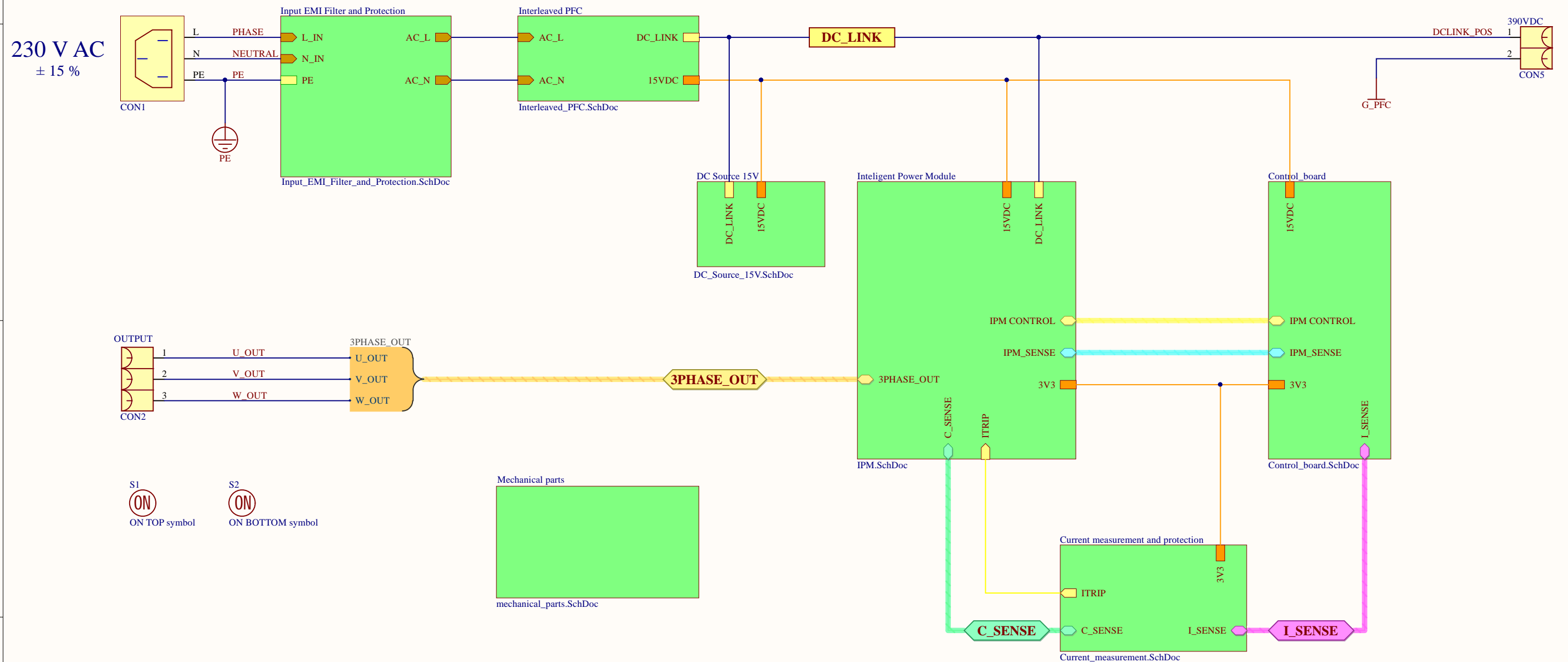


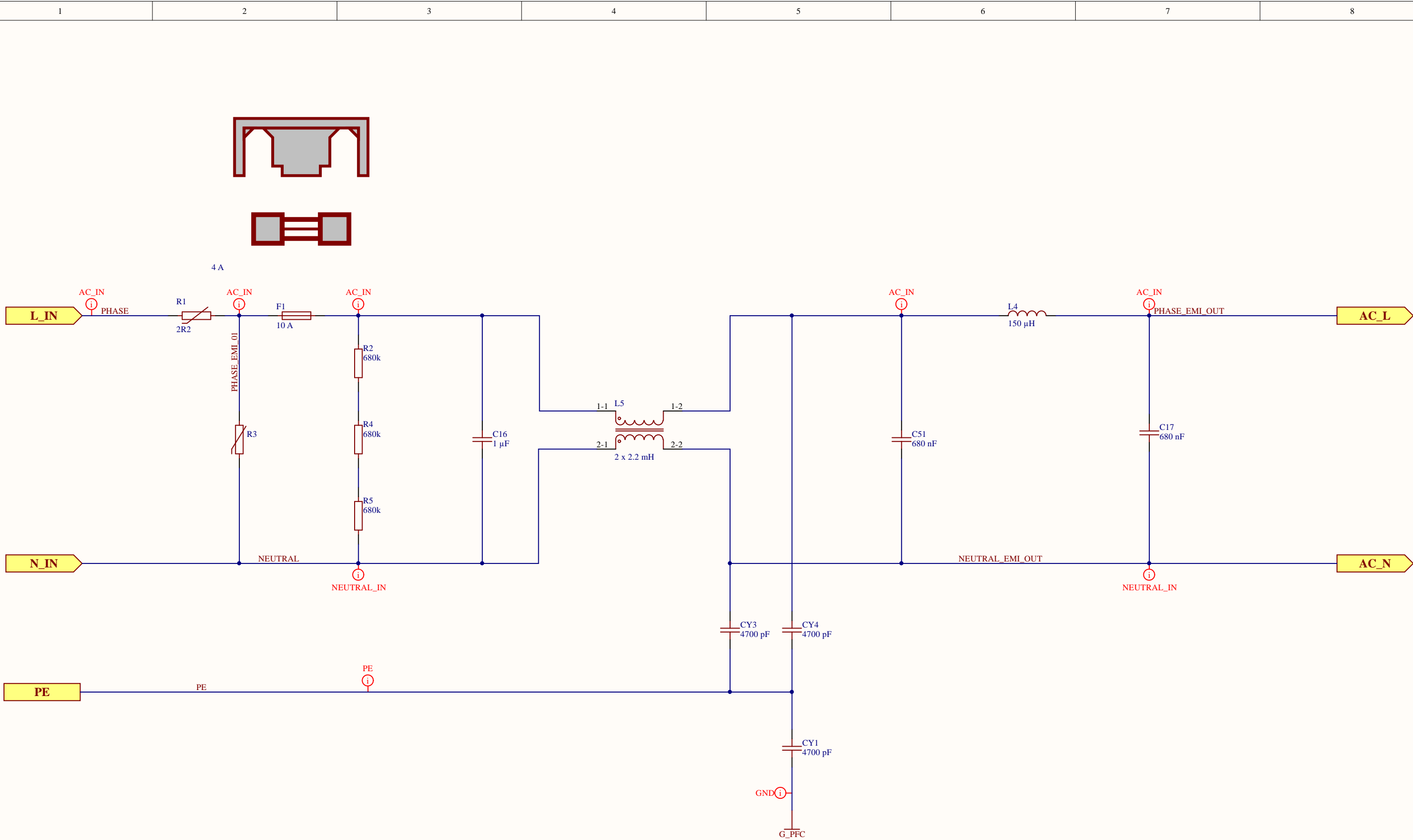
Compact Intelligent Power Module Demo board

