

PSOC CONTROL C3M5 DIGITAL POWER CONTROL CARD

CONTENTS	
PAGE	DESCRIPTION
01	Title page
02	Block diagram
03	Power supply
04	SWD/JTAG
05	I2C/Misch
06	XMC4200 debugger
07	PSOC C3M5 controller
08	PSOC C3M5 decoupling
09	120pin edge connector
10	Revision History

Drawing Numbers

PCBA	121-60689-01
PCB	600-60689-01
FAB DRW	610-60689-01
ASSY DRW	620-60689-01
SCH DRW	630-60689-01

Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

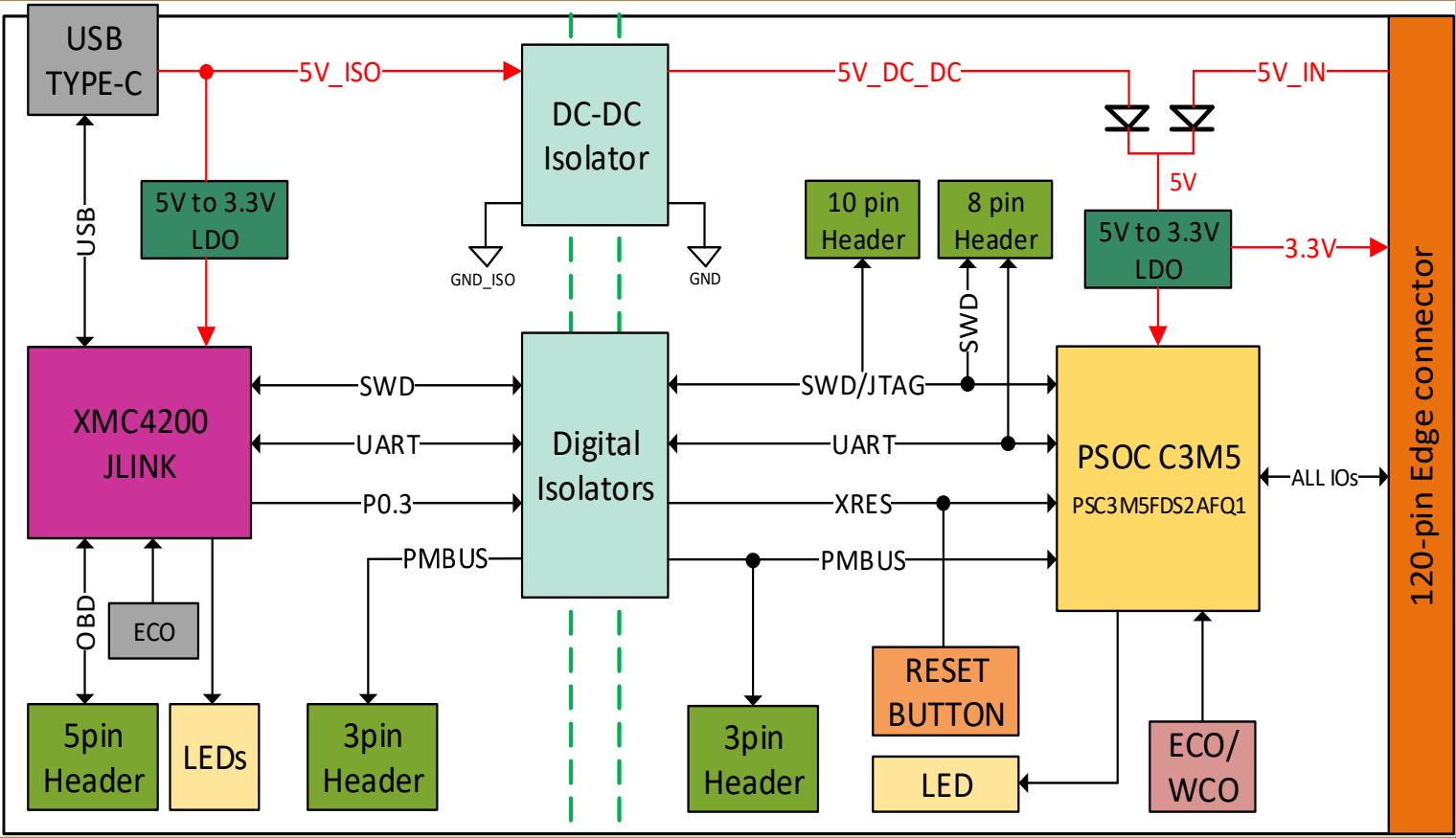


SCH Title : PSOC CONTROL C3M5 Control card

Page Title: Title page

Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date: Thursday, April 10, 2025		Sheet 1 of 10		

