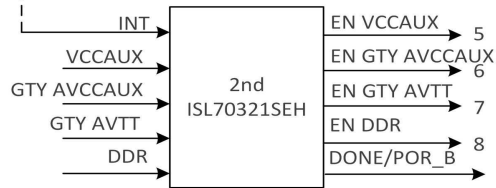
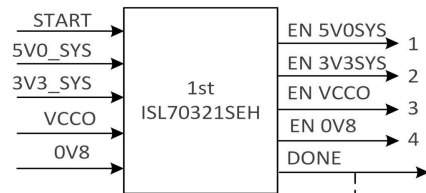
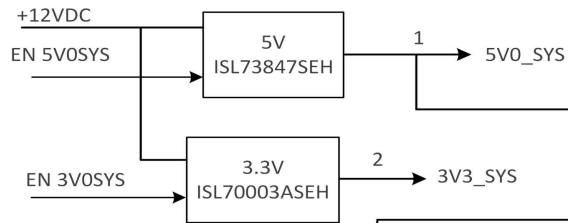
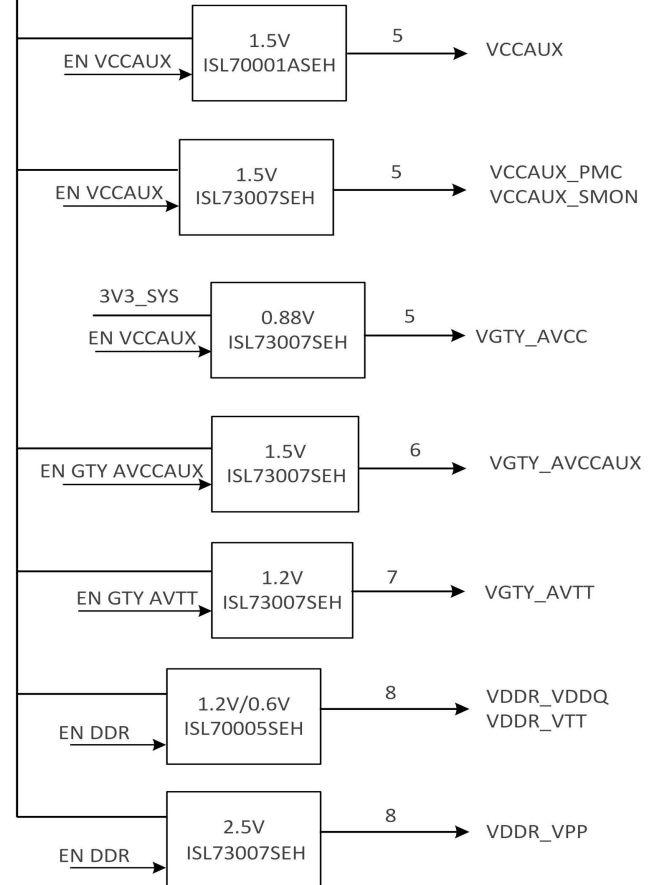
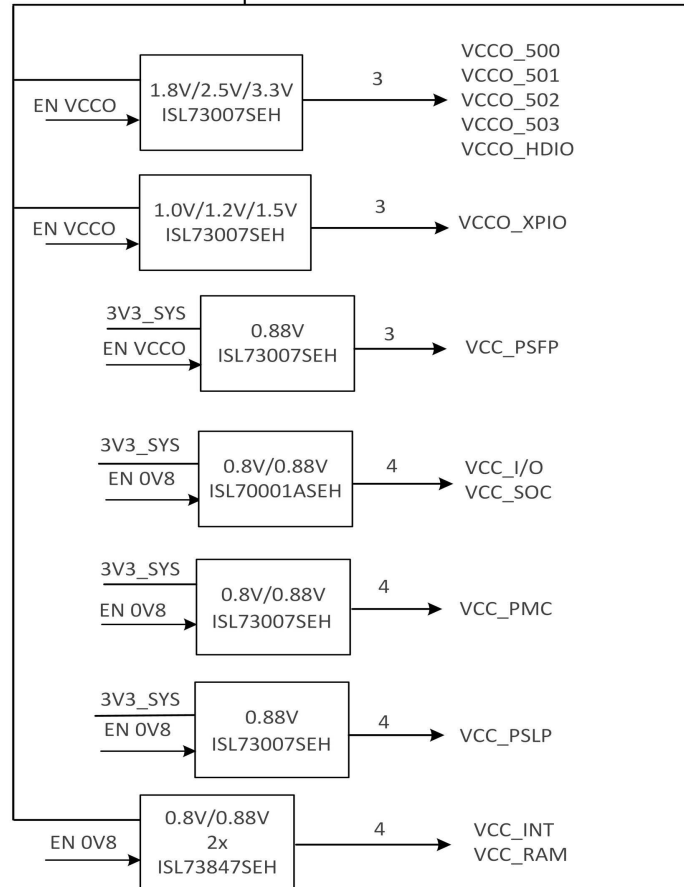


# Kintex Versal AI Core VC1902 Power Tree



\*DONE on the 2<sup>nd</sup> ISL70321 sequencer is the FPGA POR\_B signal. It is kept low until all power supplies have sequenced up. DONE asserts high to complete FPGA POR.

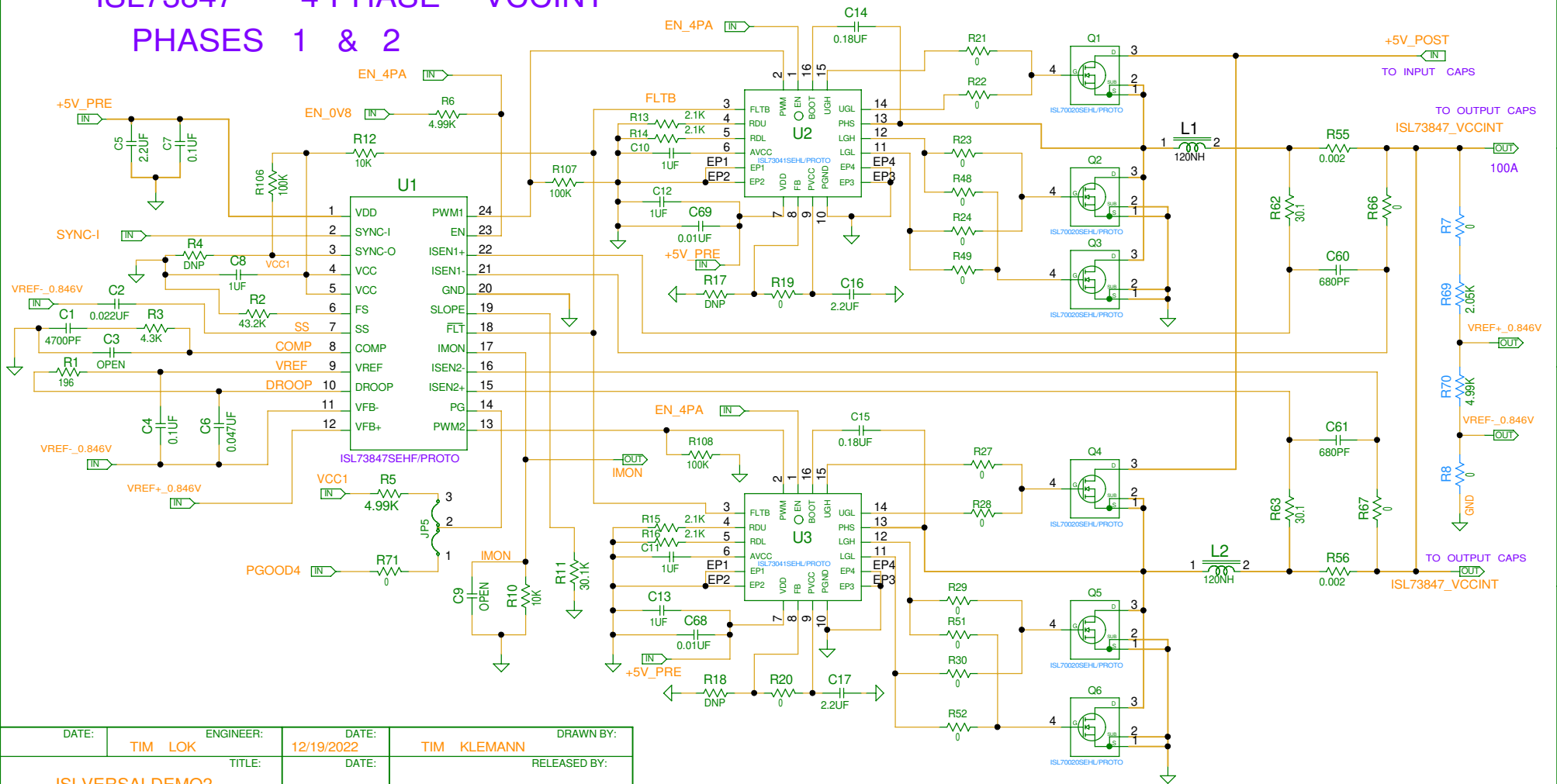


# CONTENTS

- |                            |                                       |
|----------------------------|---------------------------------------|
| 1. BLOCK DIAGRAM           | 18. ISL70001A_VCCAUX                  |
| 2. POWER TREE              | 19. ISL73007_VCCAUX_SMON_PMC          |
| 3. TABLE OF CONTENTS       | 20. ISL73007_GTY_AVCC                 |
| 4. ISL73847_VCCINT_4_PHASE | 21. ISL73007_GTY_AVCCAUX              |
| 12. ISL73007_VCCO_50X      | 22. ISL73007_GTY_AVTT                 |
| 13. ISL73007_VCCO_XPIO     | 23. ISL73005_DDR_VDD                  |
| 14. ISL73007_VCC_PSFP      | 24. ISL73007_DDR_VPP                  |
| 15. ISL730001A_VCC_SOC_IO  | 25. ISL73847_5V0_SYS                  |
| 16. ISL73007_VCC_PMC       | 27. ISL70003A_3V3_SYS                 |
| 17. ISL73007_VCC_PSLP      | 28. POWER SEQUENCER AND HOUSE KEEPING |

