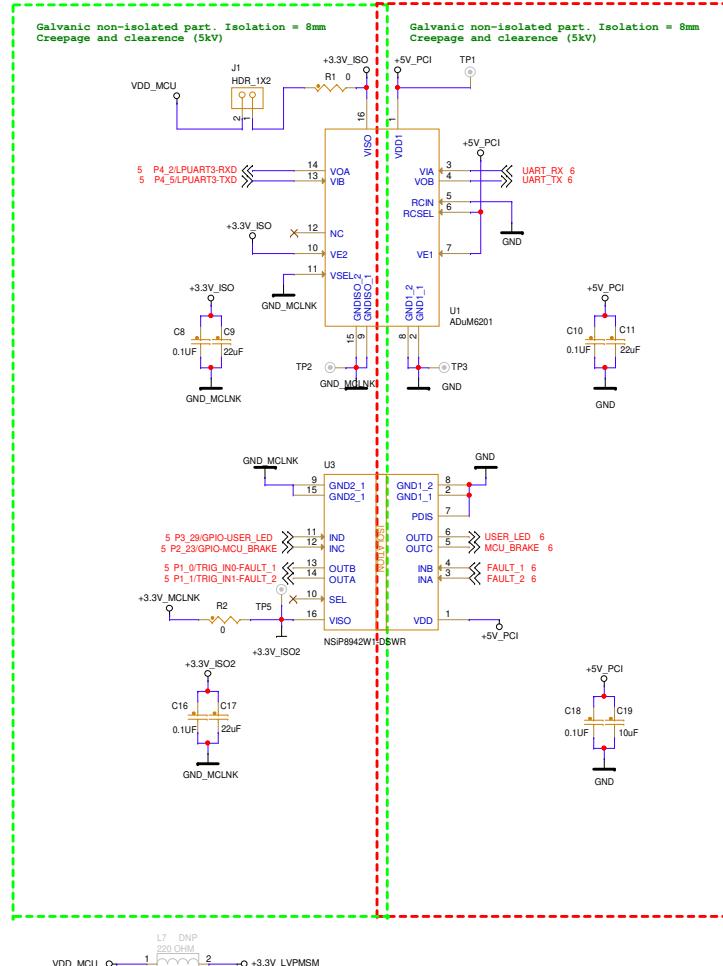
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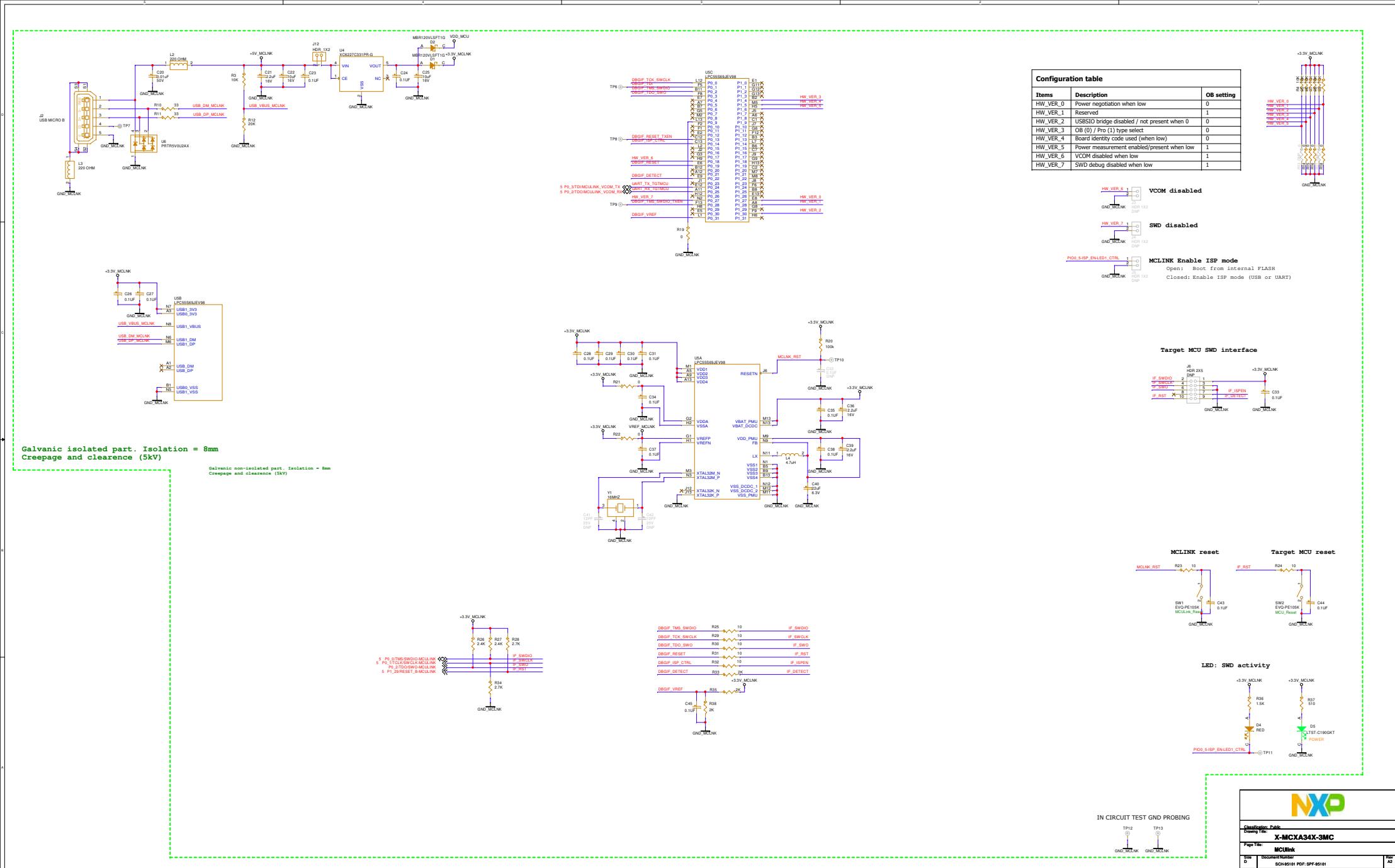
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Drawing Title: X-MCXAX34X-3MC
Page Title: Block Diagram