850W



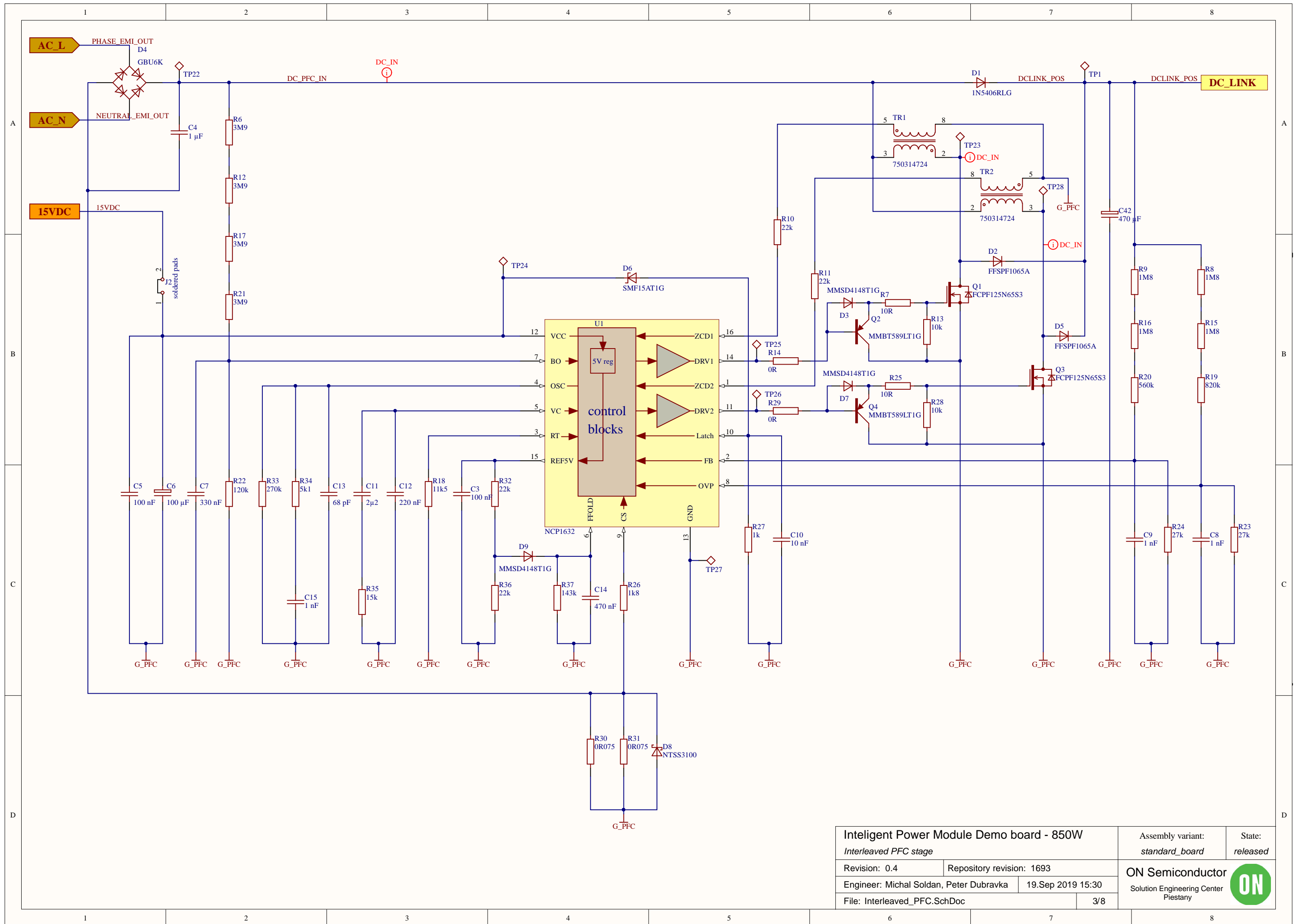
S1 ON TOP symbol
S2 ON BOTTOM symbol

Intelligent Power Module Demo board - 850W		Assembly variant:	State:
Top level		standard_board	released
Revision: 0.4	Repository revision: 1693		
Engineer: Michal Soldan, Peter Dubravka		19.Sep 2019 15:30	
File: IPM_board_top.SchDoc		1/8	
		ON Semiconductor	
		Solution Engineering Center Piešťany	