DRAWN BY: <b>TIM KLEMANN</b>	DATE: <b>12/20/2022</b>	ENGINEER: <b>TIM LOK</b>	DATE:	
RELEASED BY:	DATE:	TITLE: <b>ISLVERSALDEMO2 CONTENTS SCHEMATIC</b>		
UPDATED BY:	DATE:			
<b>intersil</b> ™	TESTER	MASK#	HRDWR ID	REV. <b>A</b>
	FILENAME: <b>ISLVERDEMO2ZA/CONTENTS</b>		SHEET <b>3 OF 31</b>	

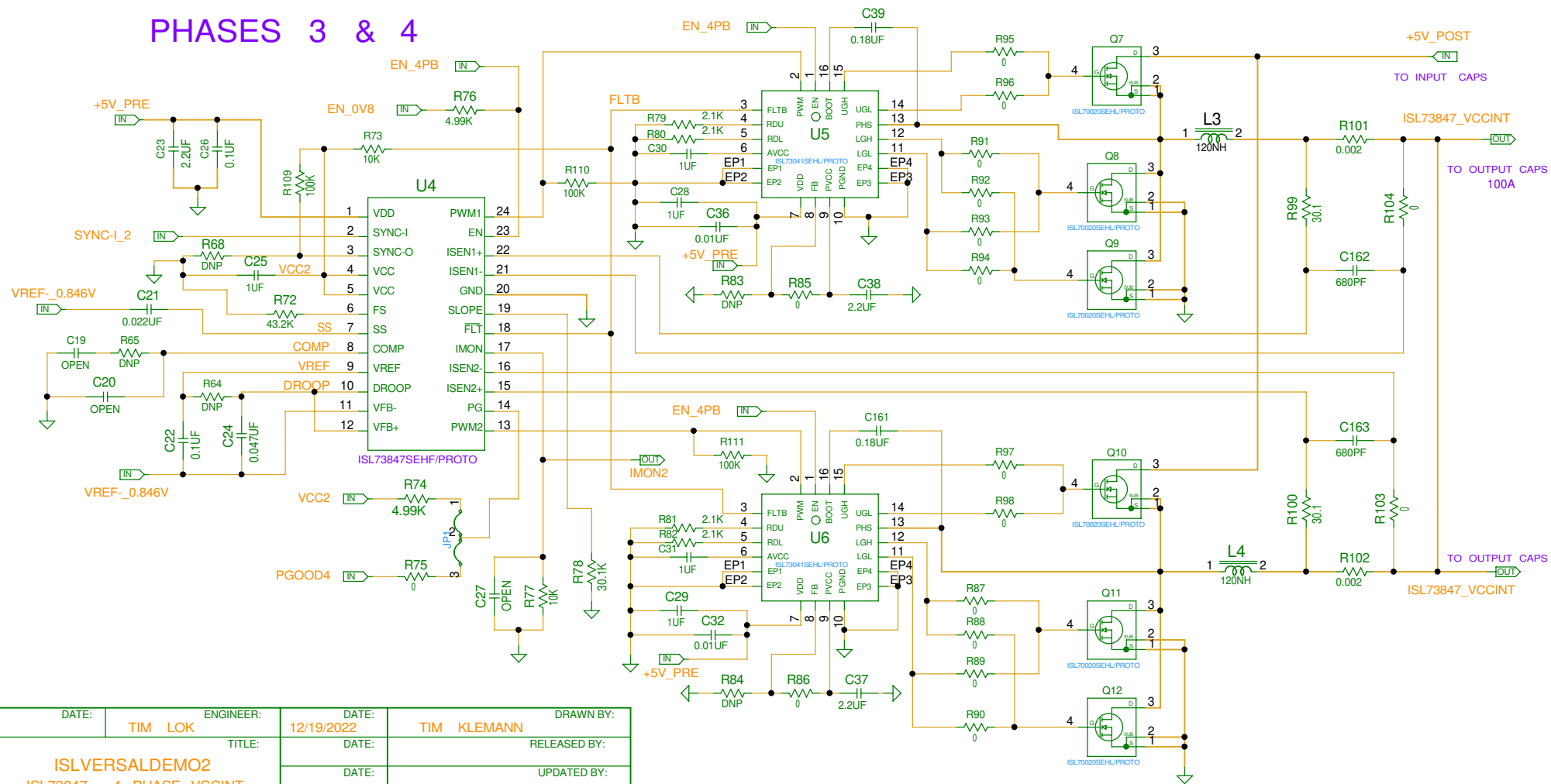
# ISL73847 4-PHASE VCCINT PHASES 1 & 2



DATE:	ENGINEER:	DATE:	DRAWN BY:
	TIM LOK	12/19/2022	TIM KLEMMANN
TITLE:		DATE:	RELEASED BY:
ISLVERSALDEMO2			
ISL73847 4 PHASE VCCINT		DATE:	UPDATED BY:
SCHEMATIC			
REV.	HRDWR ID	MASK#	TESTER
A			
SHEET		FILENAME:	
4 OF 31		ISLVERSALDEMO2A/ISL73847_4_PHASE_VCCINT	

**intersil™**

# ISL73847 4-PHASE VCCINT PHASES 3 & 4

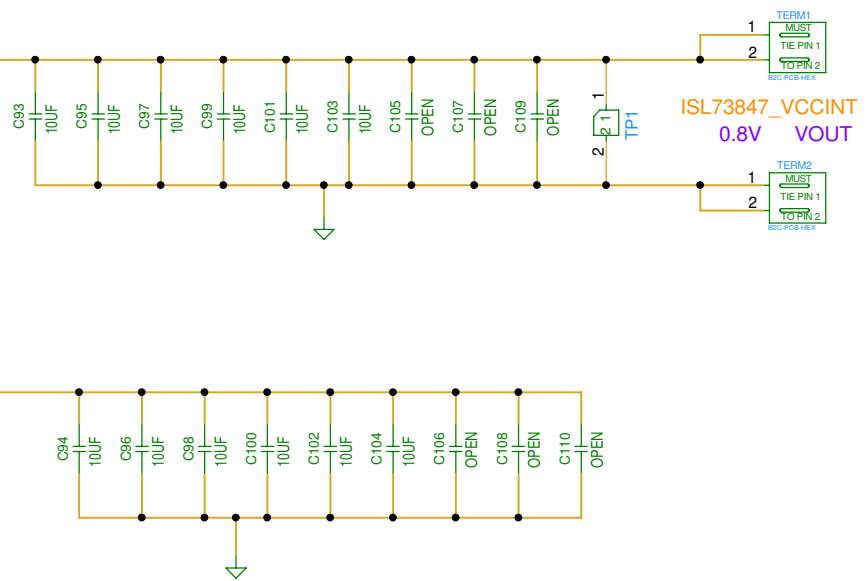
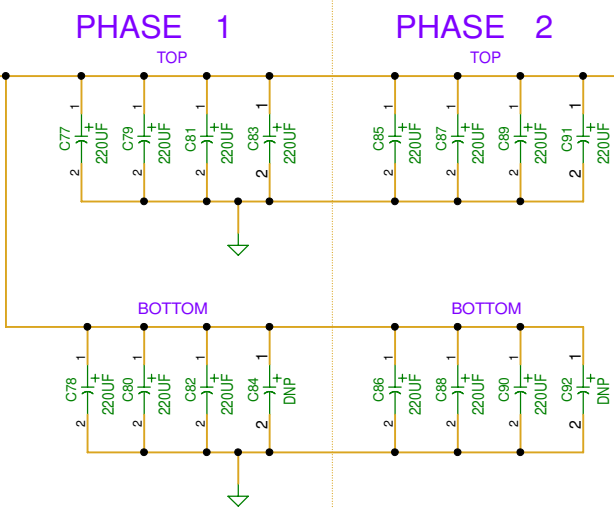


DATE:	ENGINEER:	DATE:	DRAWN BY:
TIM LOK		12/19/2022	TIM KLEMANN
TITLE:		DATE:	RELEASED BY:
ISL73847 4 PHASE VCCINT			
SCHEMATIC		DATE:	UPDATED BY:
TESTER			
REV.	HRDWR ID	MASK#	FILENAME:
A			ISL73847_4_PHASE_VCCINT
5 OF 31	SHEET		

**intersil™**

ISL73847 4-PHASE VCCINT  
PHASES 1 & 2

0.8V VOUT  
ISL73847\_VCCINT



DRAWN BY: TIM KLEMMANN	DATE: 12/16/2022	ENGINEER: TIM LOK	DATE:
RELEASED BY:	DATE:	TITLE: ISLVERSALDEMO2 ISL73847 4-PHASE VCCINT SCHEMATIC	
UPDATED BY:	DATE:	TESTER	
intelsil™		MASK#	HRDWR ID
FILENAME: ISLVERSALDEMO2A\ISL73847_4_PHASE_VCCINT		REV. A	SHEET 6 OF 31