Size C	Document Number SCH-95101 PDF: SPF-95101	Rev A2
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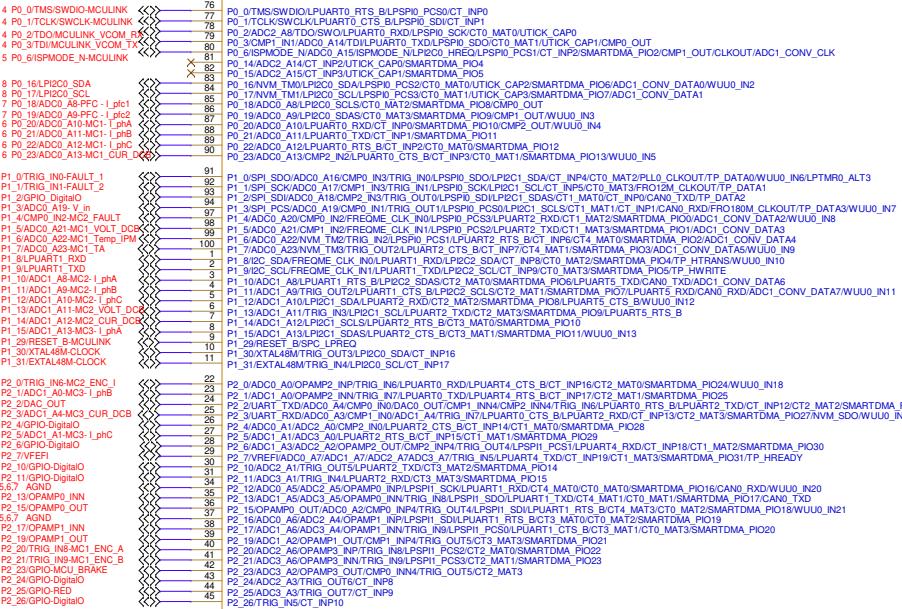