BLOCK DIAGRAM

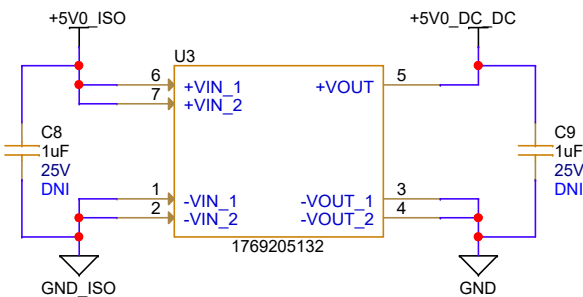
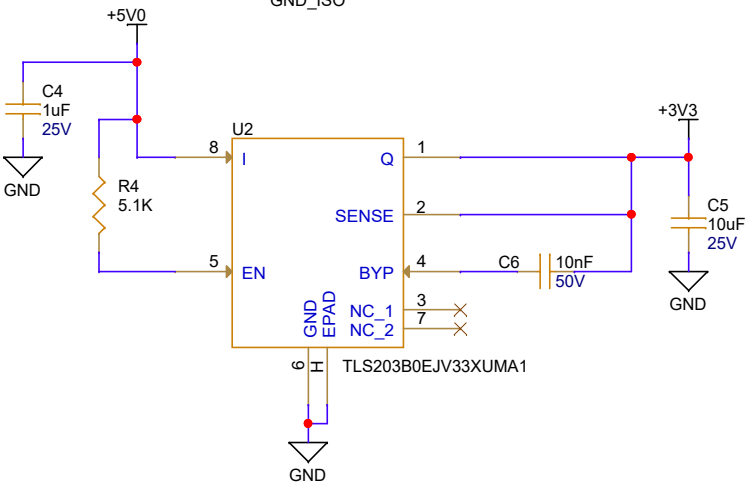
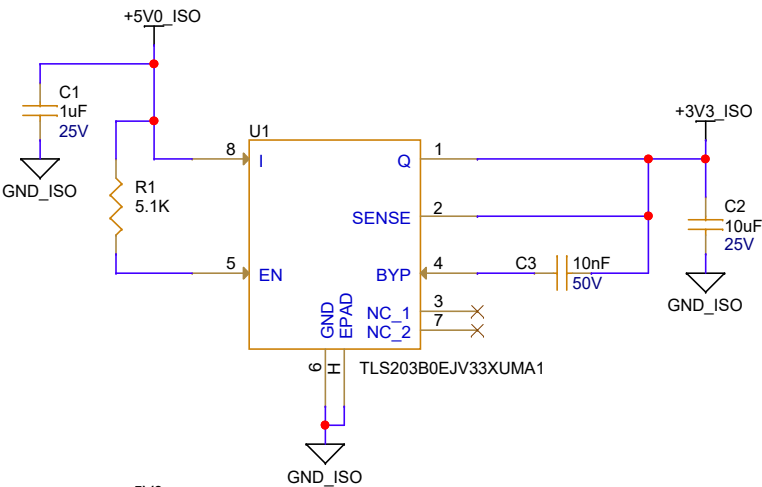
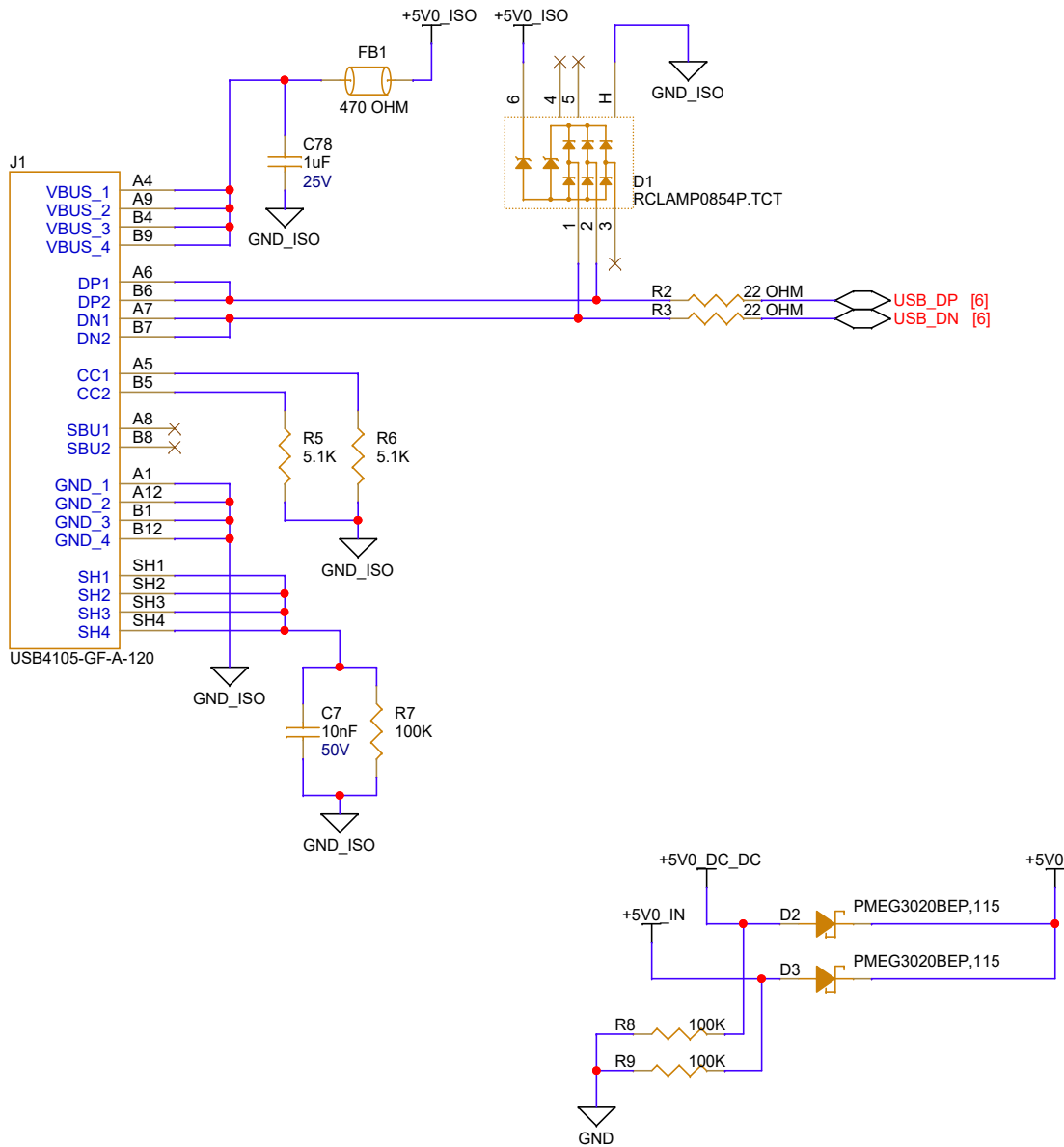


Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.



SCH Title : PSOC CONTROL C3M5 Control card				
Page Title: Block diagram				
Size A4	Document Number 630-60689-01	Drawn By GURRAL	Approved By RKAD	Rev 04
Date: Thursday, April 10, 2025		Sheet 2 of 10		

POWER SUPPLY



Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

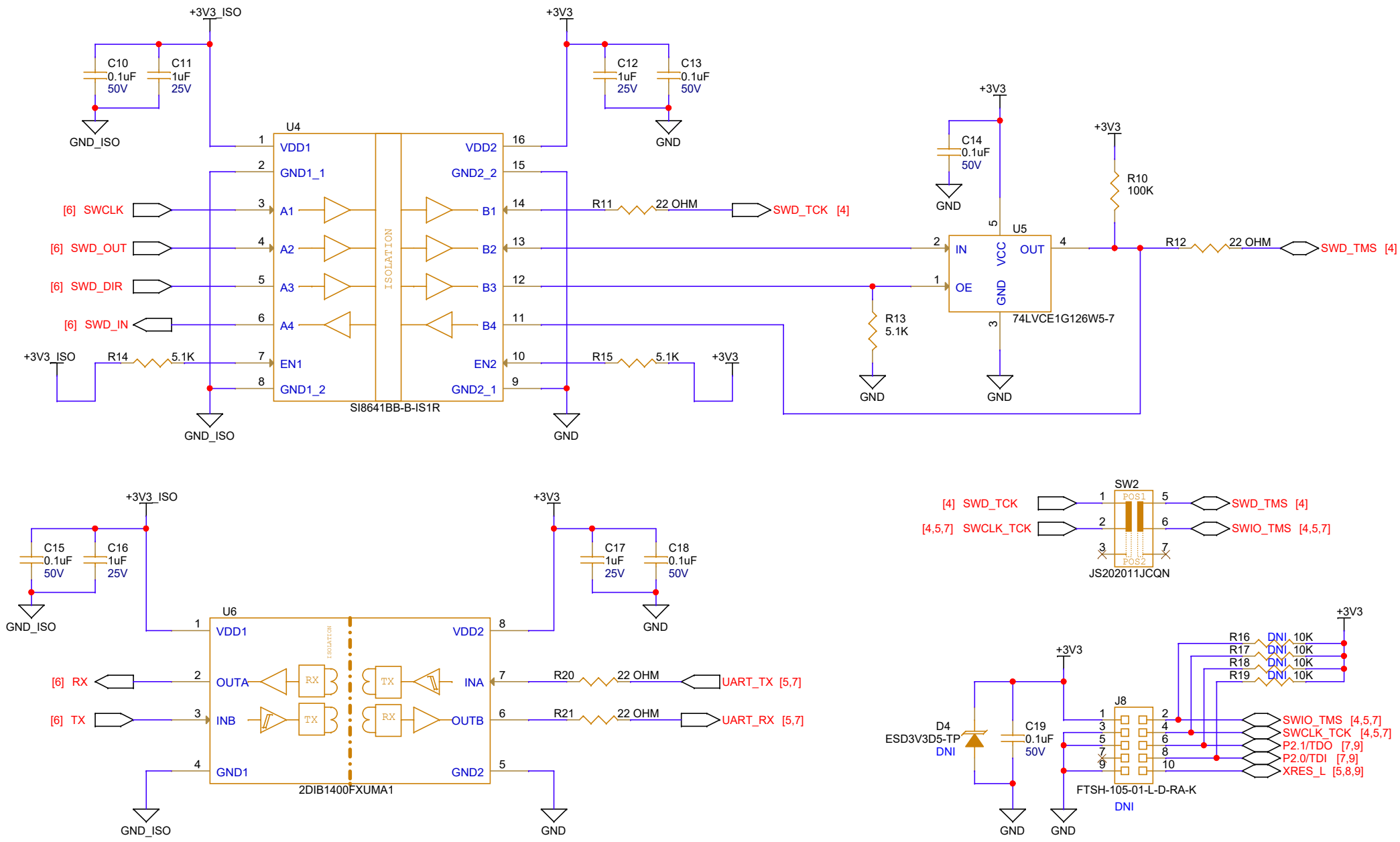


SCH Title : PSOC CONTROL C3M5 Control card

Page Title : Power supply

Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date:	Thursday, April 10, 2025		Sheet	3 of 10

SWD/JTAG

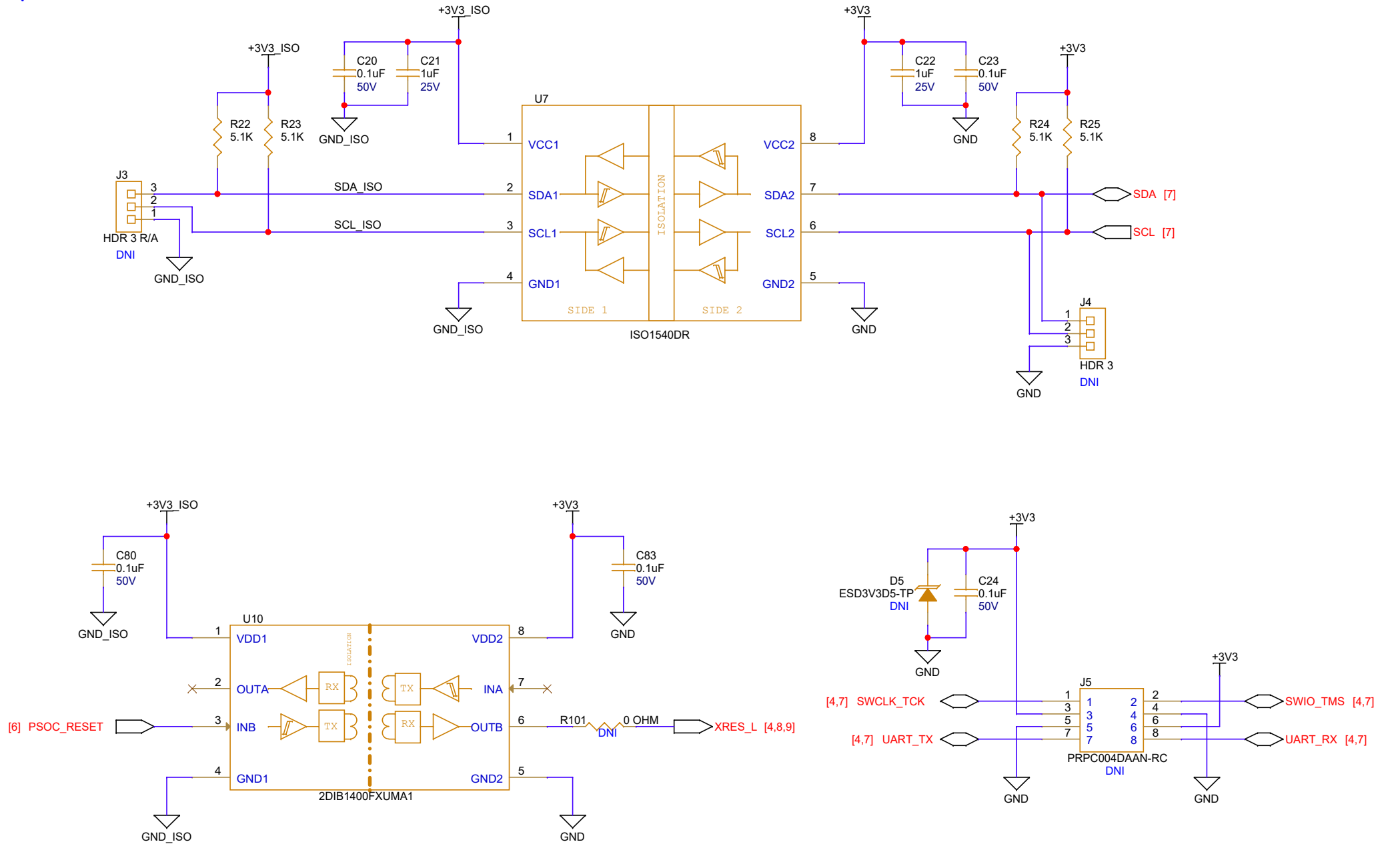


Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.