# ISL73847 4-PHASE VCCINT

## PHASES 3 & 4

0.8V VOUT  
ISL73847\_VCCINT

PHASE 3  
TOP

PHASE 4  
TOP

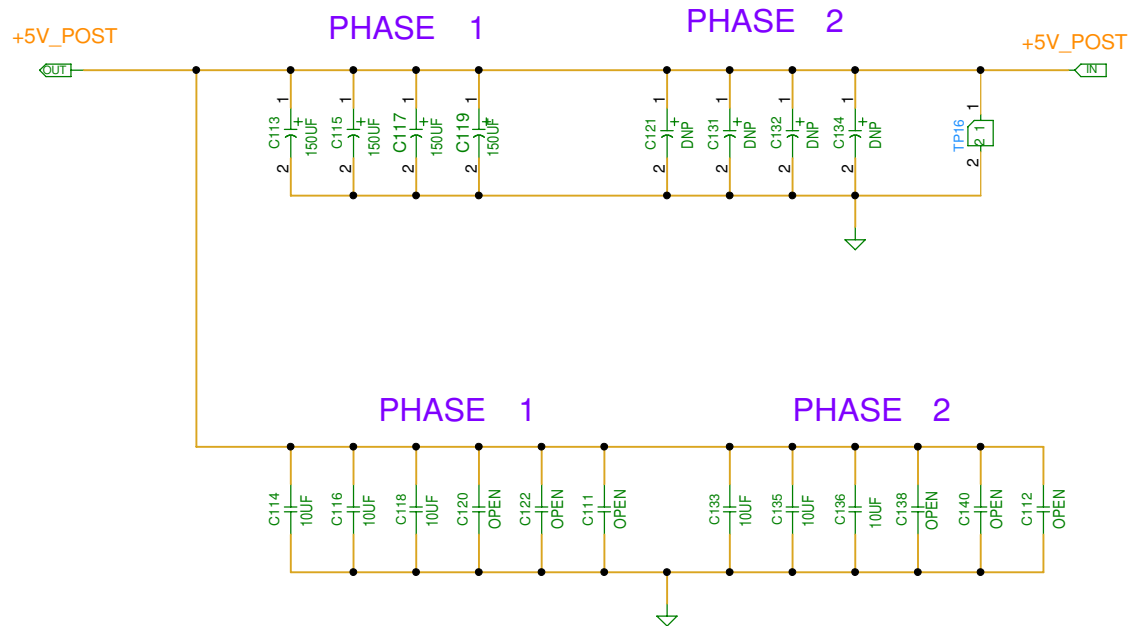
BOTTOM


BOTTOM

DRAWN BY: <b>TIM KLEMMANN</b>	DATE: <b>12/16/2022</b>	ENGINEER: <b>TIM LOK</b>	DATE:
RELEASED BY:	DATE:	TITLE: <b>ISLVERSALDEMO2</b> <b>ISL73847 4-PHASE VCCINT</b> <b>SCHEMATIC</b>	
UPDATED BY:	DATE:		
<b>intersil</b> ™	TESTER		REV. <b>A</b>
	FILENAME: <b>ISLVERSALDEMO2\ISL73847_4_PHASE_VCCINT</b>	MASK#	HRDWR ID
SHEET <b>7 OF 31</b>			

# ISL73847 4-PHASE VCCINT

## PHASES 1 & 2

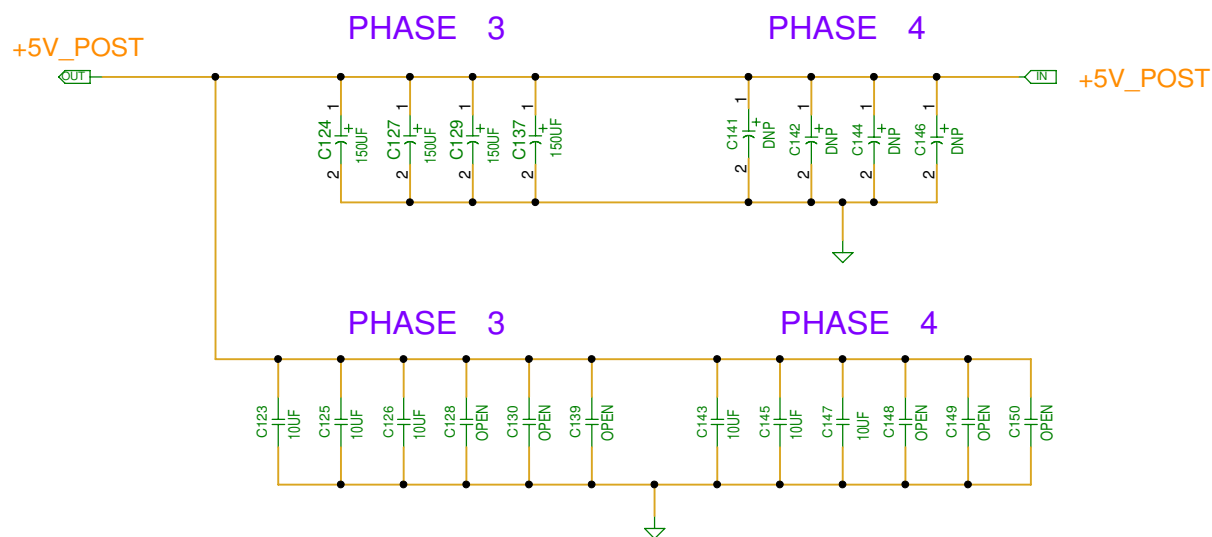


DRAWN BY: TIM KLEMANN		DATE: 12/20/2022		ENGINEER: TIM LOK		DATE:	
RELEASED BY:		DATE:		TITLE: ISLVERSALDEMO2 ISL73847 4 PHASE VCCINT SCHEMATIC			
UPDATED BY:		DATE:					
		TESTER					
				MASK#		HRDWR ID	
FILENAME: ISLVERSALDEMO2A/ISL73847_4_PHASE_VCCINT						SHEET 8 OF 31	



# ISL73847 4-PHASE VCCINT

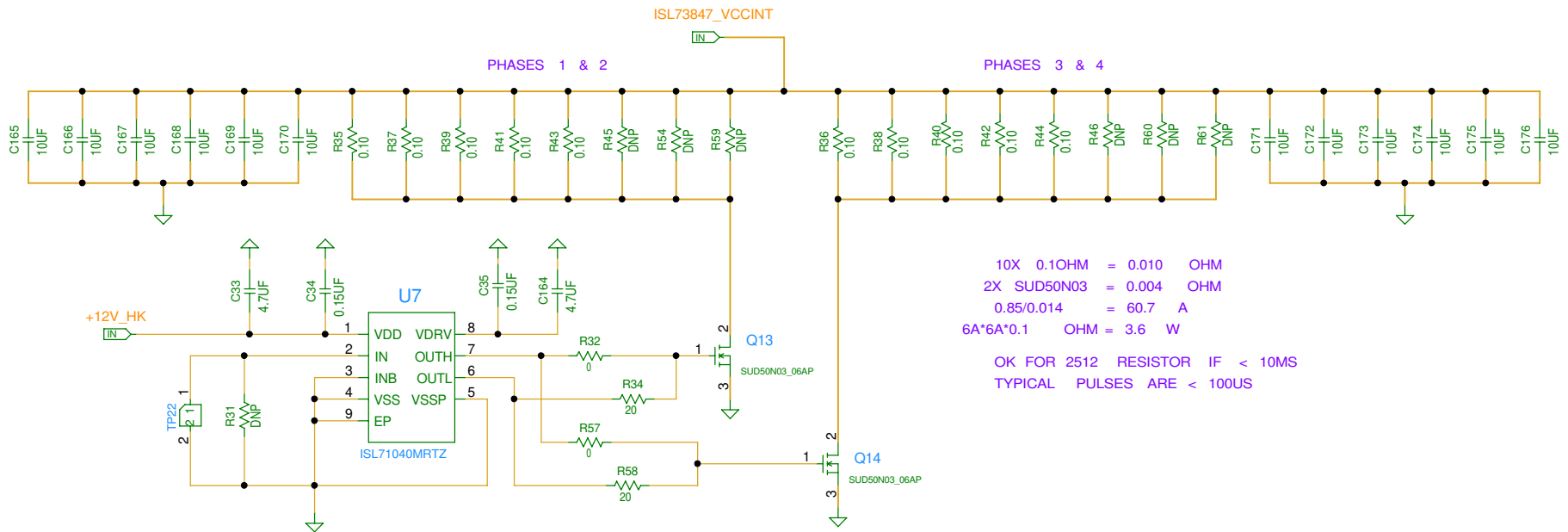
## PHASES 3 & 4



DRAWN BY:	TIM KLEMANN	DATE:	12/20/2022	ENGINEER:	TIM LOK	DATE:	
RELEASED BY:		DATE:		TITLE:	ISLVERSALDEMO2 ISL73847 4-PHASE SCHEMATIC		
UPDATED BY:		DATE:		TESTER			
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		FILENAME:	ISLVERSALDEMO2\ISL73847_4_PHASE			SHEET	9 OF 31

