

5

4

3

2

1

D

D

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C

B

B

A

A



Title <Title>		
Size A	Document Number <Doc>	Rev <RevCode>
Date:	Tuesday, September 10, 2019	Sheet 1 of 15

5

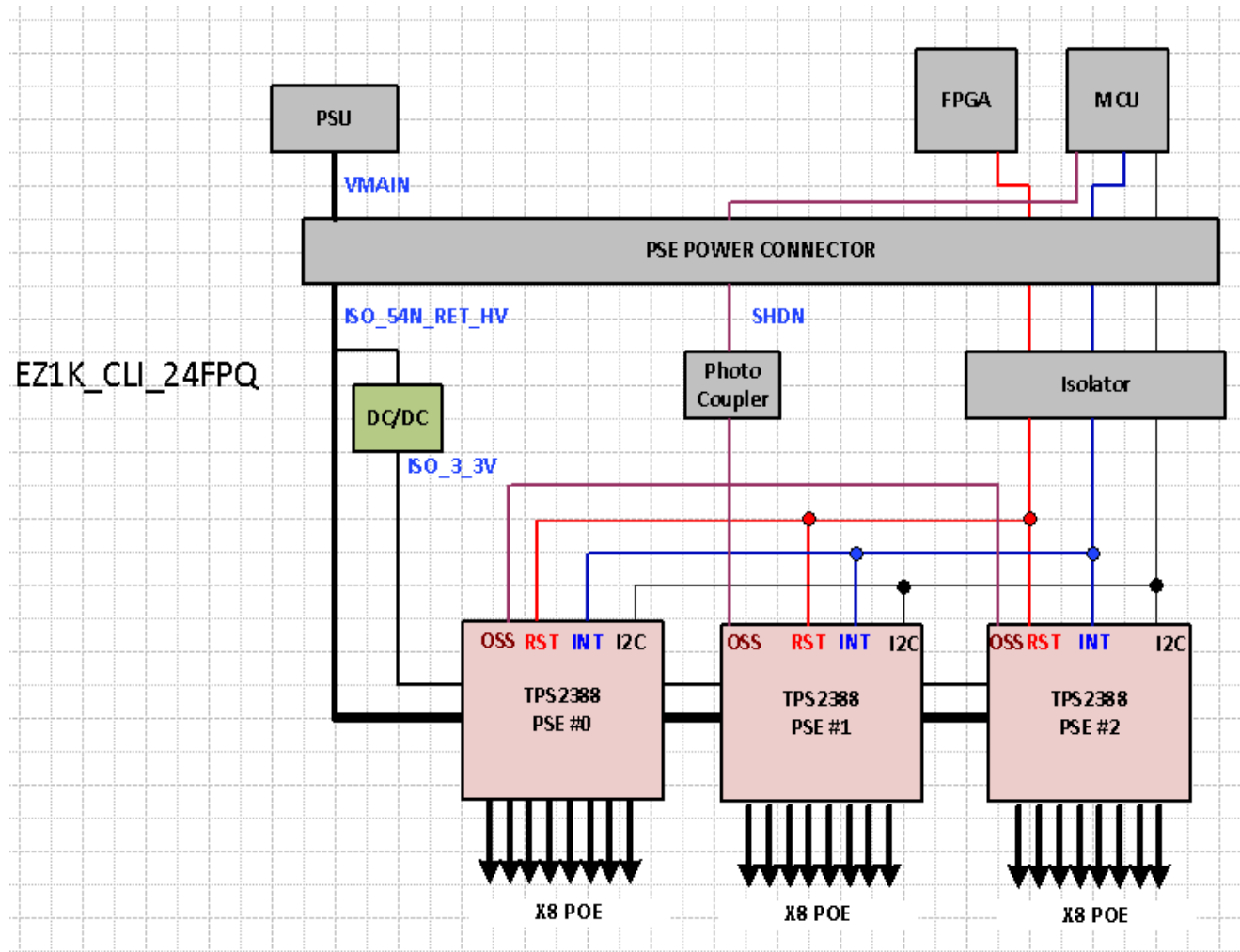
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3