Galvanic isolated part. Isolation = 8mm
Creepage and clearance (5kV)

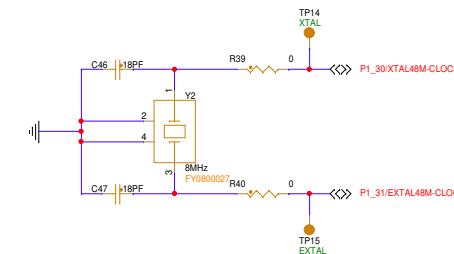




U2A
MCXA346VLL



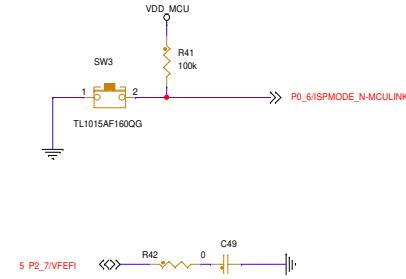
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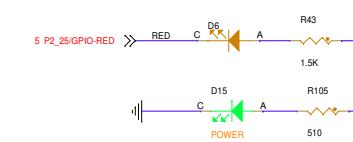
U2B
MCXA346VLL



ISP



Layout notes:
These resistors and two caps are close to MCU pin.



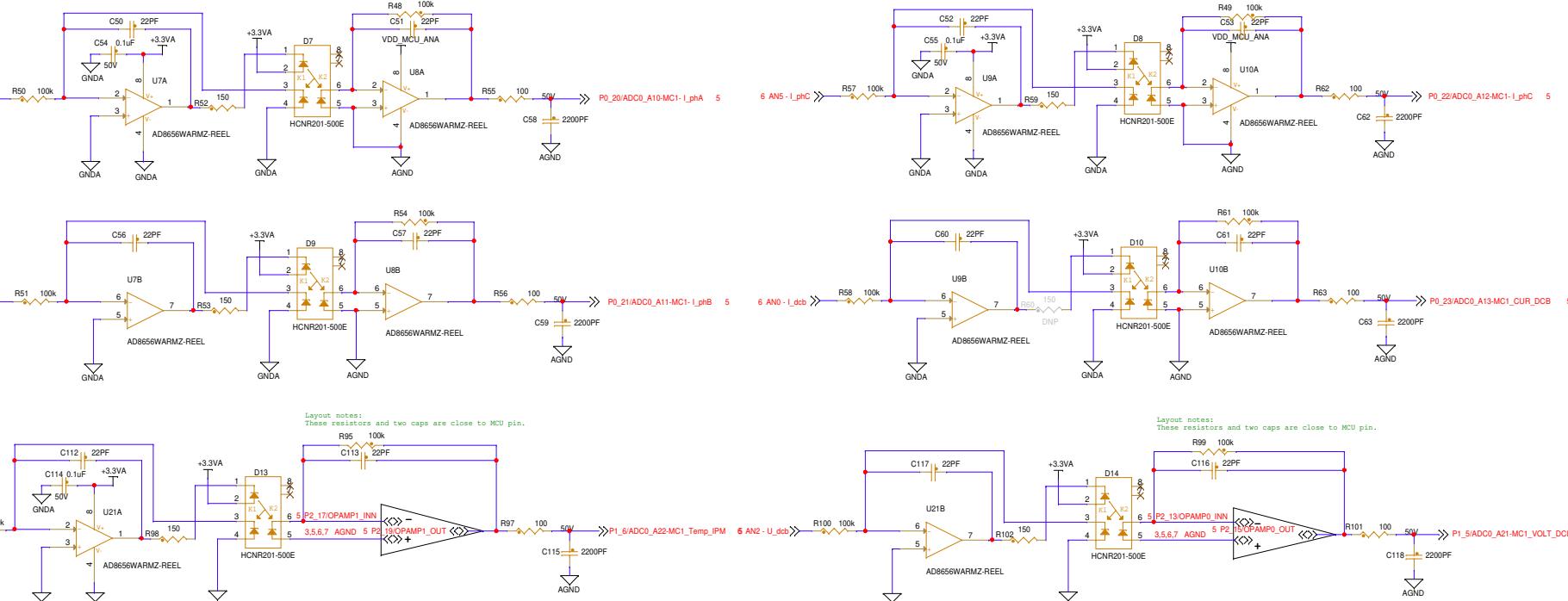
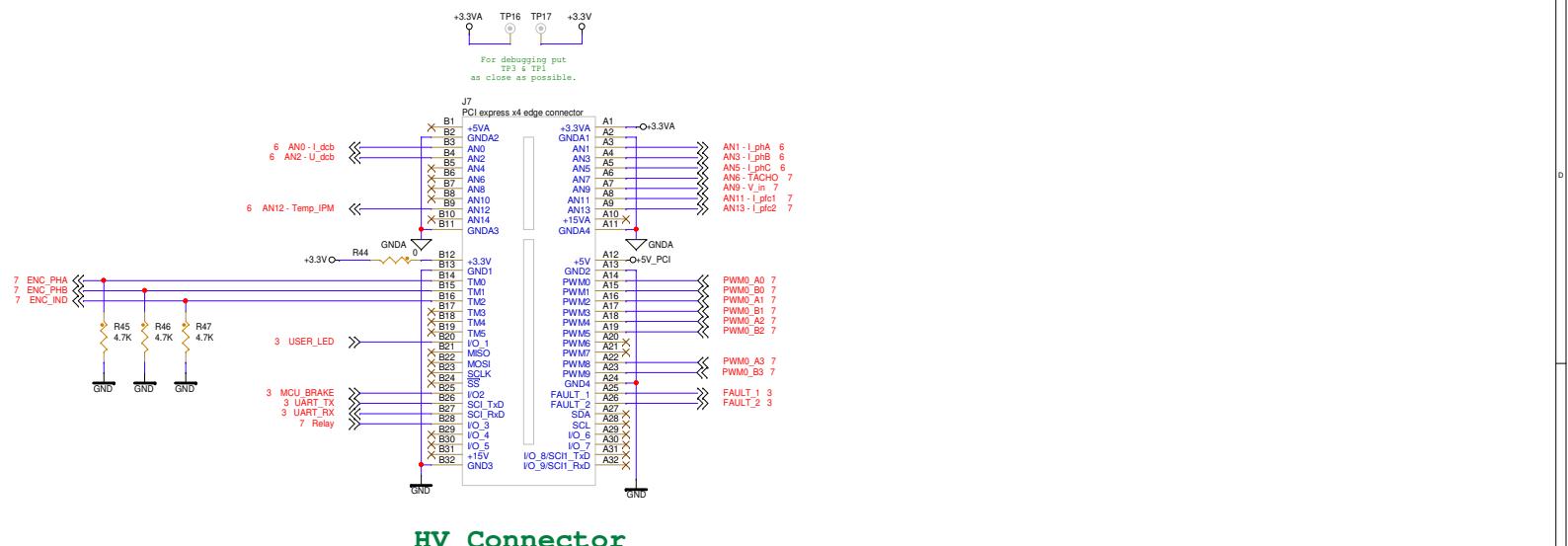
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Page Title: MCU

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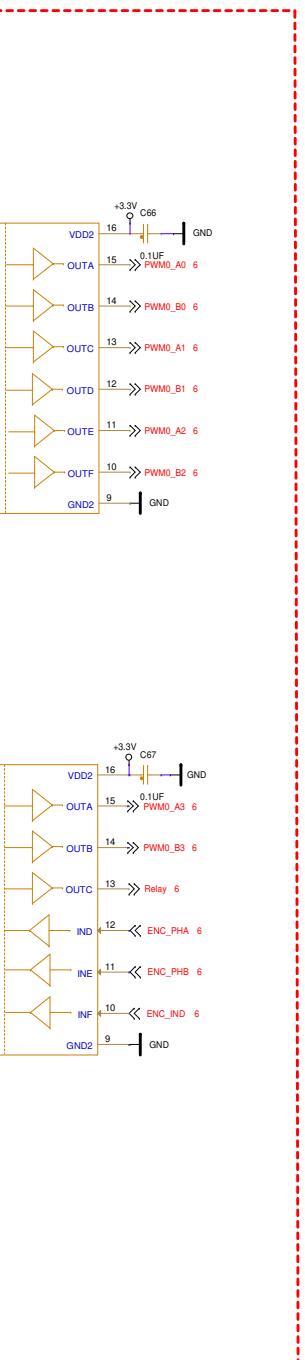