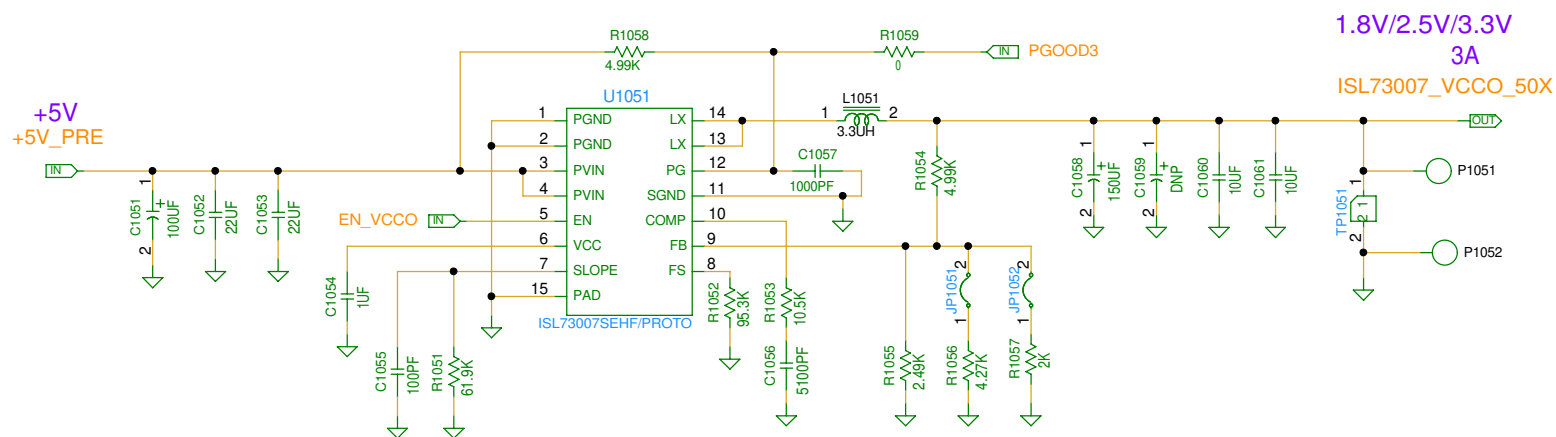



# ISL73847 4-PHASE VCCINT TRANSIENT LOAD GENERATOR



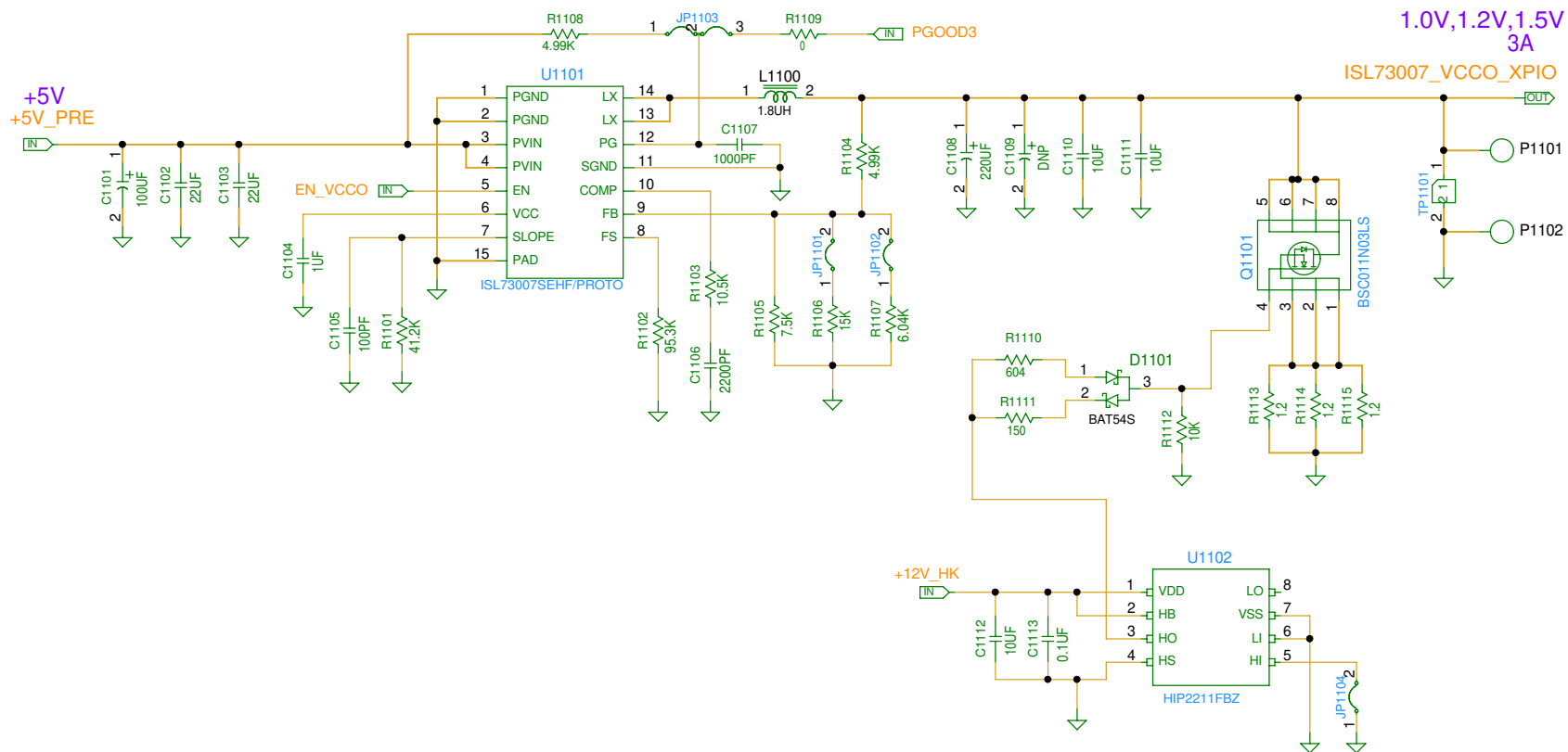
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RELEASED BY:	DATE:	TITLE: <b>ISLVERSALDEMO2</b>	
UPDATED BY:	DATE:	<b>ISL73847 4-PHASE VCCINT</b>	
<b>intersil</b>	TESTER	<b>SCHEMATIC</b>	
	FILENAME: <b>ISLVERSALDEMO2A\ISL73847_4_PHASE_VCCINT</b>	MASK#	HRDWR ID
		REV. <b>A</b>	
		SHEET <b>11</b>	OF <b>31</b>

## ISL73007 VCCO 50X




DRAWN BY: TIM KLEMMANN		DATE: 12/08/2022	ENGINEER: TIM LOK		DATE:
RELEASED BY:		DATE:	TITLE: ISLVERSALDEMO2 ISL73007 VCCO 50X SCHEMATIC		
UPDATED BY:		DATE:			
		TESTER	MASK#		HRDWR ID
		FILENAME: ISLVERSALDEMO22A/ISL73007_VCCO_50X		SHEET 12 OF 31	
			REV. A		

# ISL73007 VCCO XPIO

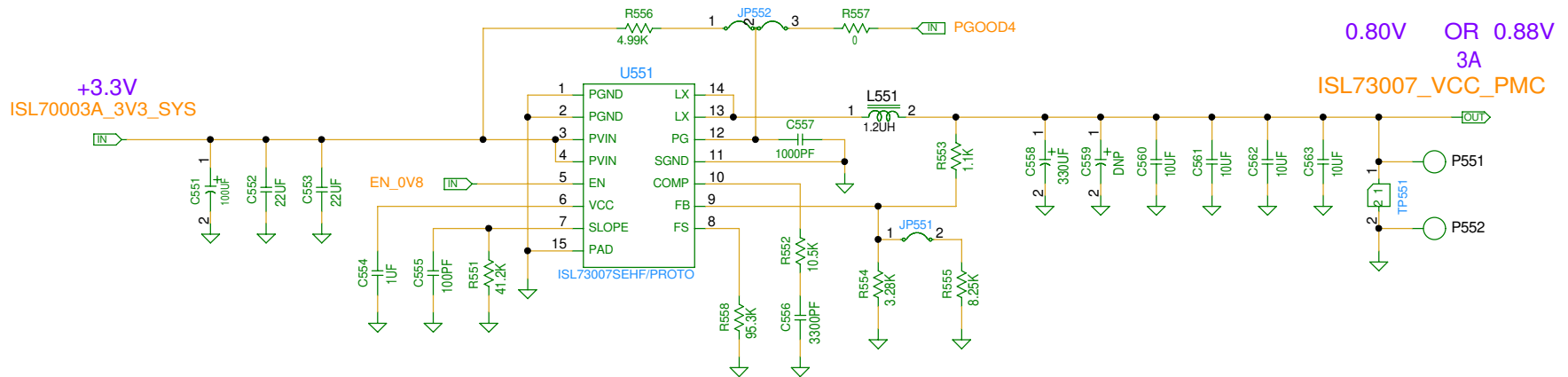


DRAWN BY: <b>TIM KLEMANN</b>	DATE: <b>12/16/2022</b>	ENGINEER: <b>TIM LOK</b>	DATE:
RELEASED BY:	DATE:	TITLE: <b>ISLVERSALDEMO2 ISL73007_VCCO_XPIO SCHEMATIC</b>	
UPDATED BY:	DATE:	TESTER	
<b>intersil</b>	FILENAME: <b>ISLVERDSALDEMO2ZA/ISL73007_VCCO_XPIO</b>	MASK#	HRDWR ID
		REV. <b>A</b>	
		SHEET <b>13</b> OF <b>31</b>	