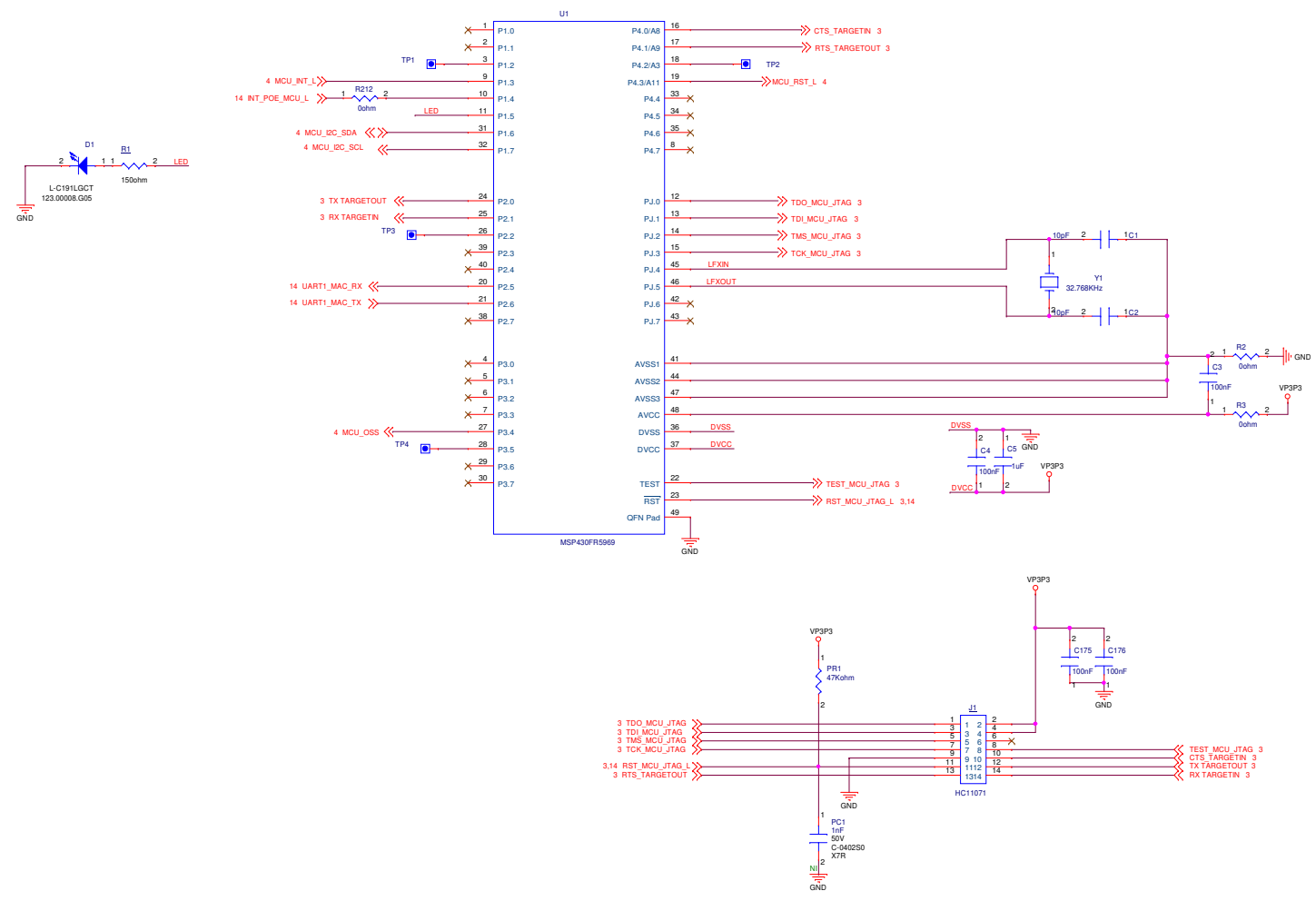
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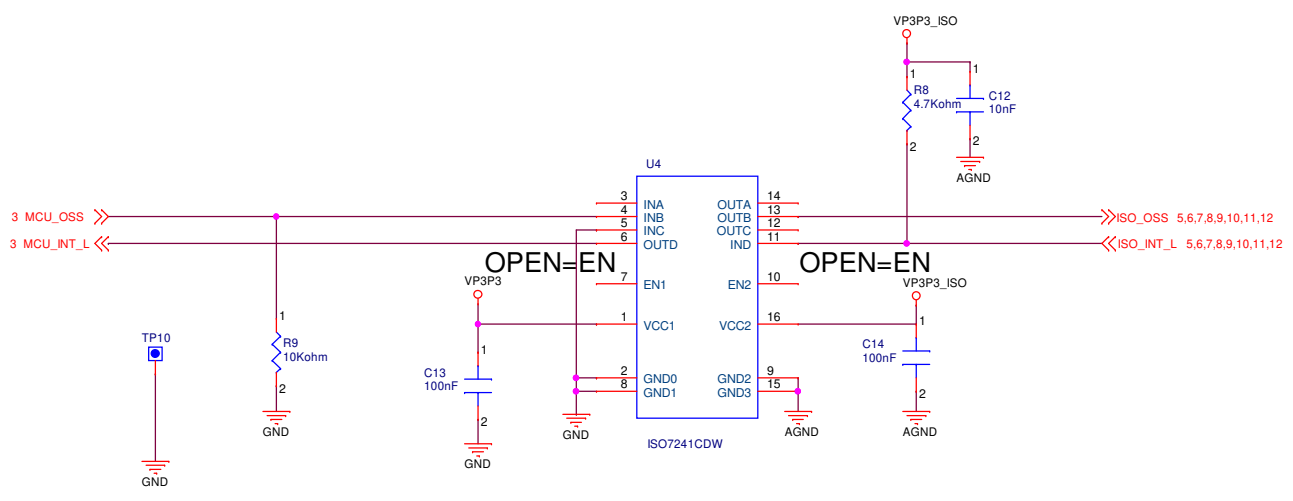
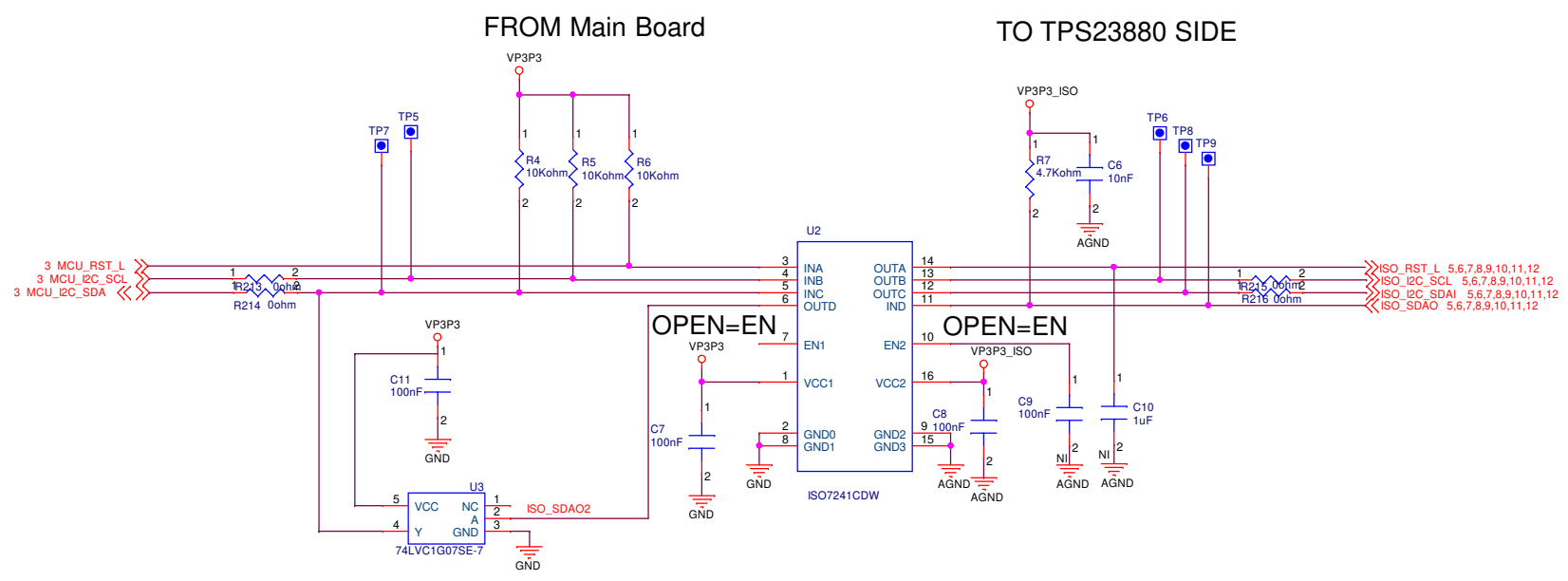
# System Block Diagram



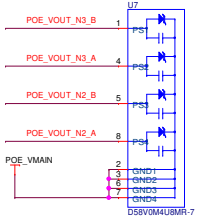
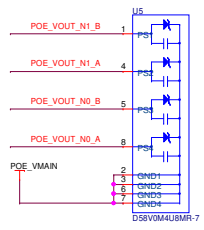
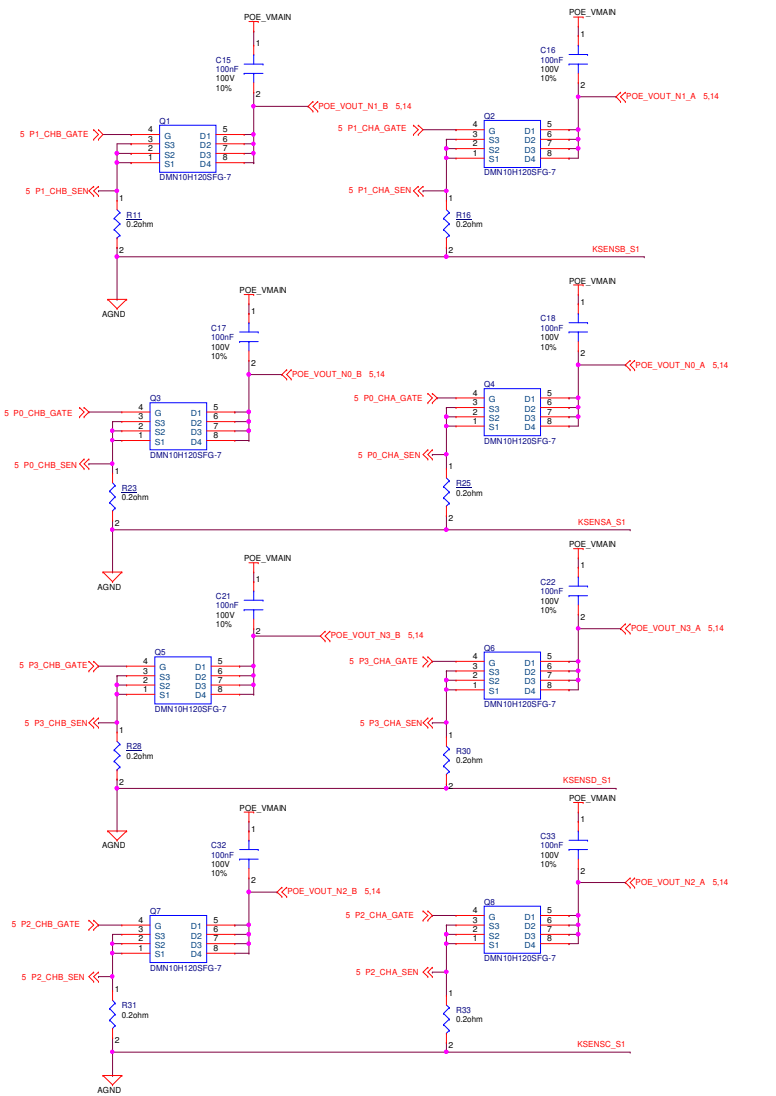
# POE Controller