Current Isolation

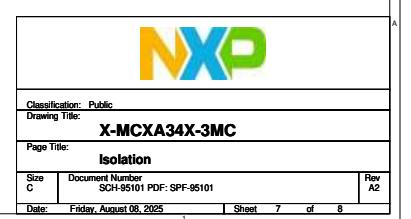
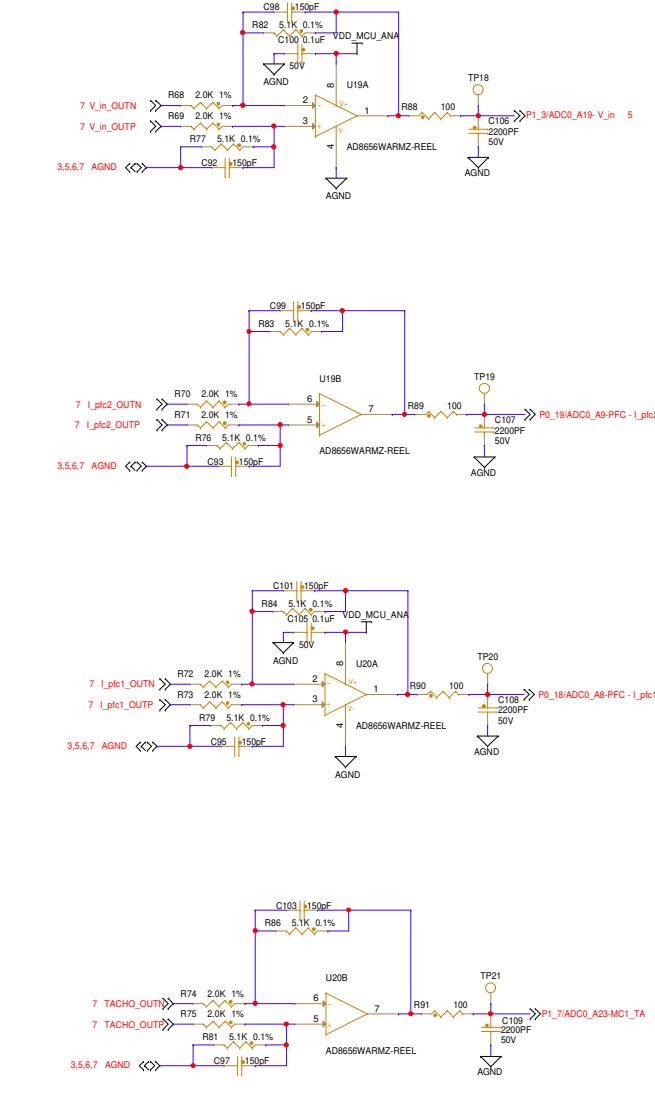
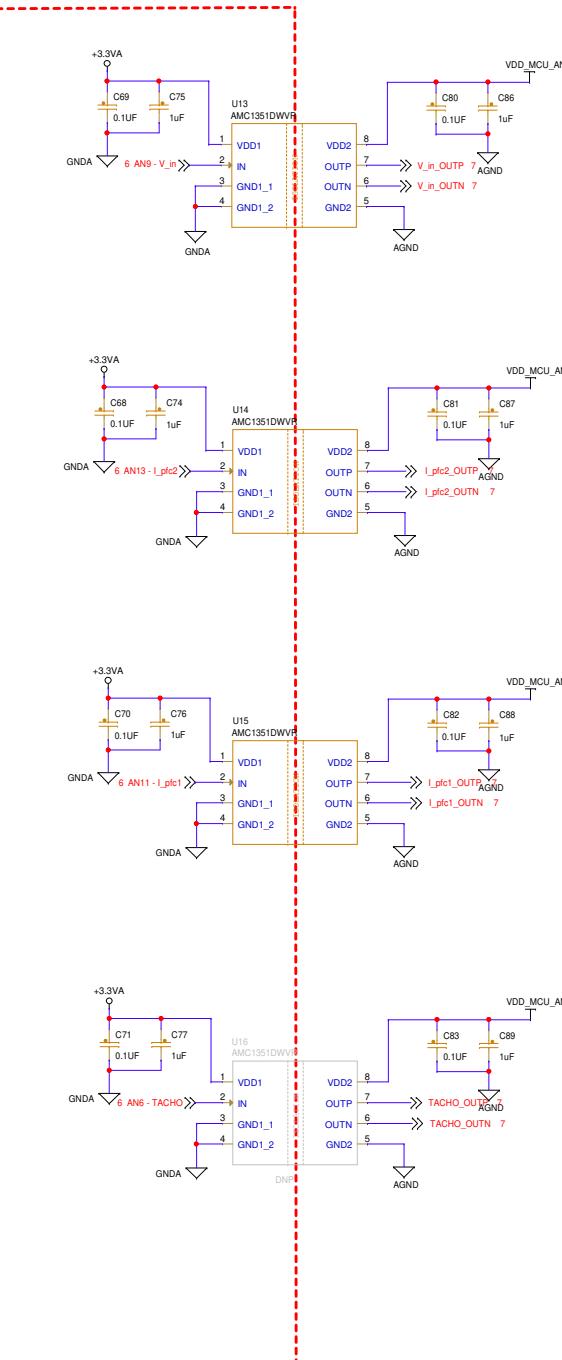