DRAWN BY: <b>TIM KLEMMANN</b>		DATE: <b>12/16/2022</b>		ENGINEER: <b>TIM LOK</b>		DATE:			
RELEASED BY:		DATE:		<b>ISLVERSALDEMO2</b> <b>ISL70001A VCC SOC/IO</b> <b>SCHEMATIC</b>					
UPDATED BY:		DATE:							
		TESTER		MASK#		HRDWR ID		REV. <b>A</b>	
				FILENAME: <b>ISLVERSALDEMO2ZA\ISL70001_VCC_SOC_IO</b>					

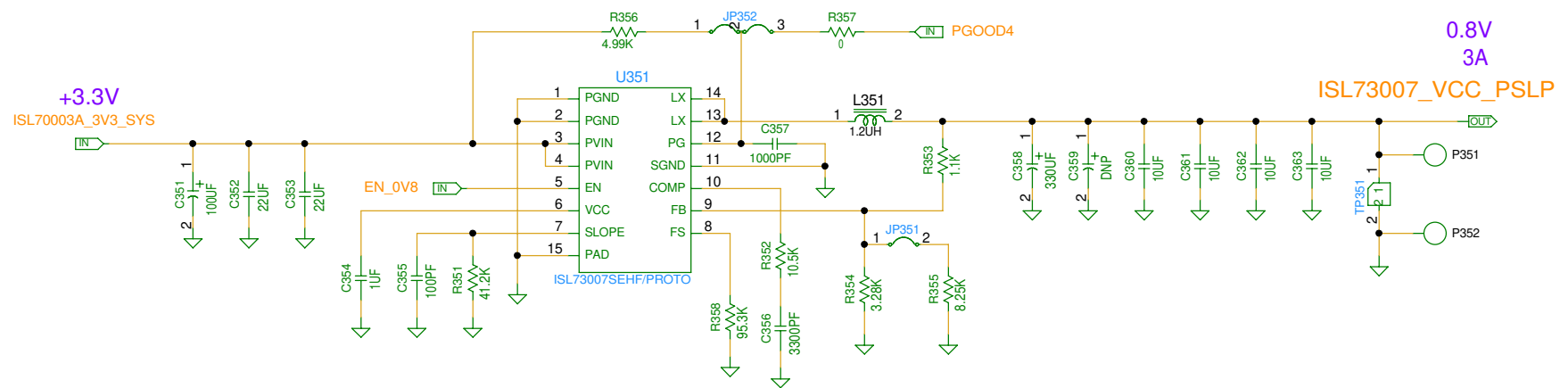
# ISL73007\_VCC\_PMC



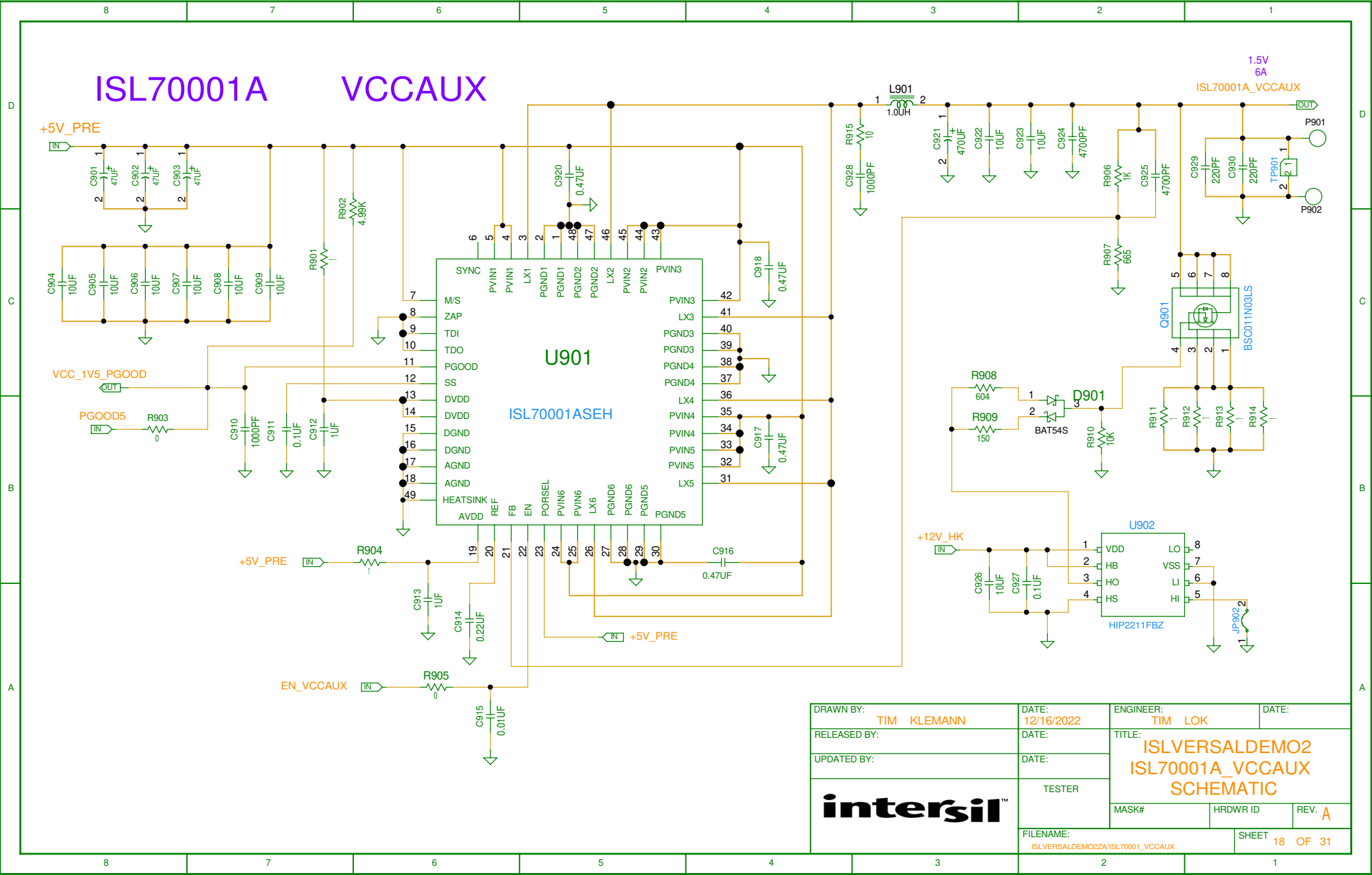
DRAWN BY: TIM KLEMMANN	DATE: 12/19/2022	ENGINEER: TIM LOK	DATE:
RELEASED BY:	DATE:	TITLE: ISLVERSALDEMO2 ISL73007_VCC_PMC SCHEMATIC	
UPDATED BY:	DATE:	TESTER	
FILENAME: ISLVERSALDEMO2A/ISL73007_VCC_PMC		MASK#	HRDWR ID
		REV. A	
SHEET 16 OF 31			