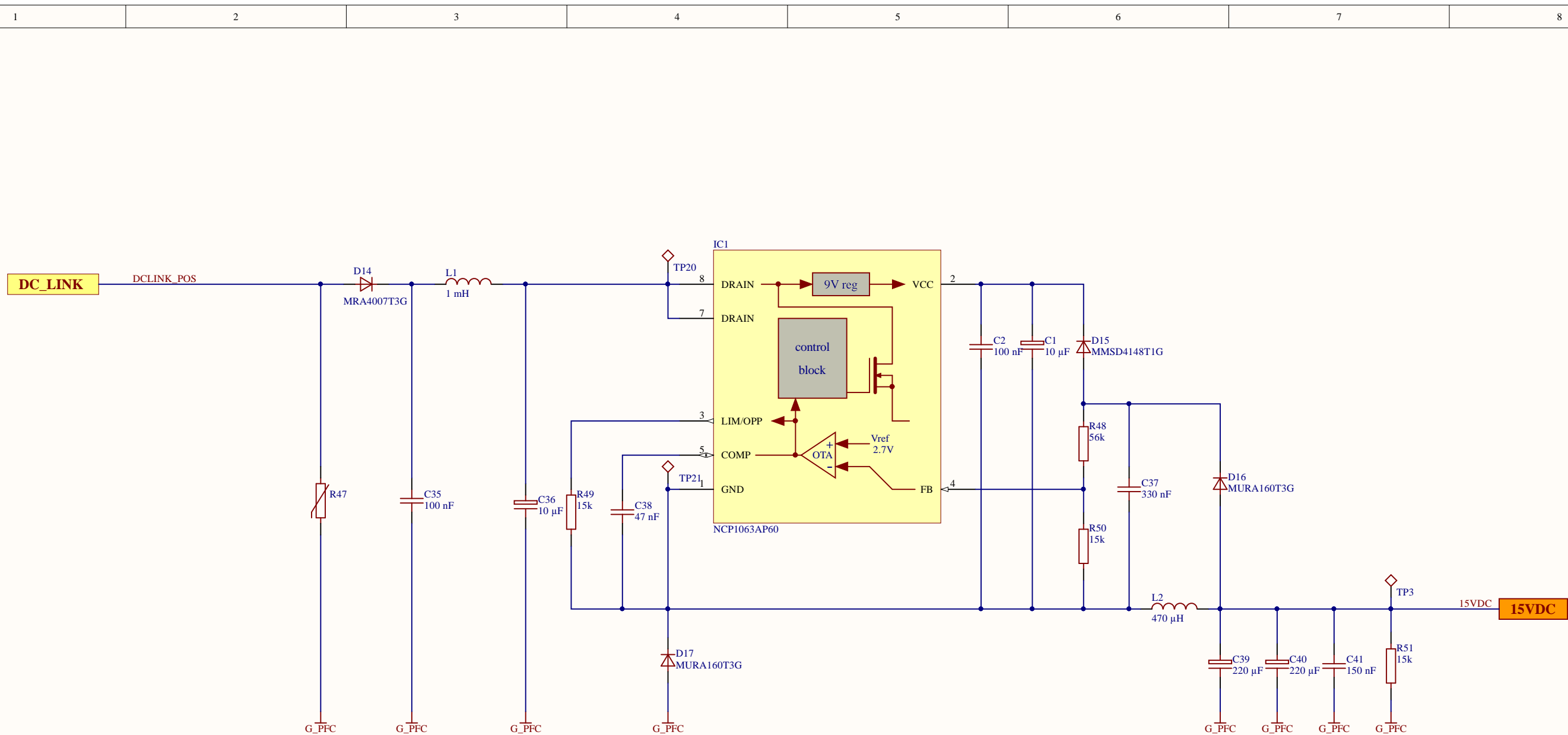
Intelligent Power Module Demo board - 850W <i>EMI filter and Protection circuit</i>		Assembly variant: <i>standard_board</i>	State: <i>released</i>
Revision: 0.4	Repository revision: 1693		ON Semiconductor Solution Engineering Center Piešťany
Engineer: Michal Soldan, Peter Dubravka	19.Sep 2019 15:30		
File: Input_EMI_Filter_and_Protection.SchDoc	2/8		