# Isolation



# POE Manager Slave (90W)#1



- 5 P0\_CHA\_SEN << 2
- 5 P0\_CHB\_SEN << 6
- 5 P1\_CHA\_SEN << 13
- 5 P1\_CHB\_SEN << 34
- 5 P2\_CHA\_SEN << 30
- 5 P2\_CHB\_SEN << 37
- 5 P3\_CHA\_SEN << 34
- 5 P3\_CHB\_SEN << 41

- 5,14 POE\_VOUT\_N0\_A << 3
- 5,14 POE\_VOUT\_N0\_B << 5
- 5,14 POE\_VOUT\_N1\_A << 10
- 5,14 POE\_VOUT\_N1\_B << 12
- 5,14 POE\_VOUT\_N2\_A << 31
- 5,14 POE\_VOUT\_N2\_B << 33
- 5,14 POE\_VOUT\_N3\_A << 38
- 5,14 POE\_VOUT\_N3\_B << 40

- KSENSA\_S1 << 4
- KSENSB\_S1 << 11
- KSENSC\_S1 << 32
- KSENSD\_S1 << 39

- 4,6,7,8,9,10,11,12 ISO\_RST\_L << 44
- 26 TEST0
- 23 TEST1
- 24 TEST2
- 25 TEST3
- 20 TEST4
- 47 TEST5

- 4,6,7,8,9,10,11,12 ISO\_IC\_SCL << 53
- 4,6,7,8,9,10,11,12 ISO\_IC\_SDAI << 54
- 4,6,7,8,9,10,11,12 ISO\_OSS << 56

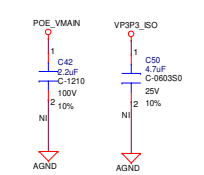
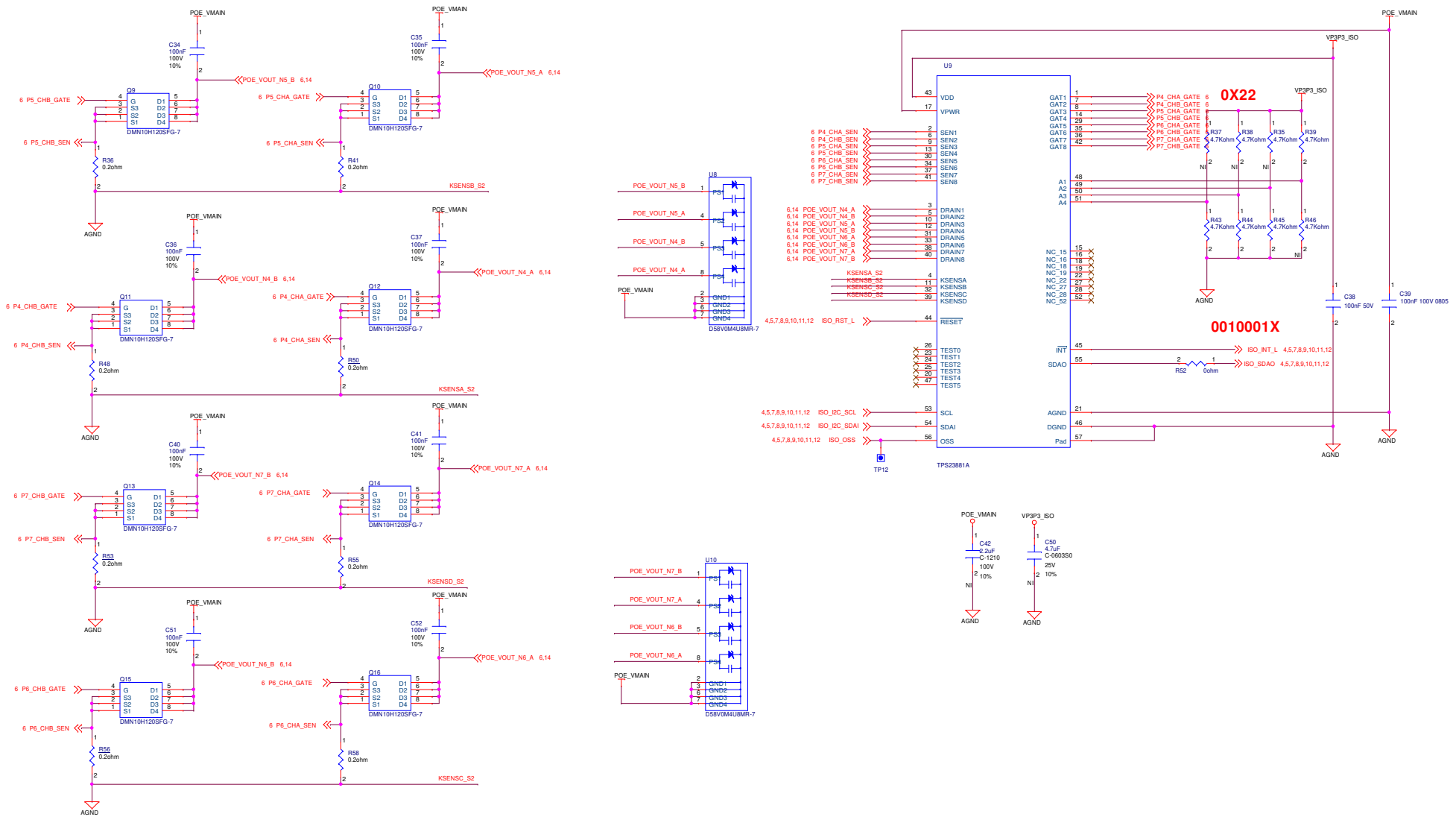
TP11