## ISL73007\_VCC\_PSLP

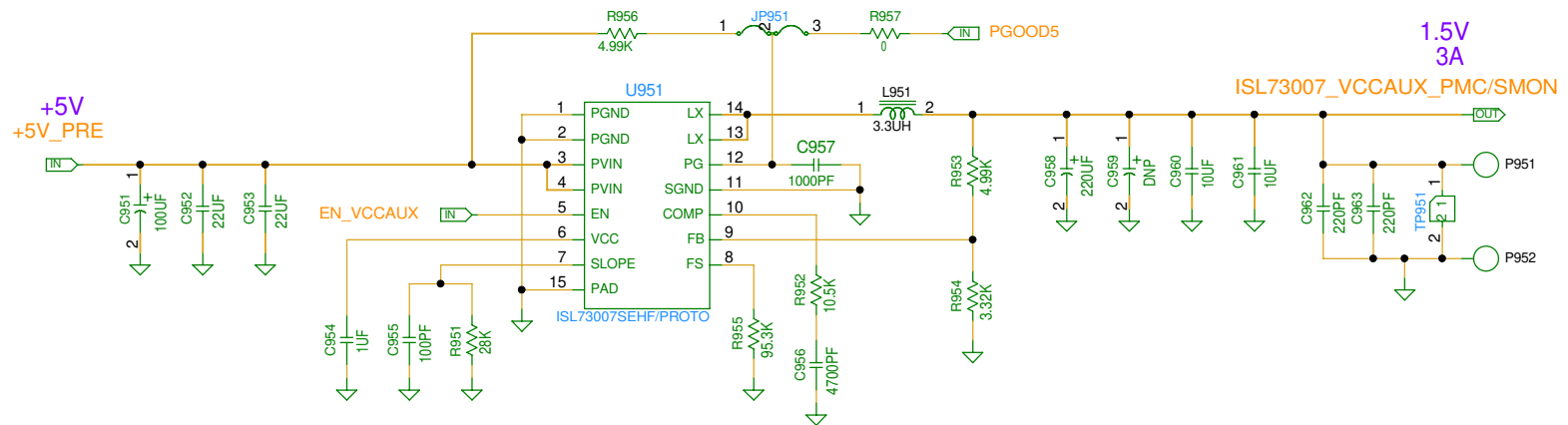


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UPDATED BY:		DATE:							
<b>intersil™</b>		TESTER		MASK#		HRDWR ID		REV. <b>A</b>	
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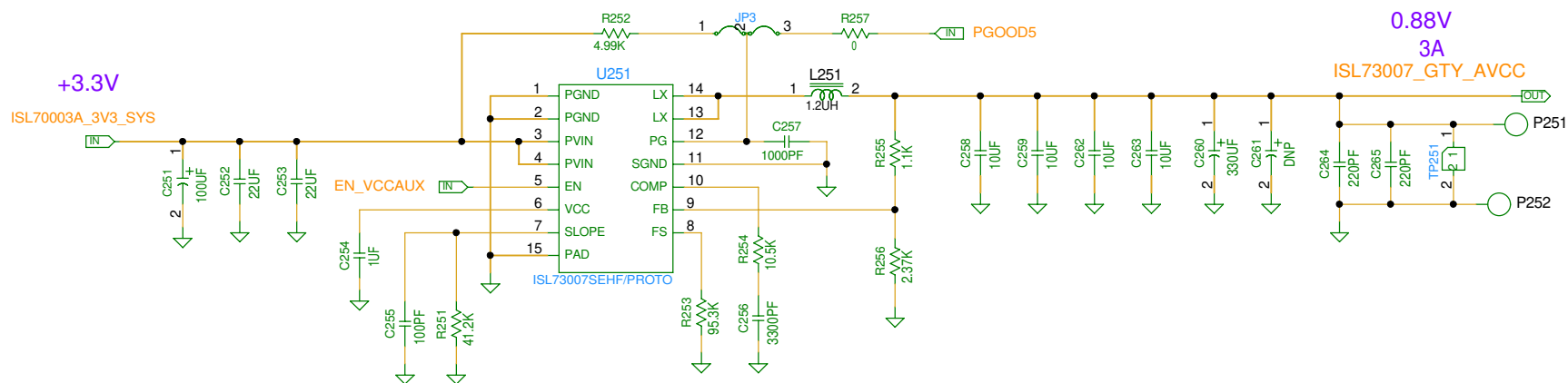
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UPDATED BY:	DATE:		
	TESTER	MASK#	HRDWR ID
	FILENAME: ISLVERSALDEMO22A/ISL70001_VCCAUX	REV. A	SHEET 18 OF 31

# ISL73007 VCCAUX PMC/SMON



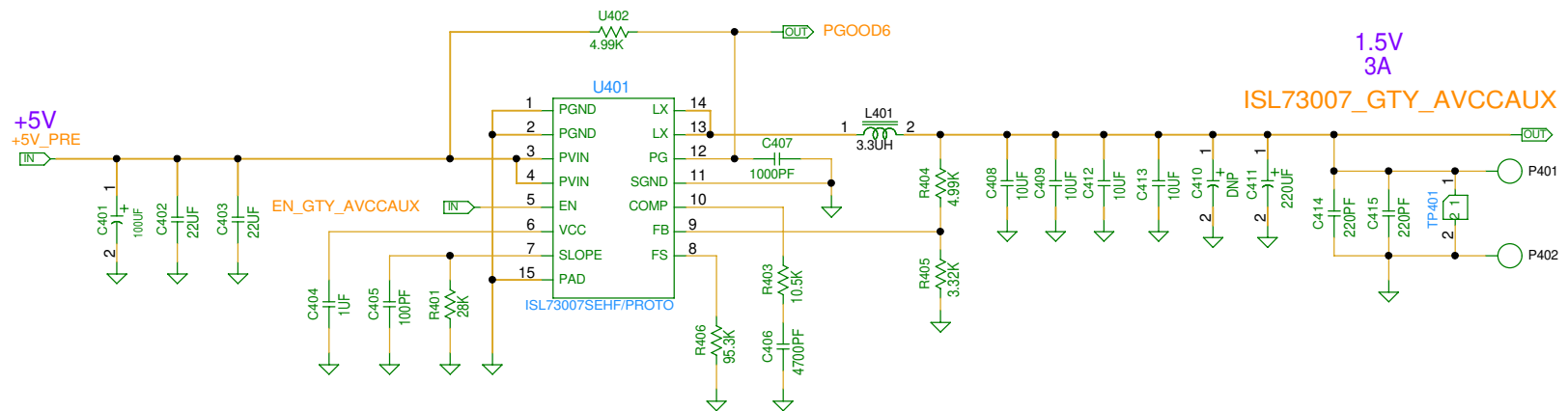
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RELEASED BY:		DATE:		TITLE:	ISLVERSALDEMO2 ISL73007 VCCAUX PMC/SMON SCHEMATIC		
UPDATED BY:		DATE:		TESTER			
		MASK#	HRDWR ID	REV.	A		
		FILENAME:	ISLVERSALDEMO2\ISL73007_VCCAUX_PMC_SMON		SHEET	19 OF 31	

## ISL73007 GTY AVCC



DRAWN BY: <b>TIM KLEMMANN</b>		DATE: 12/16/2022	ENGINEER: <b>TIM LOK</b>		DATE:	
RELEASED BY:		DATE:	<b>ISLVERSALDEMO2 ISL73007 GTY AVCC SCHEMATIC</b>			
UPDATED BY:		DATE:				
<b>intersil™</b>		TESTER	MASK#		HRDW ID	REV. <b>A</b>
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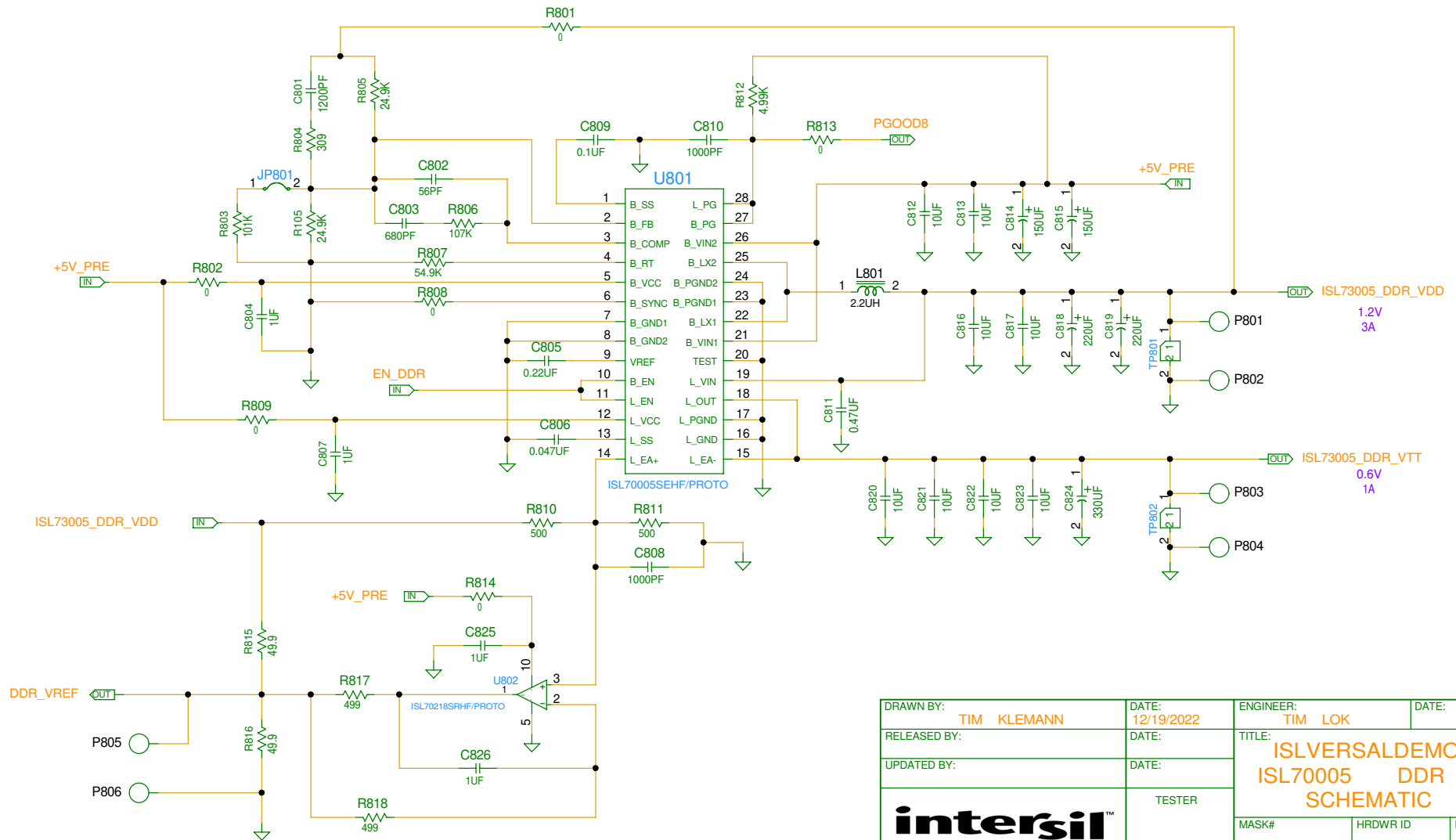
# ISL73007\_GTY\_AVCCAUX