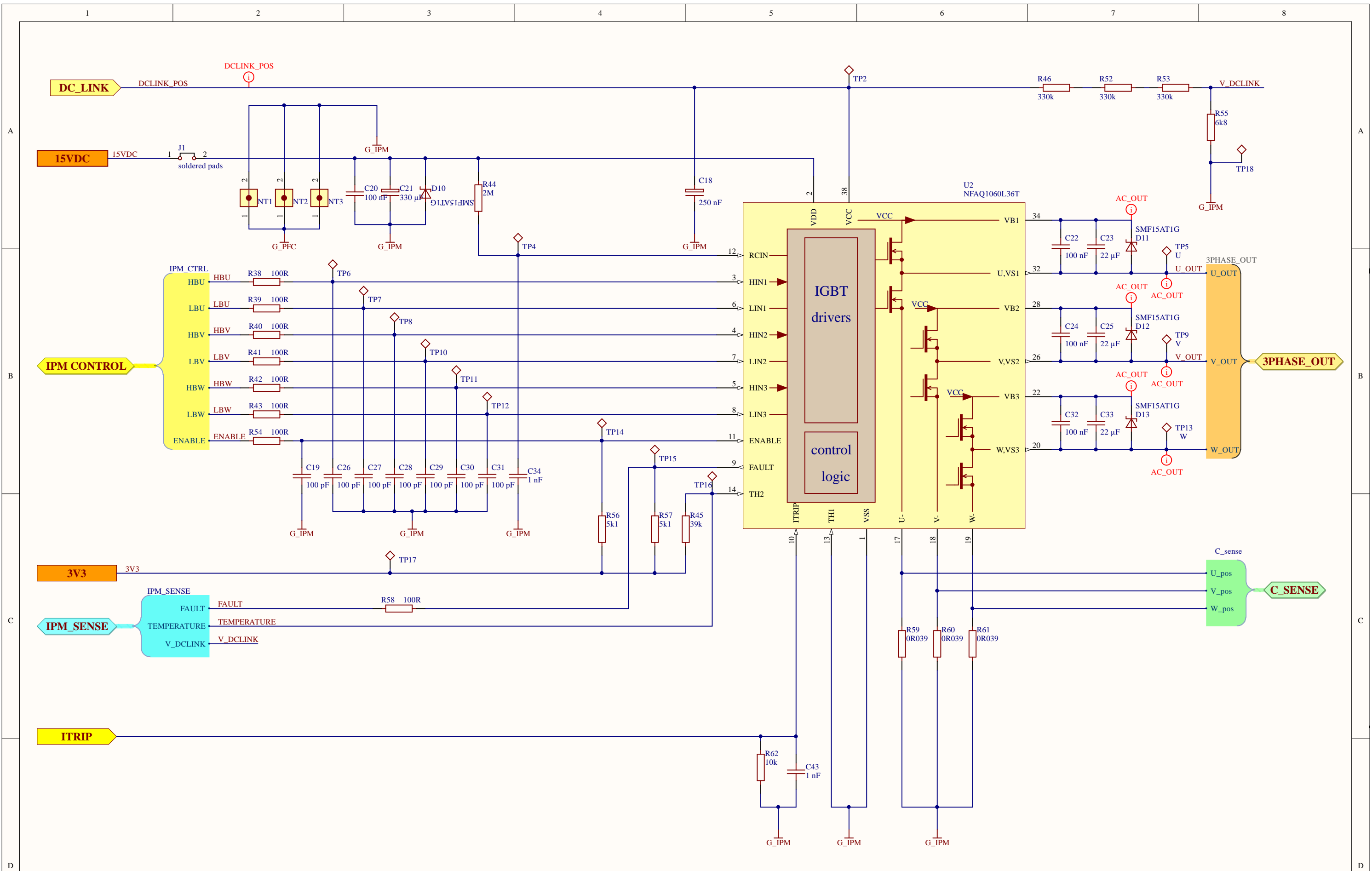
Intelligent Power Module Demo board - 850W <i>Interleaved PFC stage</i>		Assembly variant: <i>standard_board</i>	State: <i>released</i>
Revision: 0.4	Repository revision: 1693		ON Semiconductor Solution Engineering Center Piestany
Engineer: Michal Soldan, Peter Dubravka	19.Sep 2019 15:30		
File: Interleaved_PFC.SchDoc	3/8		