SCH Title : PSOC CONTROL C3M5 Control card				
Page Title: SWD/JTAG				
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date:	Thursday, April 10, 2025		Sheet	4 of 10

I2C/MISCH



Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

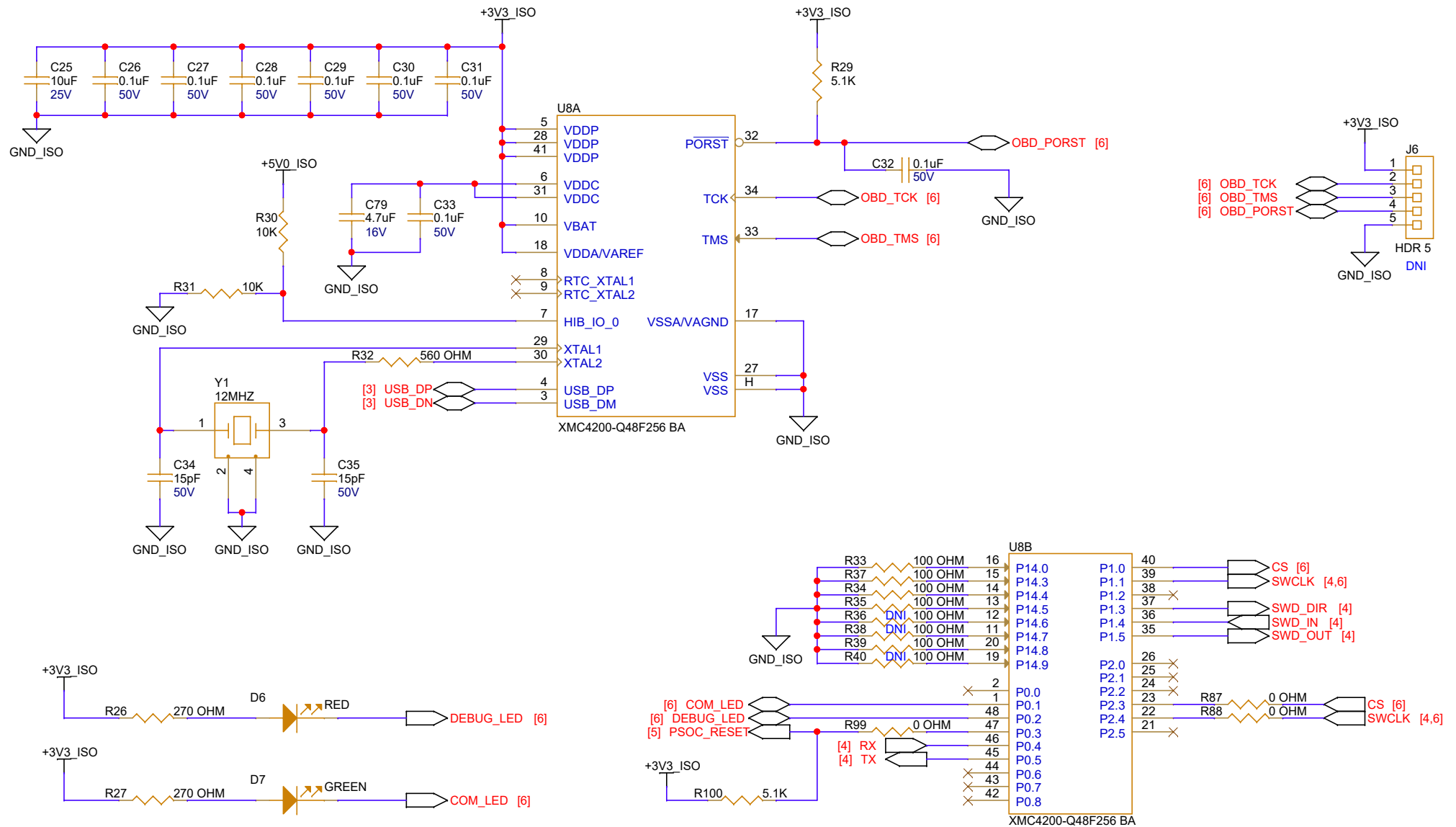


SCH Title : PSOC CONTROL C3M5 Control card

Page Title: I2C/Misch

Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date:	Thursday, April 10, 2025		Sheet	5 of 10