DRAWN BY: <b>TIM KLEMANN</b>	DATE: <b>12/16/2022</b>	ENGINEER: <b>TIM LOK</b>	DATE:
RELEASED BY:	DATE:	TITLE: <b>ISLVERSALDEMO2 ISL73007_GTY_AVCCAUX SCHEMATIC</b>	
UPDATED BY:	DATE:	TESTER	
<b>intersil</b> <sup>™</sup>	FILENAME: <b>ISLVERSALDEMO22A/ISL73007_GTY_AVCCAUX</b>	MASK#	HRDWR ID
		REV. <b>A</b>	
		SHEET <b>21</b>	OF <b>31</b>

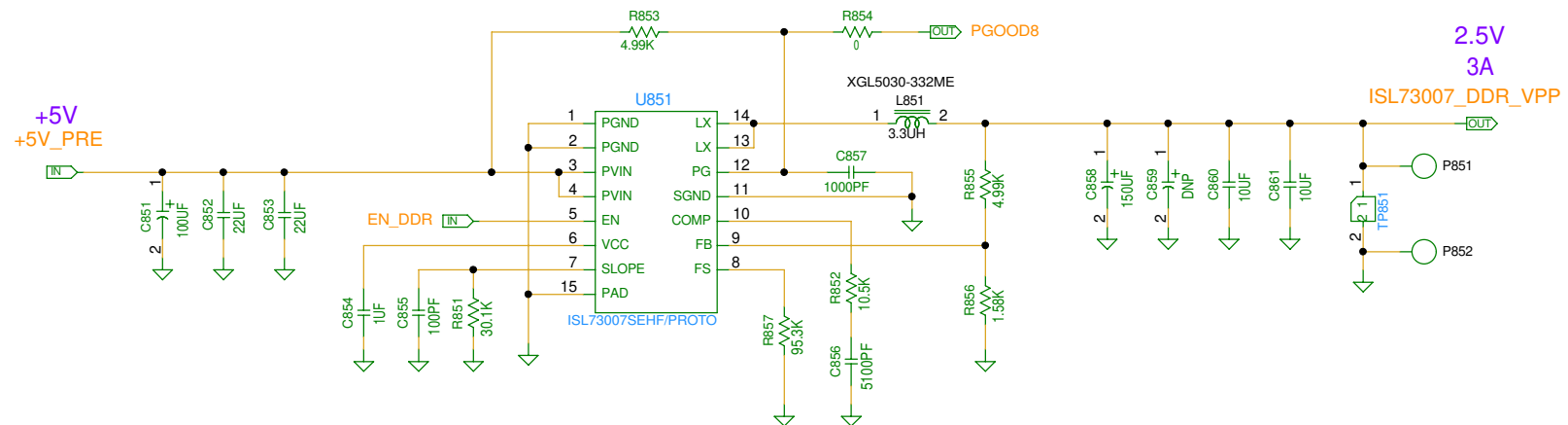



# ISL70005 DDR VDD



DRAWN BY: <b>TIM KLEMANN</b>	DATE: <b>12/19/2022</b>	ENGINEER: <b>TIM LOK</b>	DATE:
RELEASED BY:	DATE:	TITLE: <b>ISL70005 DDR VDD SCHEMATIC</b>	
UPDATED BY:	DATE:		
<b>intersil</b>		TESTER	REV. <b>A</b>
		MASK#	HRDWR ID
FILENAME: ISL70005SEHF/PROTO			SHEET <b>23</b> OF <b>31</b>

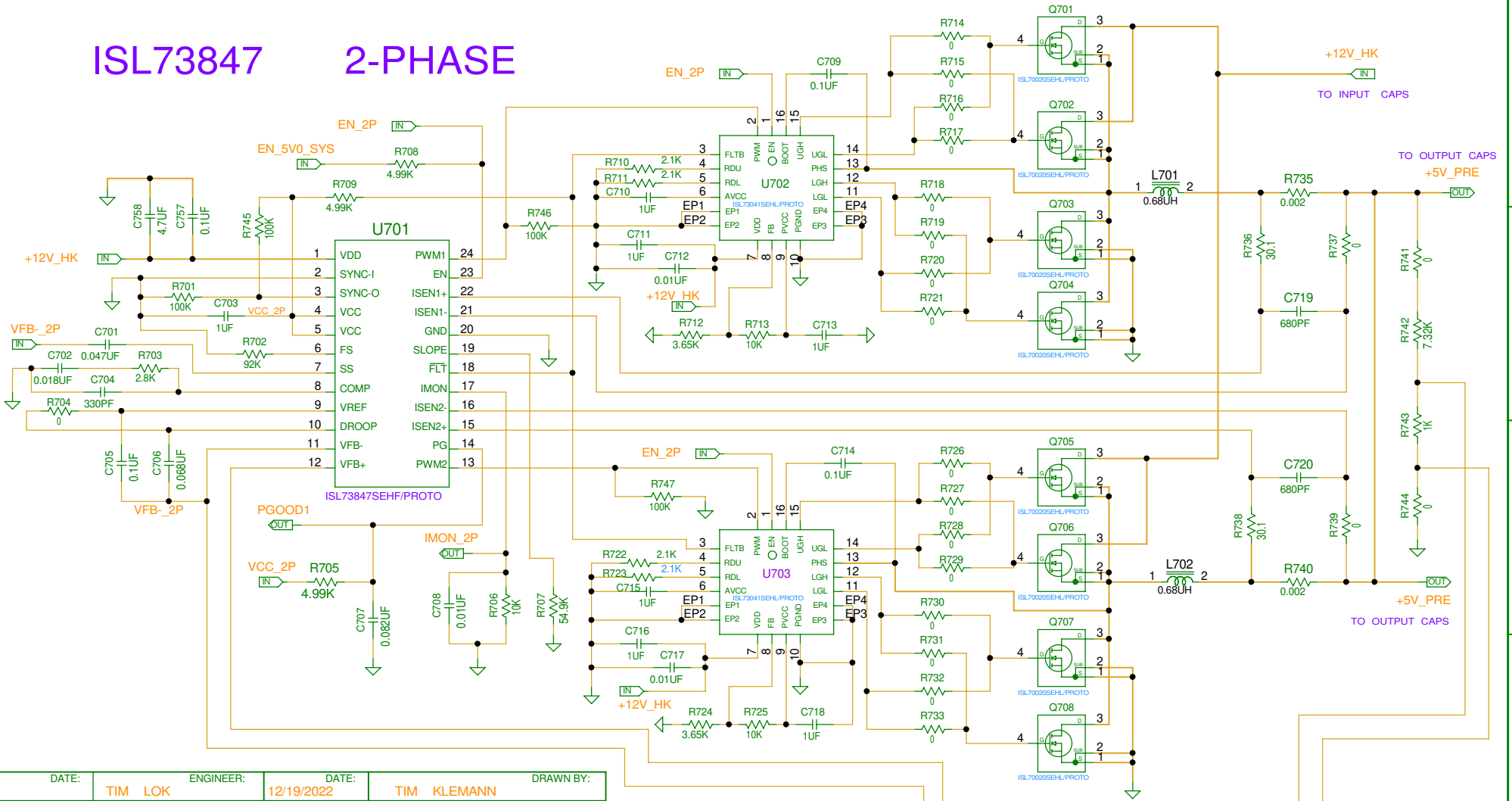
# ISL73007 DDR VPP



DRAWN BY:	TIM KLEMANN	DATE:	12/19/2022	ENGINEER:	TIM LOK	DATE:	
RELEASED BY:		DATE:		TITLE:	ISL73007 DDR VPP SCHEMATIC		
UPDATED BY:		DATE:		TESTER			
		MASK#	HRDWR ID	REV.	A		
		FILENAME:	ISL73007_DDR_VPP			SHEET	24 OF 31



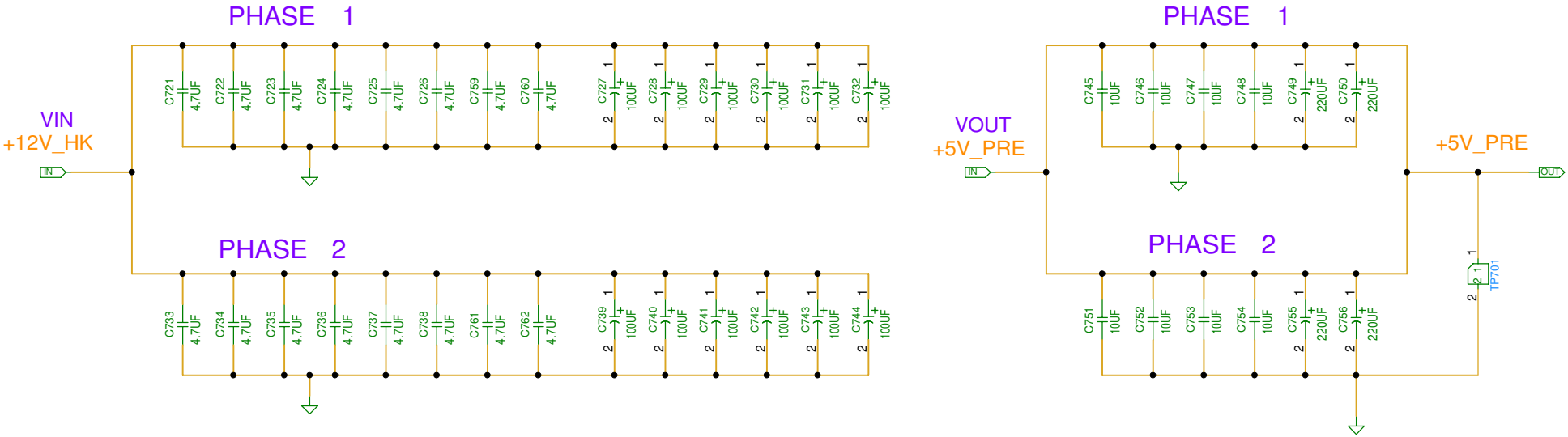
# ISL73847 2-PHASE



DATE:	TIM LOK	ENGINEER:	DATE:	12/19/2022	TIM KLEMMANN	DRAWN BY:
TITLE:	ISL73847 2-PHASE SCHEMATIC	TESTER:	DATE:		RELEASED BY:	
REV.	HRDWR ID	MASK#	DATE:		UPDATED BY:	
A			TESTER:			
25 OF 31	SHEET	FILENAME:				
		ISL73847_2_PHASE				