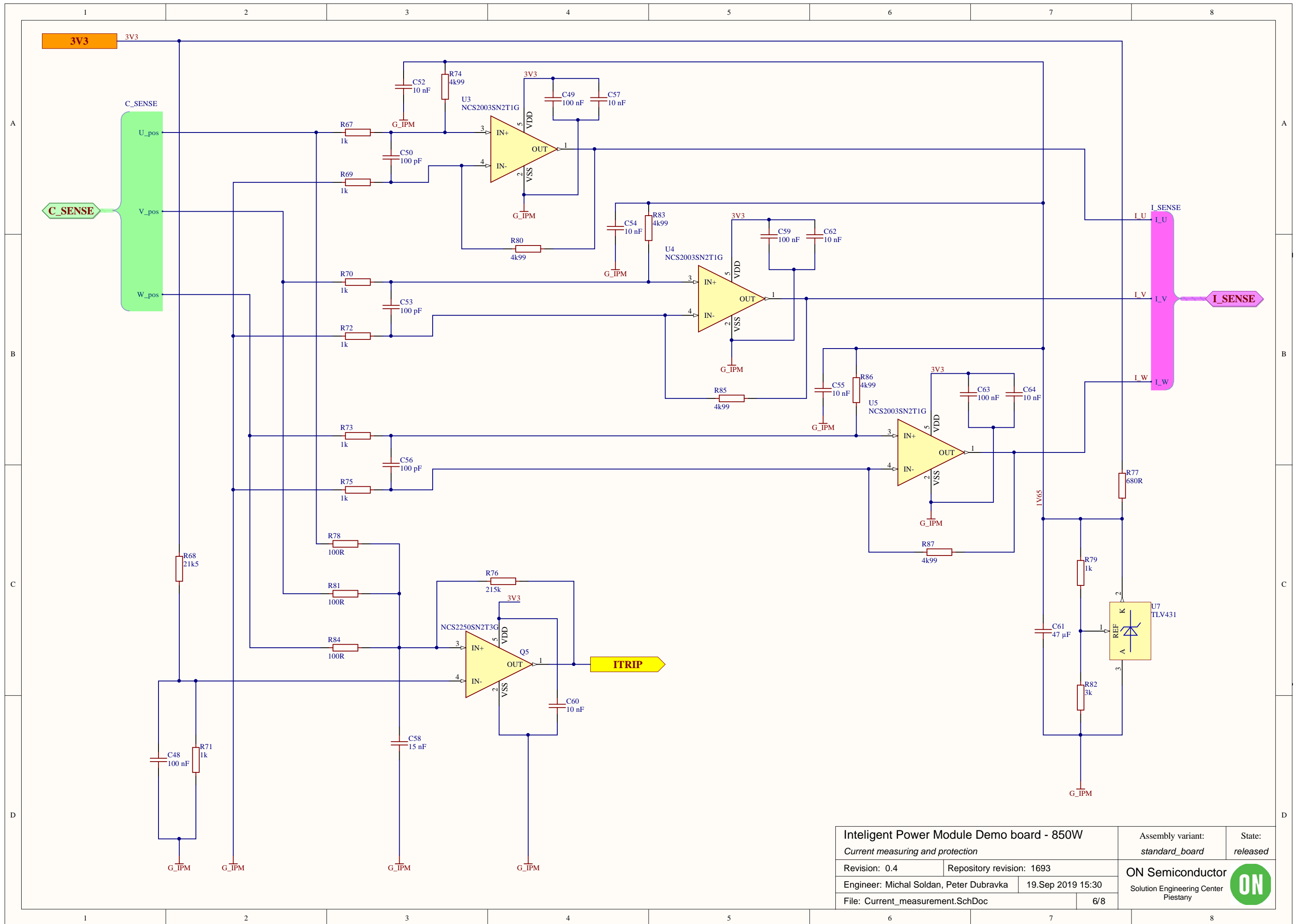
Intelligent Power Module Demo board - 850W DC/DC Power supply 390VDC / 15VDC		Assembly variant: <i>standard_board</i>	State: <i>released</i>
Revision: 0.4	Repository revision: 1693		ON Semiconductor Solution Engineering Center Piešťany
Engineer: Michal Soldan		19.Sep 2019 15:30	
File: DC_Source_15V.SchDoc		4/8	