XMC4200 DEBUGGER



Legal Disclaimer :

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

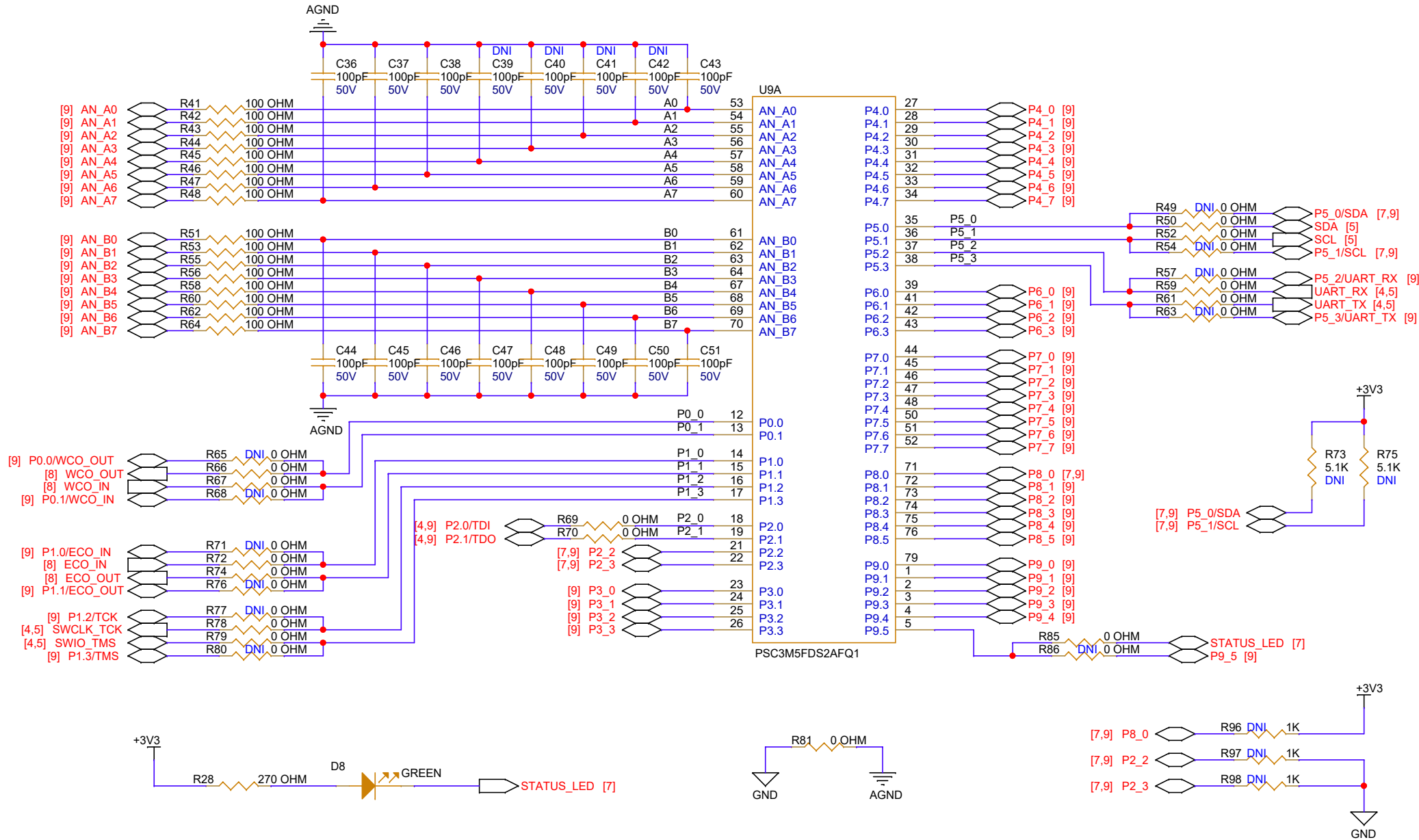


SCH Title : PSOC CONTROL C3M5 Control card

Page Title: XMC4200 debugger

Size A4	Document Number 630-60689-01	Drawn By GURRAL	Approved By RKAD	Rev 04
Date: Thursday, April 10, 2025			Sheet 6 of 10	