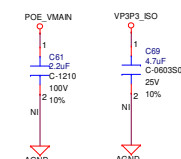
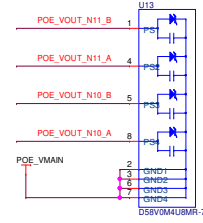
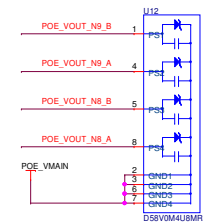
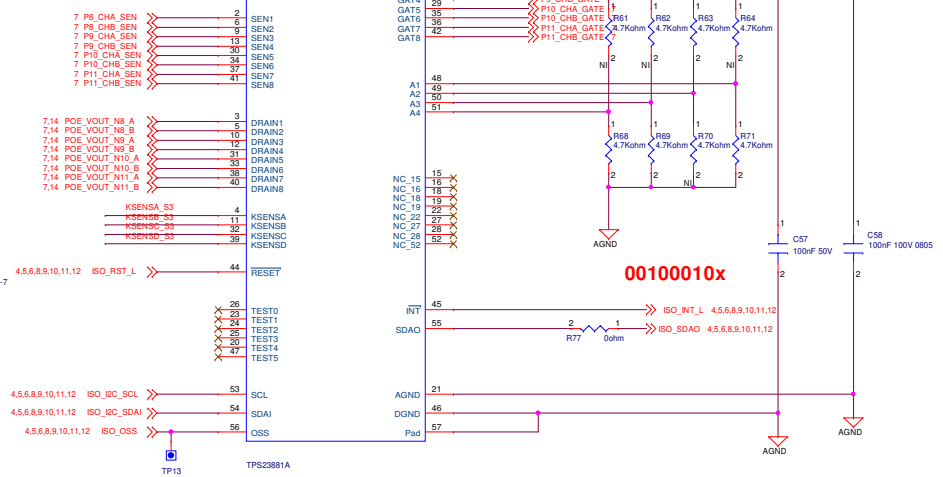
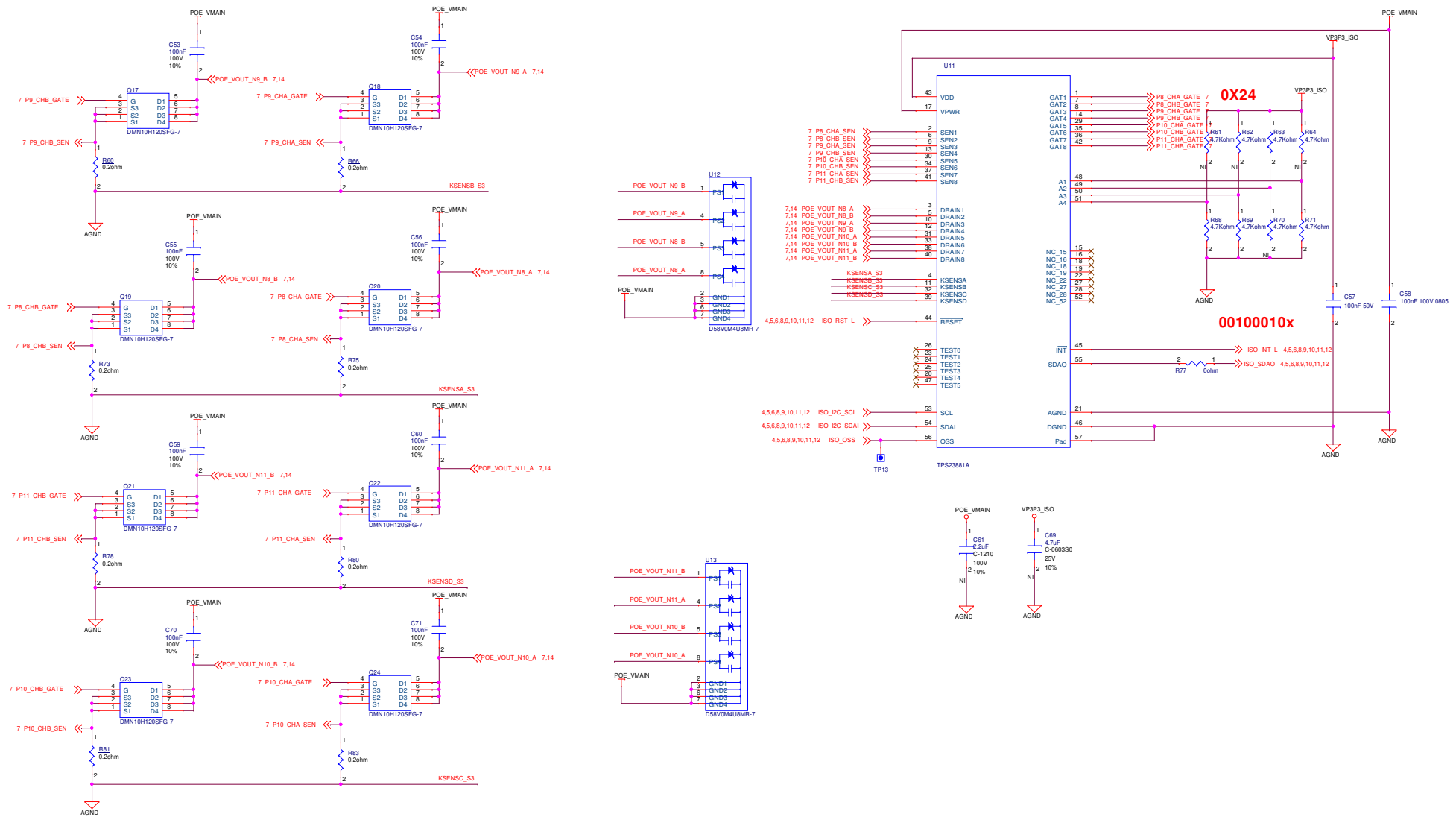
## I2C Address

DESCRIPTION	BINARY DEVICE ADDRESS							ADDRESS PINS			
	6	5	4	3	2	1	0	A4	A3	A2	A1
Broadcast access	1	1	1	1	1	1	1	X	X	X	X
Slave 0	0	1	0	0	0	0	0/1	GND	GND	GND	GND
	0	1	0	0	0	1	0/1	GND	GND	GND	HIGH
	0	1	0	0	1	0	0/1	GND	GND	HIGH	GND
	0	1	0	0	1	1	0/1	GND	GND	HIGH	HIGH
	0	1	0	1	0	0	0/1	GND	HIGH	GND	GND
	0	1	0	1	0	1	0/1	GND	HIGH	GND	HIGH
	0	1	0	1	1	1	0/1	GND	HIGH	HIGH	GND
	0	1	1	0	0	0	0/1	HIGH	GND	GND	GND
	0	1	1	0	0	1	0/1	HIGH	GND	GND	HIGH
	0	1	1	0	1	0	0/1	HIGH	GND	HIGH	GND
	0	1	1	0	1	1	0/1	HIGH	GND	HIGH	HIGH
	0	1	1	1	0	0	0/1	HIGH	HIGH	GND	GND
	0	1	1	1	0	1	0/1	HIGH	HIGH	GND	HIGH
	0	1	1	1	1	0	0/1	HIGH	HIGH	HIGH	GND
Slave 15	0	1	1	1	1	1	0/1	HIGH	HIGH	HIGH	HIGH

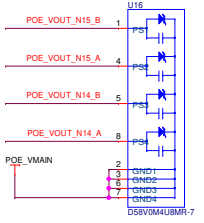
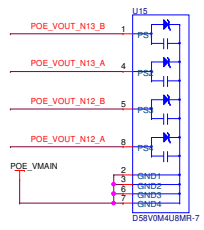
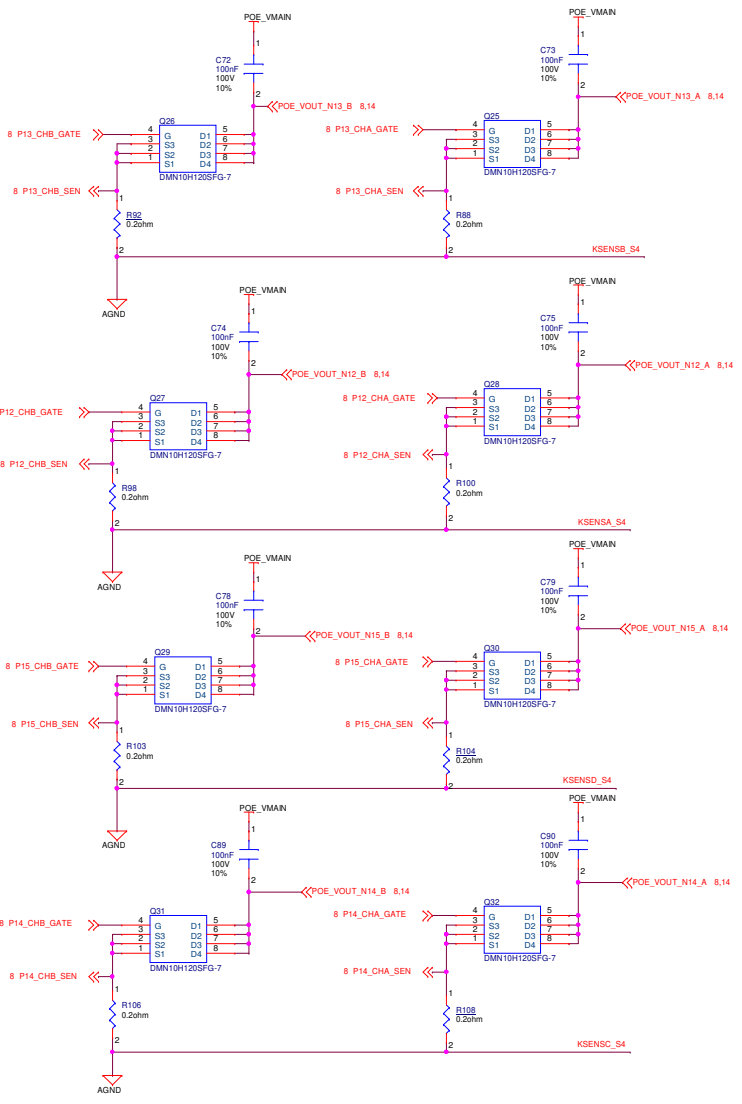
# POE Manager Slave (90W)#2