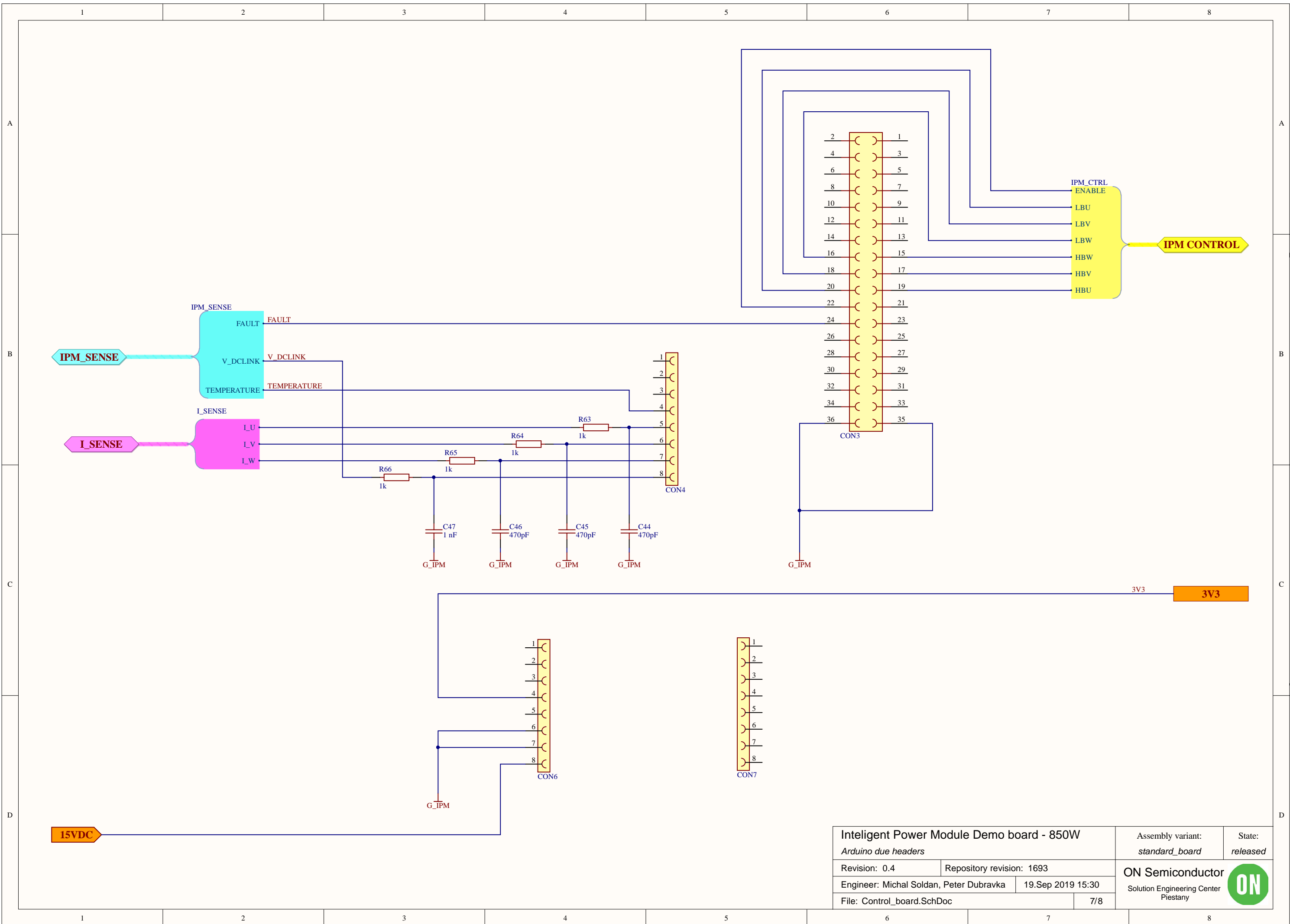
Intelligent Power Module Demo board - 850W <i>IPM module control</i>		Assembly variant: <i>standard_board</i>	State: <i>released</i>
Revision: 0.4	Repository revision: 1693		ON Semiconductor Solution Engineering Center Piešťany
Engineer: Michal Soldan, Peter Dubravka		19.Sep 2019 15:30	
File: IPM.SchDoc		5/8	





Intelligent Power Module Demo board - 850W		Assembly variant:	State:
<i>Current measuring and protection</i>		<i>standard_board</i>	<i>released</i>
Revision: 0.4	Repository revision: 1693	ON Semiconductor Solution Engineering Center Piešťany	
Engineer: Michal Soldan, Peter Dubravka	19.Sep 2019 15:30		
File: Current_measurement.SchDoc	6/8		



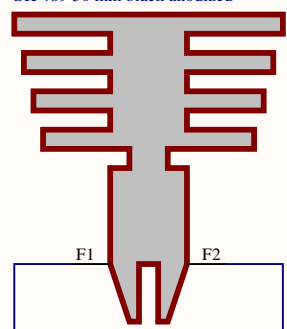


Intelligent Power Module Demo board - 850W		Assembly variant:	State:
<i>Arduino due headers</i>		<i>standard_board</i>	<i>released</i>
Revision: 0.4	Repository revision: 1693		ON Semiconductor Solution Engineering Center Piešťany
Engineer: Michal Soldan, Peter Dubravka	19.Sep 2019 15:30		
File: Control_board.SchDoc	7/8		