PSOC C3 CONTROLLER

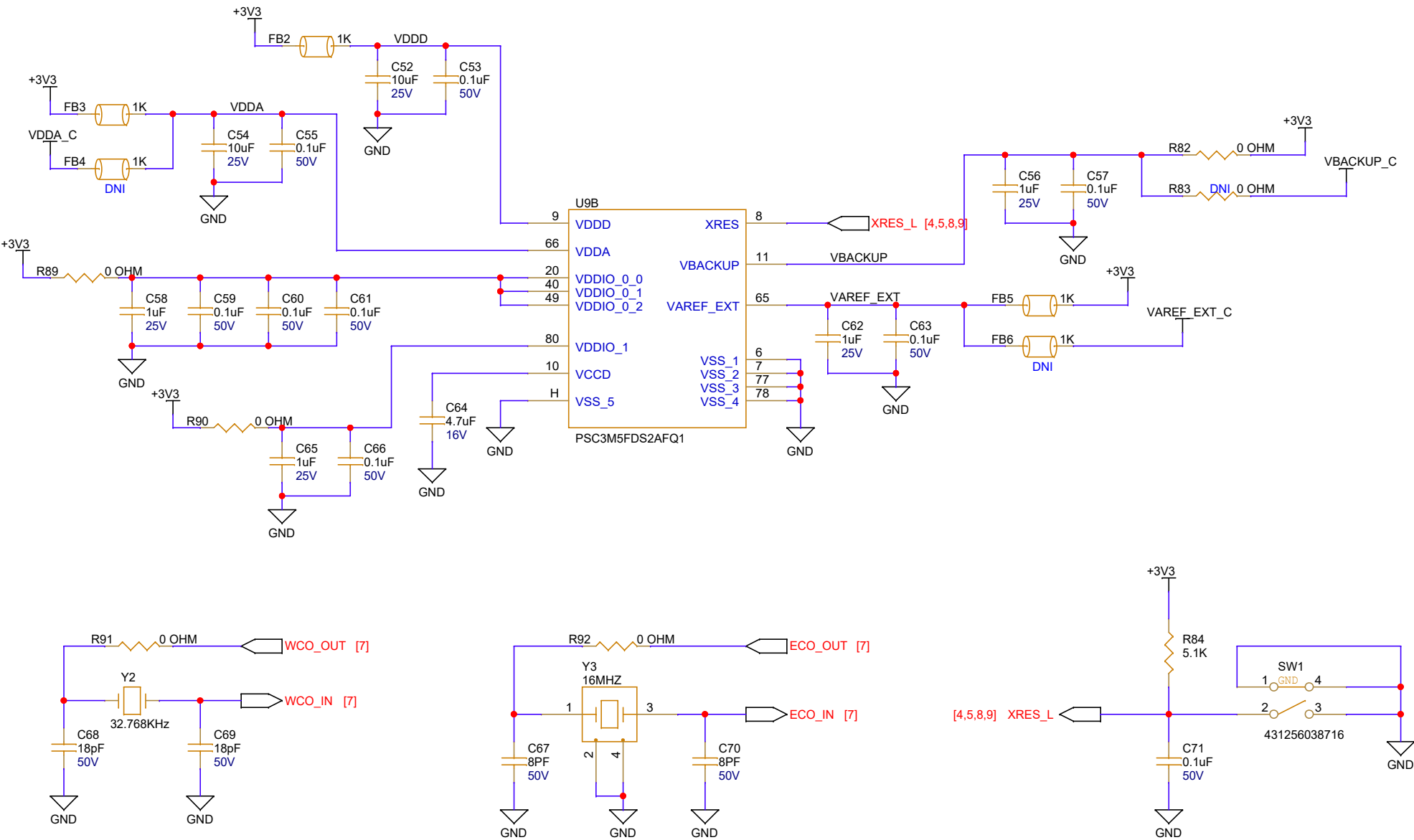


Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.



SCH Title : PSOC CONTROL C3M5 Control card				
Page Title: PSOC C3M5 controller				
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date:	Thursday, April 10, 2025		Sheet	7 of 10