# POE Manager Slave (90W)#3



# POE Manager Slave (90W)#4



- 8 P12\_CHA\_SEN >> 2 SEN1
- 8 P12\_CHB\_SEN >> 6 SEN2
- 8 P13\_CHA\_SEN >> 9 SEN3
- 8 P13\_CHB\_SEN >> 13 SEN4
- 8 P14\_CHA\_SEN >> 30 SEN5
- 8 P14\_CHB\_SEN >> 34 SEN6
- 8 P15\_CHA\_SEN >> 37 SEN7
- 8 P15\_CHB\_SEN >> 41 SEN8

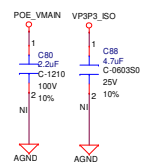
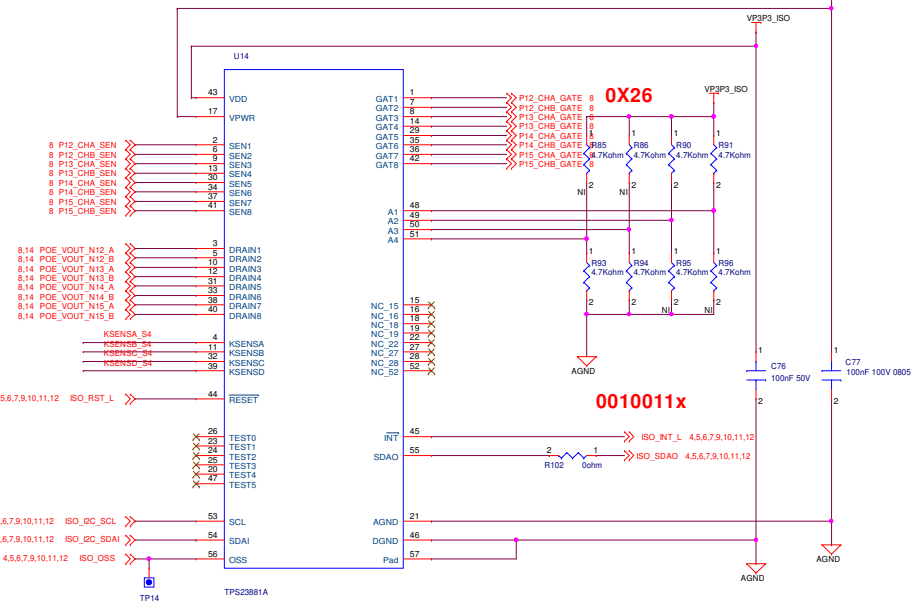
- 8,14 POE\_VOUT\_N12\_A >> 3 DRAIN1
- 8,14 POE\_VOUT\_N12\_B >> 10 DRAIN2
- 8,14 POE\_VOUT\_N13\_A >> 12 DRAIN3
- 8,14 POE\_VOUT\_N13\_B >> 31 DRAIN4
- 8,14 POE\_VOUT\_N14\_A >> 38 DRAIN5
- 8,14 POE\_VOUT\_N14\_B >> 38 DRAIN6
- 8,14 POE\_VOUT\_N15\_A >> 40 DRAIN7
- 8,14 POE\_VOUT\_N15\_B >> 40 DRAIN8

- KSENSA\_S4 >> 4 KSENSA
- KSENSB\_S4 >> 11 KSENSB
- KSENSC\_S4 >> 32 KSENSC
- KSENSD\_S4 >> 39 KSENSD

- 4,5,6,7,9,10,11,12 ISO\_RST\_L >> 44 RESET
- 26 TEST0
- 27 TEST1
- 24 TEST2
- 25 TEST3
- 20 TEST4
- 47 TEST5

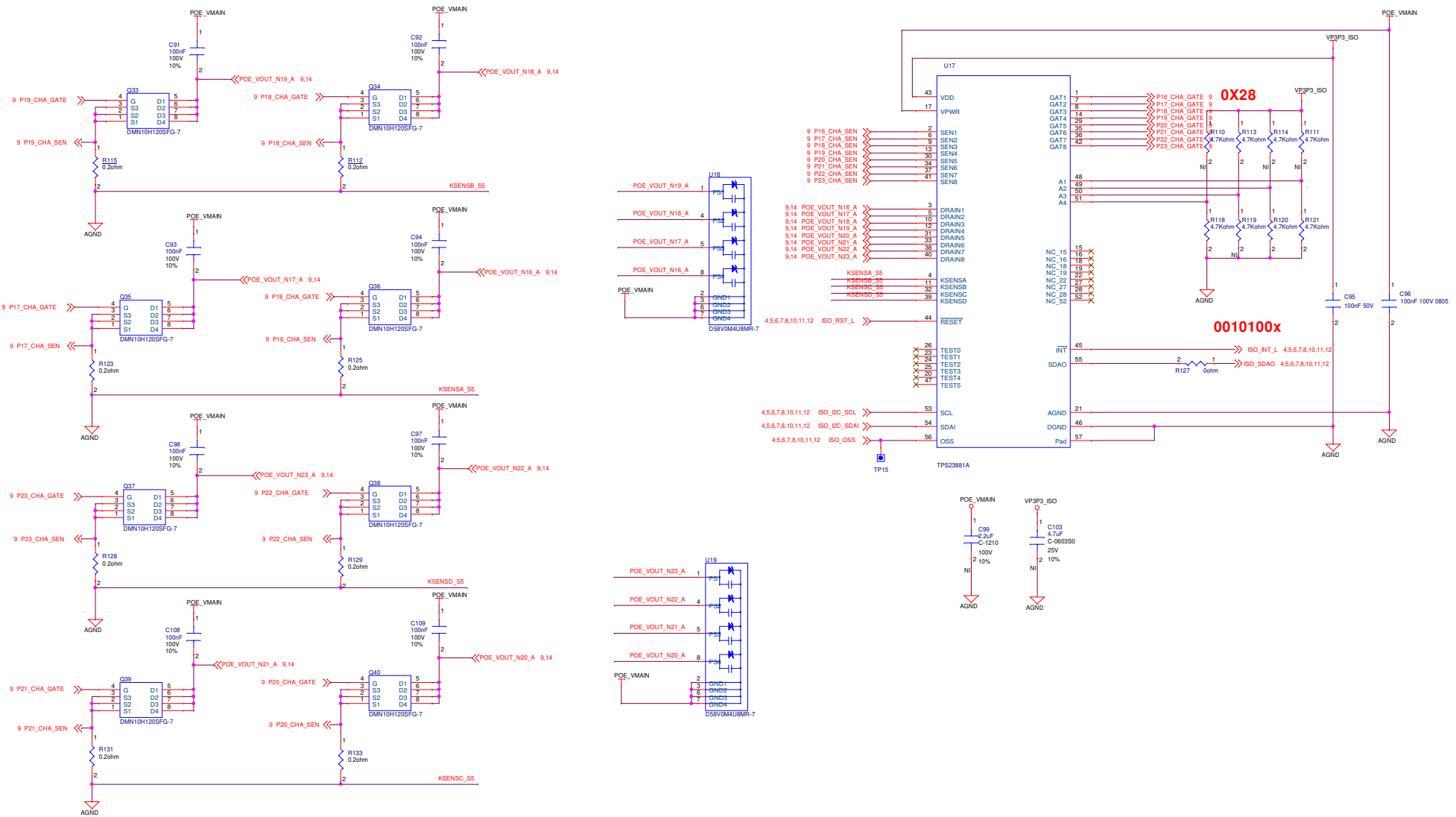
- 4,5,6,7,9,10,11,12 ISO\_IC\_SCL >> 53 SCL
- 4,5,6,7,9,10,11,12 ISO\_IC\_SDAI >> 54 SDAI
- 4,5,6,7,9,10,11,12 ISO\_OSS >> 56 OSS