Heatsinks fixing set

HSA
SK 489 50 mm black anodized

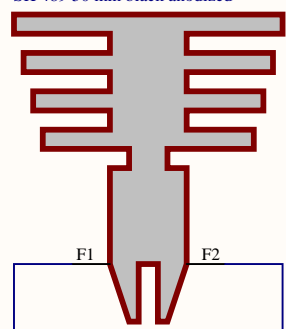


SHSA1
spacer for M3



SHSA2
spacer for M3

HSB
SK 489 50 mm black anodized



SHSB1
spacer for M3



SHSB2
spacer for M3

Note: Spacers SHSA1, SHSA2, SHSB1 and SHSB2 are placed between board and heatsink



WWSA1
plain washer M3 DIN125A



WWSA2
plain washer M3 DIN125A



WWSB1
plain washer M3 DIN125A



WWSB2
plain washer M3 DIN125A



SHA1
M3x8 DIN7985



SHA2
M3x8 DIN7985

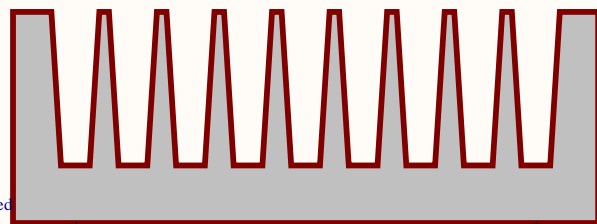


SHB1
M3x8 DIN7985



SHB2
M3x8 DIN7985

HSC
SK 92 30 mm natural anodized



WWSHC1
plain washer M3 DIN125A



WWSHC2
plain washer M3 DIN125A



SHC1
M3x16 DIN7985



SHC2
M3x16 DIN7985

HSD
SK 447 37.5 mm black anodized



WWSHD1
plain washer M3 DIN125A



SHD1
M3x8 DIN7985



WWSDD
plain washer M3 DIN125A



WSDD
spring washer M3 DIN7980



SDD
M3x16 DIN7985

Board fixing set

ST1

Spacer M3 M/F 6/30 HEX7

ST2

Spacer M3 M/F 6/30 HEX7

ST3

Spacer M3 M/F 6/30 HEX7

ST4

Spacer M3 M/F 6/30 HEX7

ST5

Spacer M3 M/F 6/30 HEX7

ST6

Spacer M3 M/F 6/30 HEX7

ST6

Spacer M3 M/F 6/30 HEX7

SB1

Spacer M3 F/F 50 HEX7

SB2

Spacer M3 F/F 50 HEX7

SB3

Spacer M3 F/F 50 HEX7

SB4

Spacer M3 F/F 50 HEX7

SB5

Spacer M3 F/F 50 HEX7

SB6

Spacer M3 F/F 50 HEX7

SB6

Spacer M3 F/F 50 HEX7

Input AC connector fixing set



SAC1
M3x8 DIN7985



WAC1
plain washer M3 DIN125A



NAC1
nut M3 ISO4032



SAC2
M3x8 DIN7985



WAC2
plain washer M3 DIN125A



NAC2
nut M3 ISO4032

Power MOSFETs and Diodes fixing set



AOS 220 18x12x1.5 D3.1



AOS 220 18x12x1.5 D3.1



AOS 220 18x12x1.5 D3.1



AOS 220 18x12x1.5 D3.1



plain washer M3 DIN125A



plain washer M3 DIN125A



plain washer M3 DIN125A



plain washer M3 DIN125A



spring washer M3 DIN7980



spring washer M3 DIN7980



spring washer M3 DIN7980



spring washer M3 DIN7980



SQA
M3x16 DIN7985



SDA
M3x16 DIN7985



SQB
M3x16 DIN7985



SDB
M3x16 DIN7985

3PHASE output connector

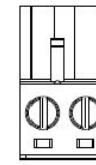
J_AC_OUT



691 351 500 003

390VDC input connector

J_DC390V



2P

691 351 500 002

Intelligent Power Module Demo board - 850W <i>Mechanical and enclosed parts</i>		Assembly variant: <i>standard_board</i>	State: <i>released</i>
Revision: 0.4	Repository revision: 1693		ON Semiconductor Solution Engineering Center Piestany
Engineer: Michal Soldan		19.Sep 2019 15:30	
File: mechanical_parts.SchDoc		8/8	