PSOC C3 DECOUPLING

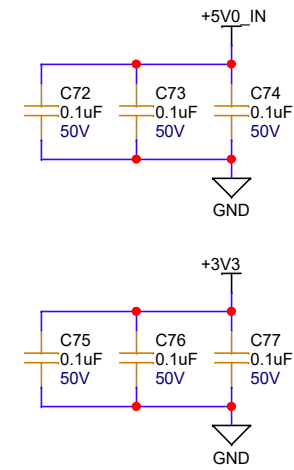
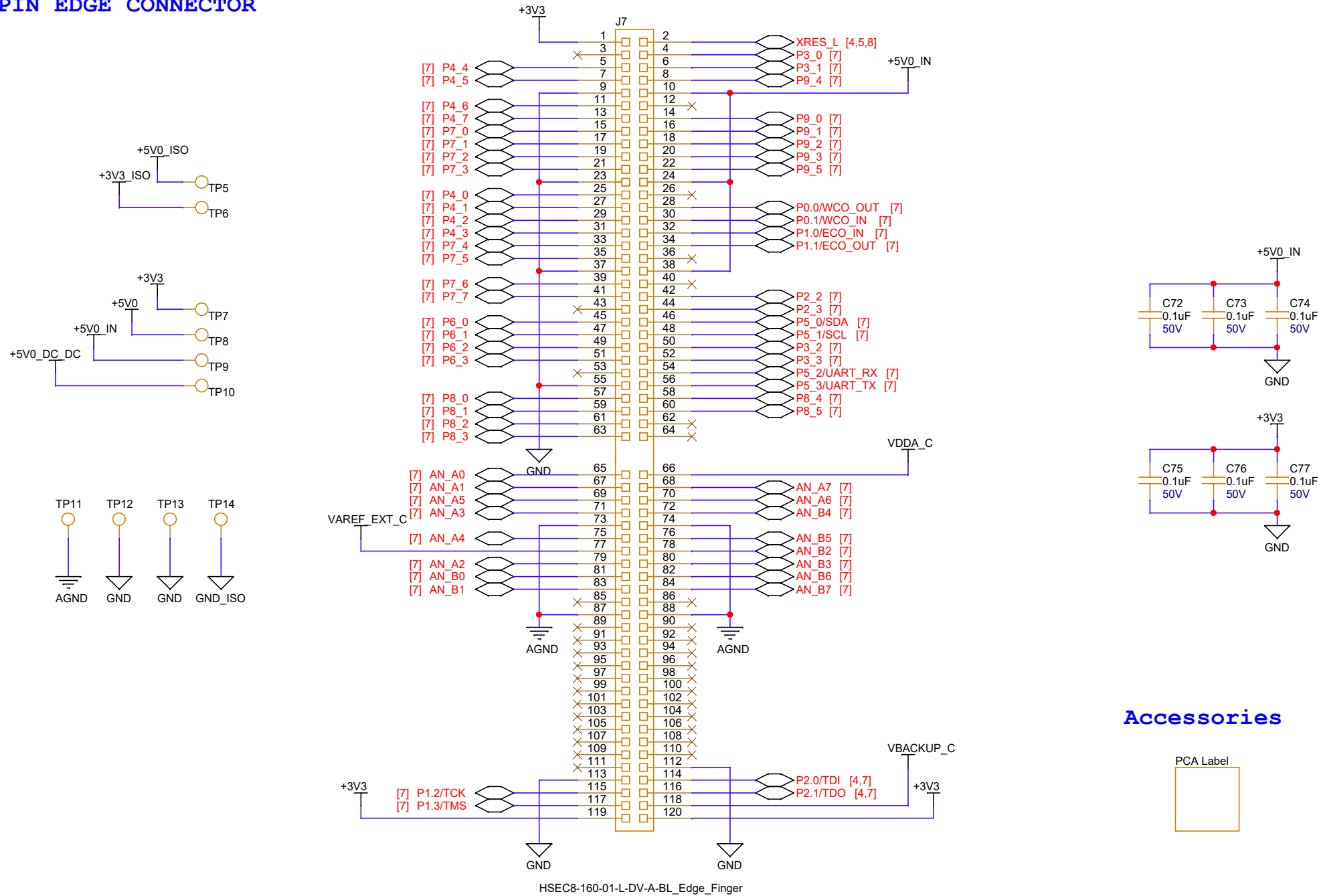


Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

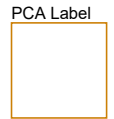


SCH Title : PSOC CONTROL C3M5 Control card				
Page Title : PSOC C3M5 decoupling				
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date:	Thursday, April 10, 2025		Sheet	8 of 10

120PIN EDGE CONNECTOR



Accessories



Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.



SCH Title : PSOC CONTROL C3M5 Control card				
Page Title: 120pin edge connector				
Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date:	Thursday, April 10, 2025		Sheet	9 of 10

REVISION HISTORY			
REV	DESCRIPTION OF CHANGE	ORIG. OF CHANGE	DATE
0.1	Initial Draft	GURRAL	06-09-2023
0.2	Connected ACT_LED to P9_5	GURRAL	22-09-2023
0.3	Replaced 100pF capacitor with new part	GURRAL	05-10-2023
1.1	Update VDDC pin connection on XMC4200, Changed ACT_LED name to STATUS_LED	GURRAL	01-12-2023
2.1	added P2.2 and P2.3 pull down resistor, P8.0 pull up resistor	GURRAL	31-05-2024
2.2	added DPDT switch SW2 to isolate on board debugger TMS & TCK signals	GURRAL	10-06-2024
2.3	XMC pin P0.3 connected to XRES pin of PSOC C3M5	GURRAL	28-08-2024
3.1	Changed the SW1 reset switch from SMD to through hole part	GURRAL	10-04-2025

Legal Disclaimer :
The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.



SCH Title : PSOC CONTROL C3M5 Control card

Page Title: Revision history

Size	Document Number	Drawn By	Approved By	Rev
A4	630-60689-01	GURRAL	RKAD	04
Date: Thursday, April 10, 2025		Sheet 10 of 10		