- TP14
- TPS23881A

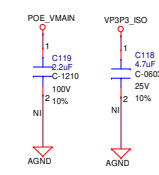
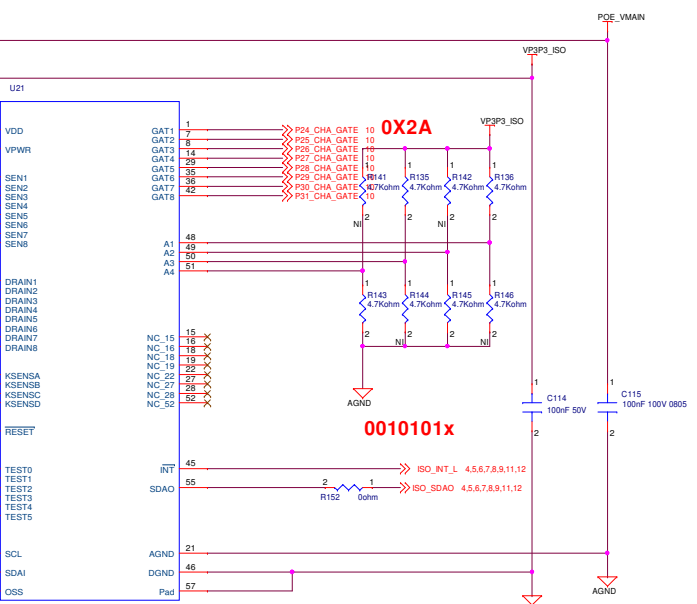
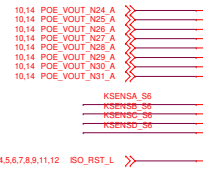
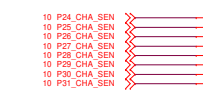
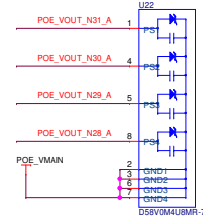
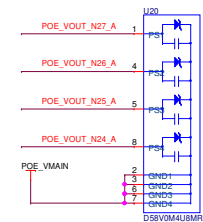
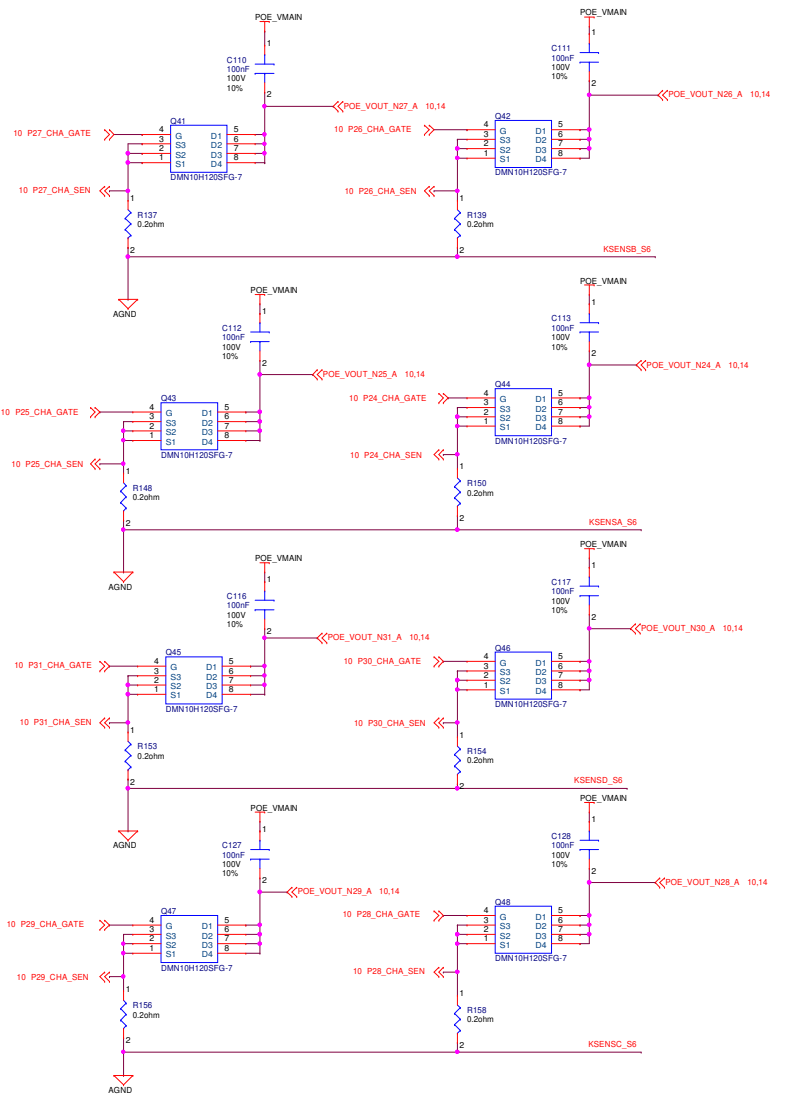




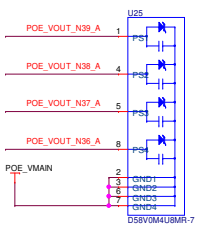
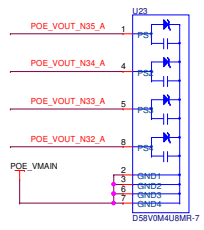
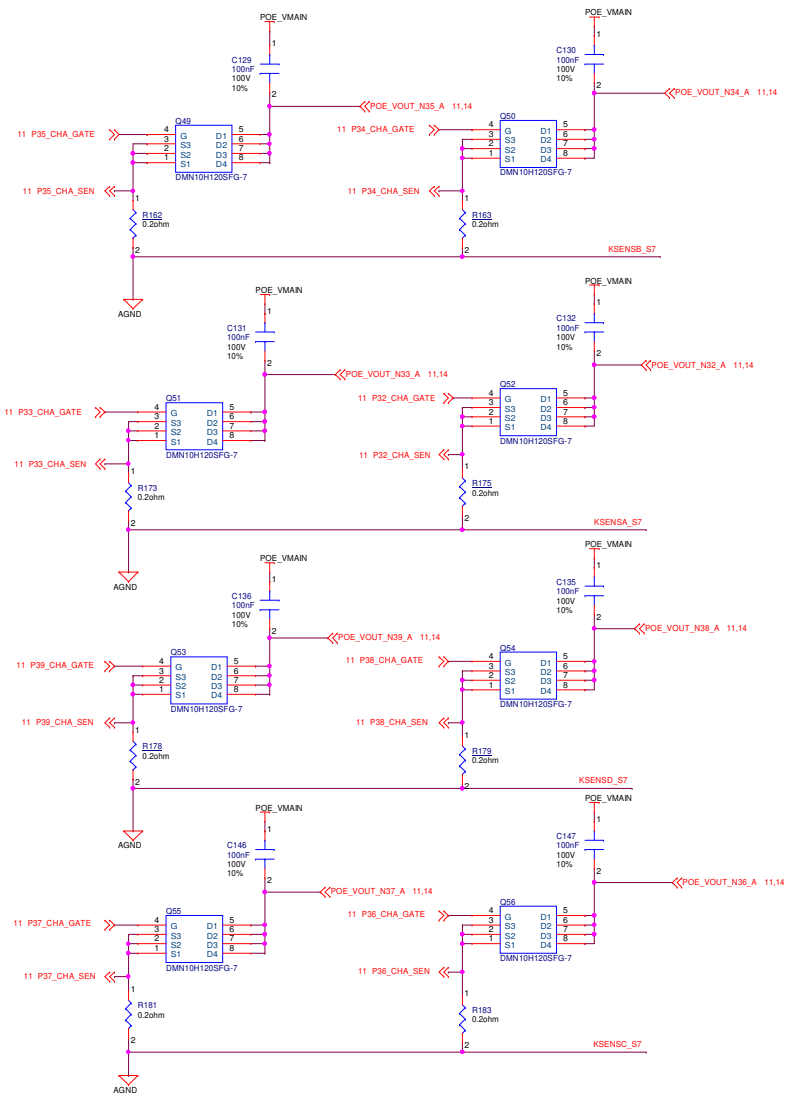
# POE Manager Slave (30W)#1