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Drawing Title: X-MCXA34X-3MC
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Size C Document Number: SCH-95101 PDF: SPF-95101
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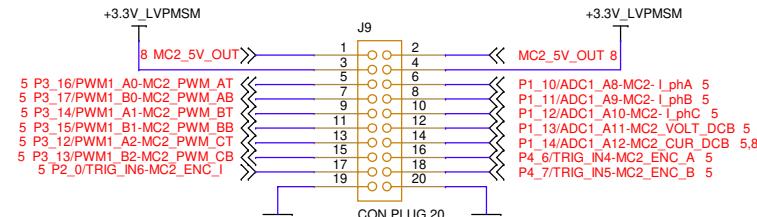
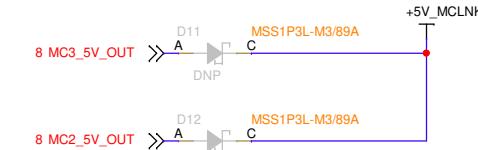
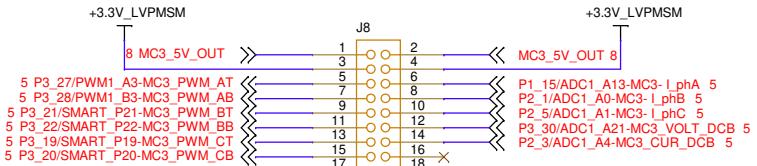
DIGITAL ISOLATION



ANALOG ISOLATION

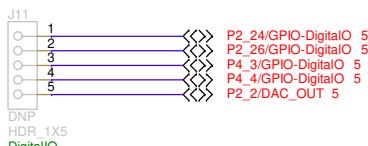
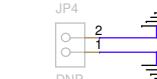
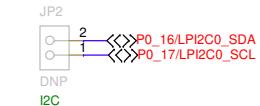
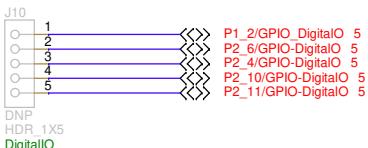


LV Motor Interface



5 P1_4/CMP0_IN2-MC2_FAULT <>> R94 <>> 0 <>> P1_14/ADC1_A12-MC2_CUR_DC5 5,8

DigitalIO



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