**intersil**™

# ISL73847 2-PHASE



DRAWN BY: TIM KLEMMANN	DATE: 12/20/2022	ENGINEER: TIM LOK	DATE:
RELEASED BY:	DATE:	TITLE: ISLVERSALDEMO2 ISL73847 2-PHASE SCHEMATIC	
UPDATED BY:	DATE:	TESTER	
		MASK#	HRDWR ID
		REV. A	
FILENAME: ISLVERSALDEMO22A/ISL73847_2_PHASE		SHEET 26 OF 31	



+12V\_IN

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575-4

BA2

575-4

BA3

575-4

BA4

AON6411

Q601

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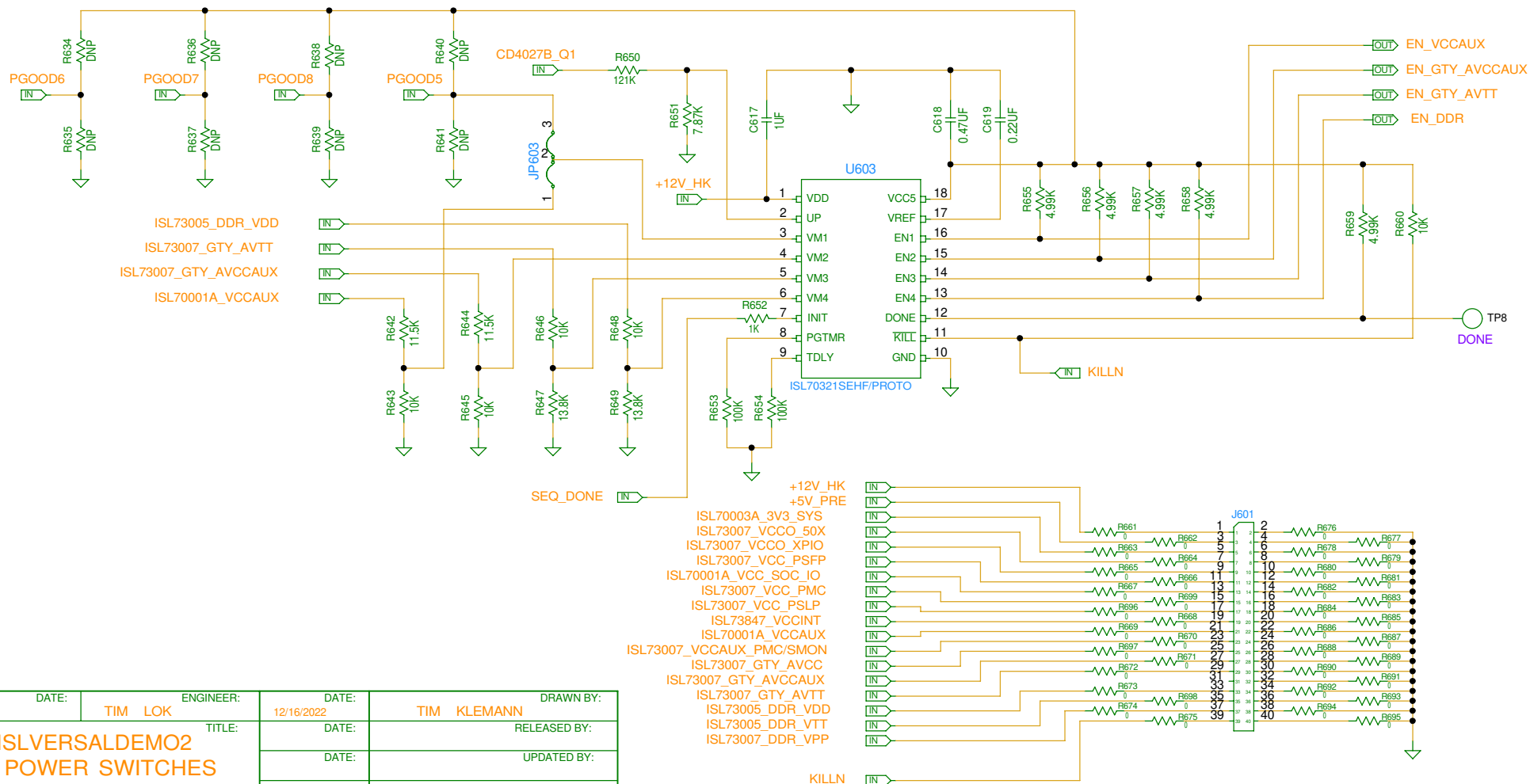
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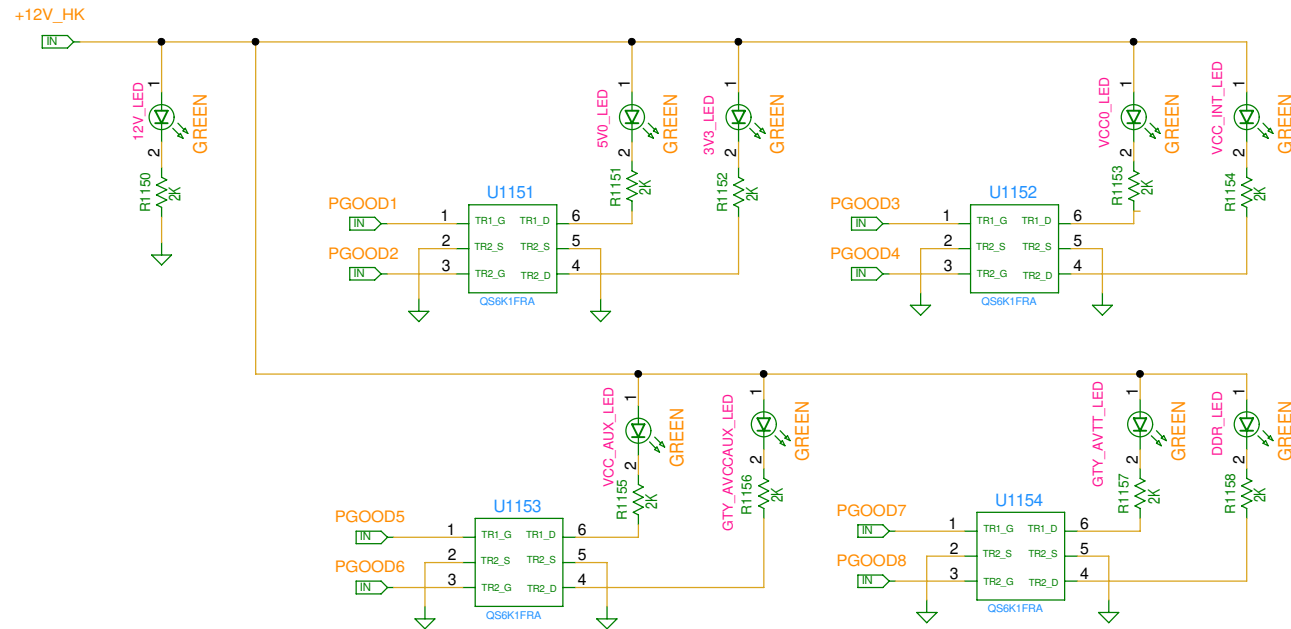
# 12V BUS POWER SWITCHES AND POWER SEQUENCER




DATE:		ENGINEER:		DATE:		DRAWN BY:			
TIM		LOK		12/16/2022		TIM KLEMMANN			
ISLVERSALEDEMO2 POWER SWITCHES SCHEMATIC				TITLE:		DATE:		RELEASED BY:	
						DATE:		UPDATED BY:	
				TESTER					
A REV.		HRDWR ID		MASK#					
29 OF 31 SHEET		ISLVERDEMO2ZA/POWER_SWITCHES		FILENAME:					



# POWER LED INDICATOR



DRAWN BY:	TIM KLEMMANN	DATE:	12/20/2022	ENGINEER:	TIM LOK	DATE:	
RELEASED BY:		DATE:		TITLE:  ISLVERSALEMO2 POWER LED INDICATOR SCHEMATIC			
UPDATED BY:		DATE:					
		TESTER		MASK# HRDWR ID REV. A			
		FILENAME: ISLVERDEMO22A/POWER_LED_INDICATOR					