# POE Manager Slave (30W)#2



# POE Manager Slave (30W)#3



- 11 P32\_CHA\_SEN >> 2 SEN1
- 11 P33\_CHA\_SEN >> 6 SEN2
- 11 P34\_CHA\_SEN >> 9 SEN3
- 11 P35\_CHA\_SEN >> 13 SEN4
- 11 P36\_CHA\_SEN >> 30 SEN5
- 11 P37\_CHA\_SEN >> 34 SEN6
- 11 P38\_CHA\_SEN >> 37 SEN7
- 11 P39\_CHA\_SEN >> 41 SEN8

- 11,14 POE\_VOUT\_N32\_A >> 3 DRAIN1
- 11,14 POE\_VOUT\_N33\_A >> 10 DRAIN2
- 11,14 POE\_VOUT\_N34\_A >> 12 DRAIN3
- 11,14 POE\_VOUT\_N35\_A >> 31 DRAIN4
- 11,14 POE\_VOUT\_N36\_A >> 33 DRAIN5
- 11,14 POE\_VOUT\_N37\_A >> 38 DRAIN6
- 11,14 POE\_VOUT\_N38\_A >> 40 DRAIN7
- 11,14 POE\_VOUT\_N39\_A >> 40 DRAIN8

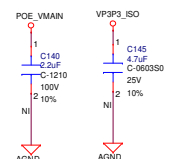
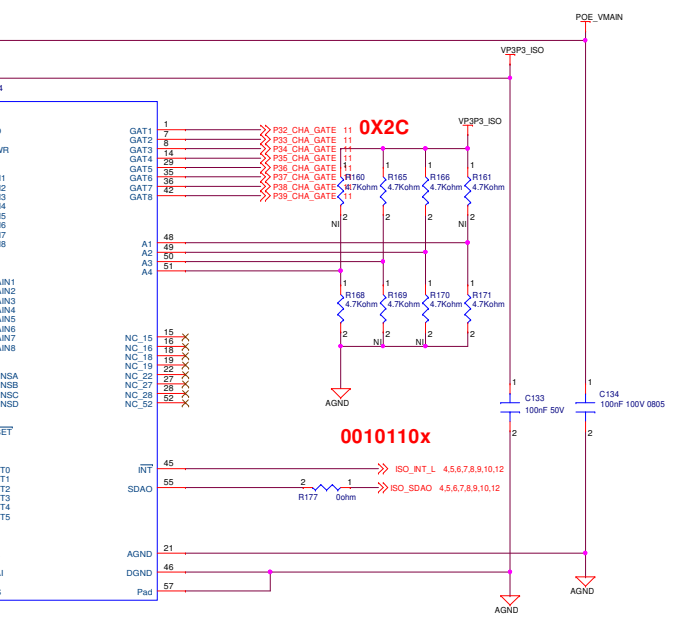
- KSENSA\_S7 >> 4 KSENSA
- KSENSB\_S7 >> 11 KSENSB
- KSENSC\_S7 >> 32 KSENSC
- KSENSD\_S7 >> 39 KSENSD

- 4.5,6,7,8,9,10,12 ISO\_RST\_L >> 44 RESET
- 26 TEST0
- 27 TEST1
- 24 TEST2
- 25 TEST3
- 20 TEST4
- 47 TEST5

- 4.5,6,7,8,9,10,12 ISO\_IC\_SCL >> 53 SCL
- 4.5,6,7,8,9,10,12 ISO\_IC\_SDAI >> 54 SDAI
- 4.5,6,7,8,9,10,12 ISO\_OSS >> 56 OSS

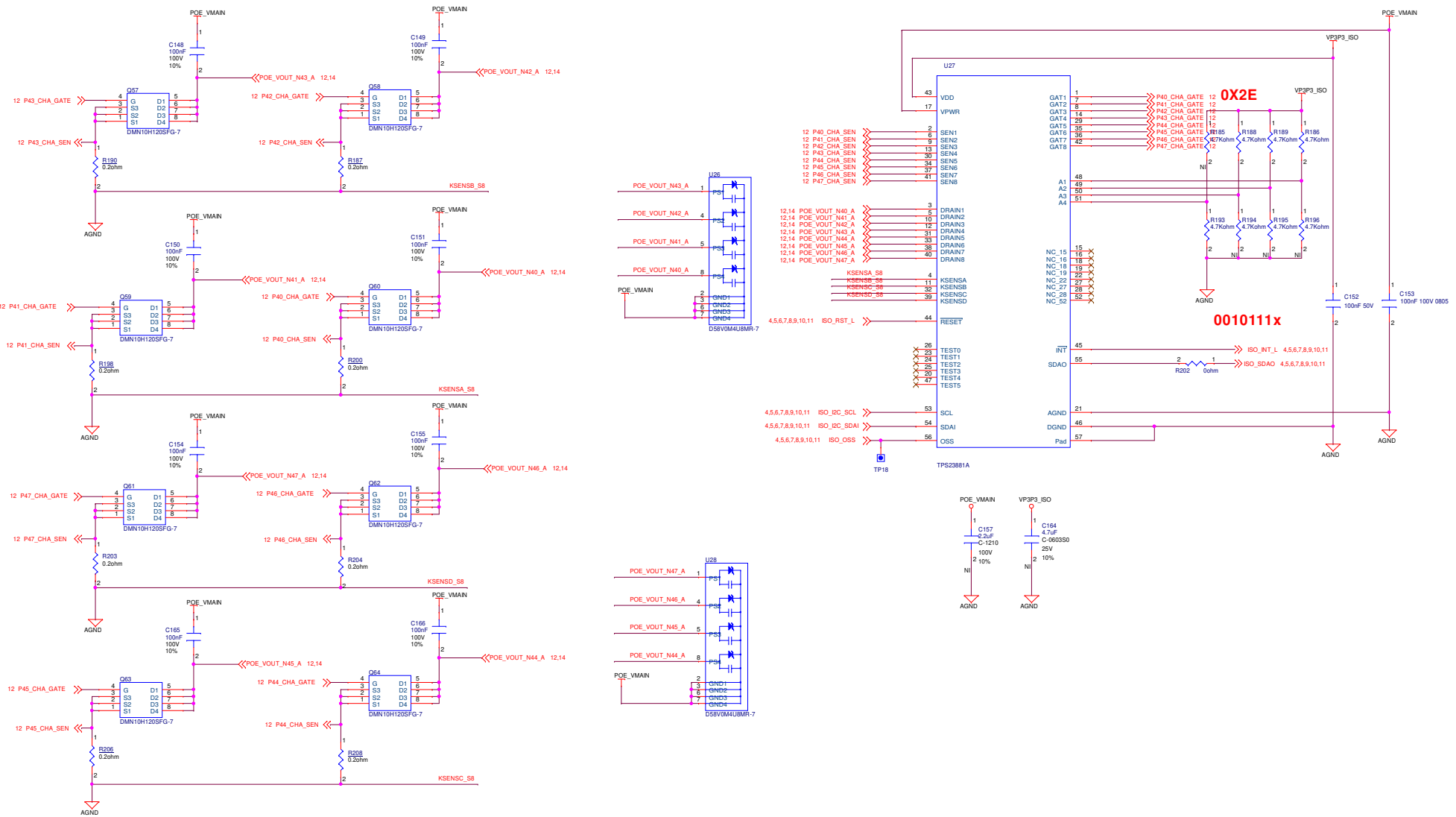
TP17

TPS23881A

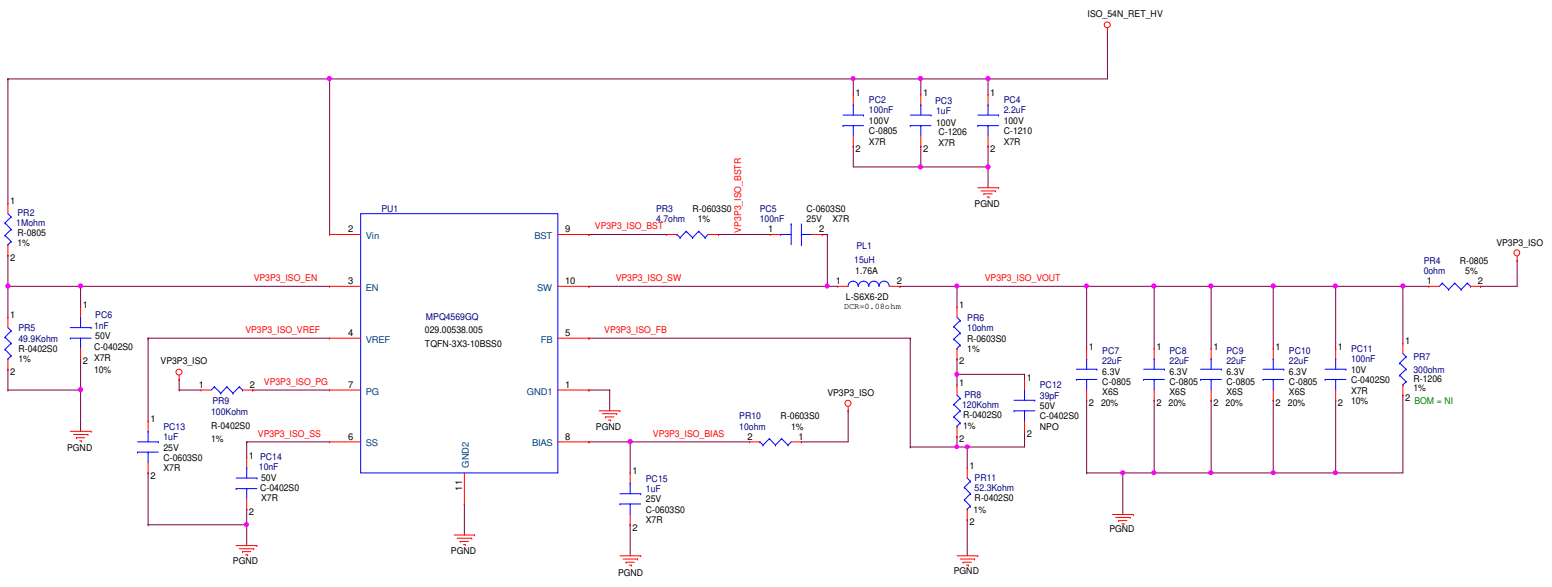


0  
C  
B  
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# POE Manager Slave (30W)#4



# DCDC\_3.3V\_ISO(0.2A)

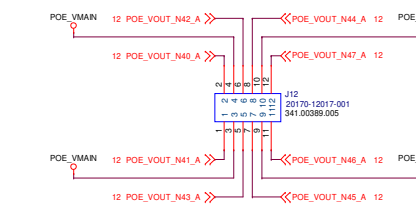
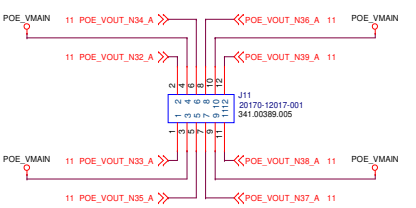
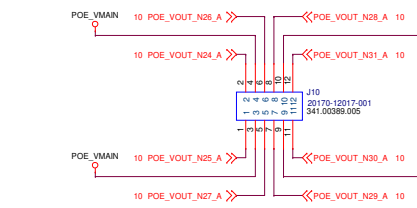
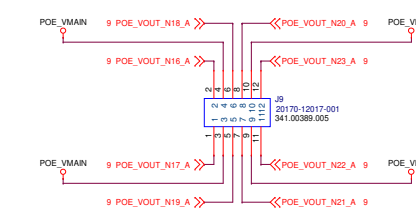
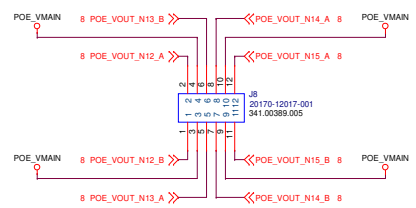
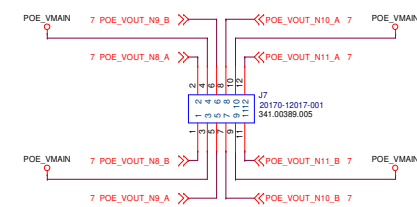
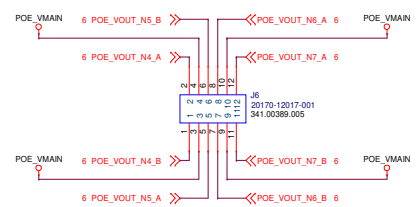
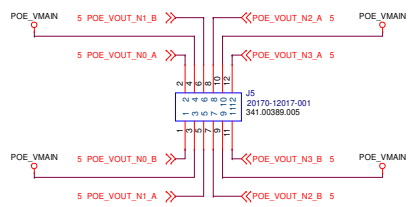
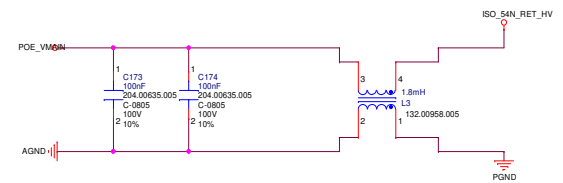
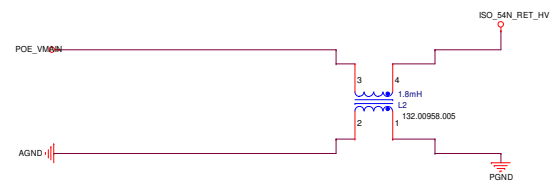
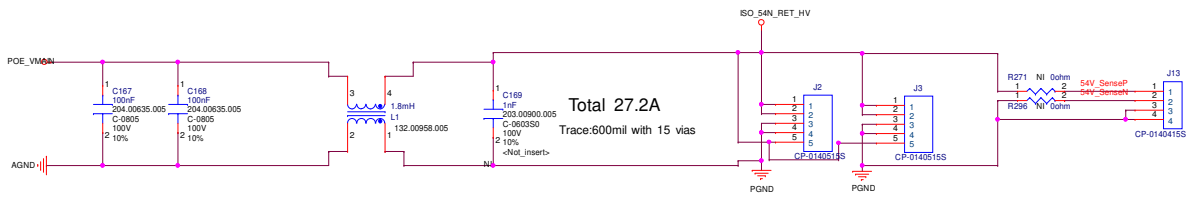
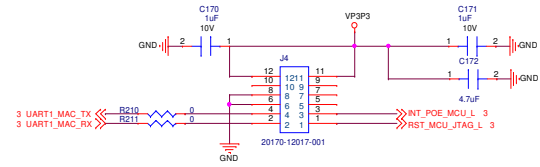


**Vo : 3.294V**  
**Io : 0.2A**  
**Tss : 2ms**

# DC/DC\_56V to 3.3V\_ISO (0.2A)

# CONNECTOR

## PSE Board-to-Board Connector



# ME Holes

