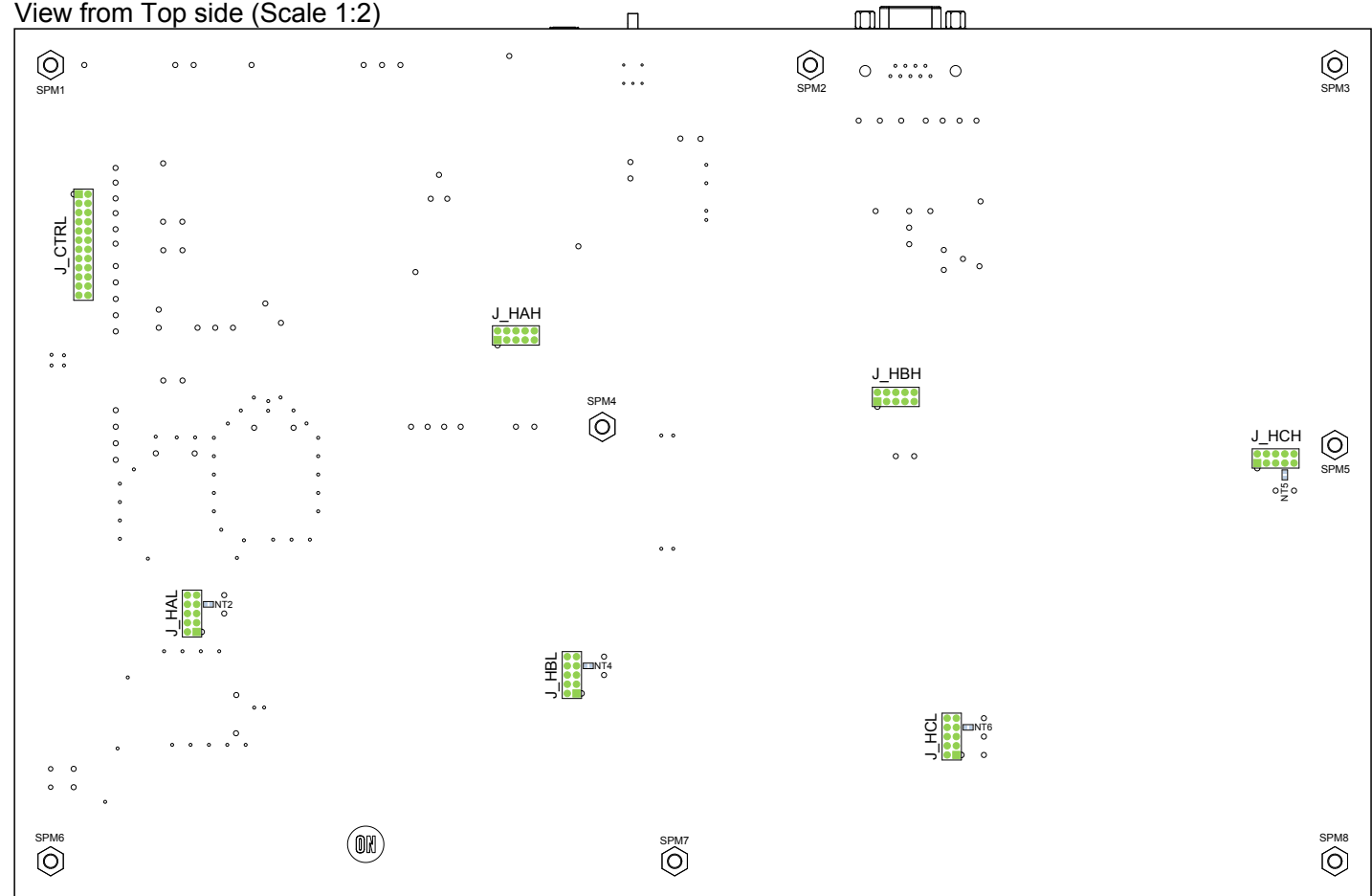


Bill Of Materials - Top side components

Designator	Comment	Quantity
J_CTRL	TSW-112-19-G-D	1
J_HCL, J_HCH, J_HBL, J_HBH, J_HAL, J_HAH	TSW-105-19-G-D	6
SPM1-SPM8	spacer M/F 25mm M4	8

View from Top side (Scale 1:2)



1 Only components present in this assembly variant are listed in BoM table on the left

2 Components not present in this assembly variant are crossed out by red line

OBC PFC control board

Revision:
0.3

State:
released

Variant name: standard_board

Assembly
document

Sheet
1 / 5

Engineer: Stefan Kosterec

Date: 29.Mar 2018 16:28

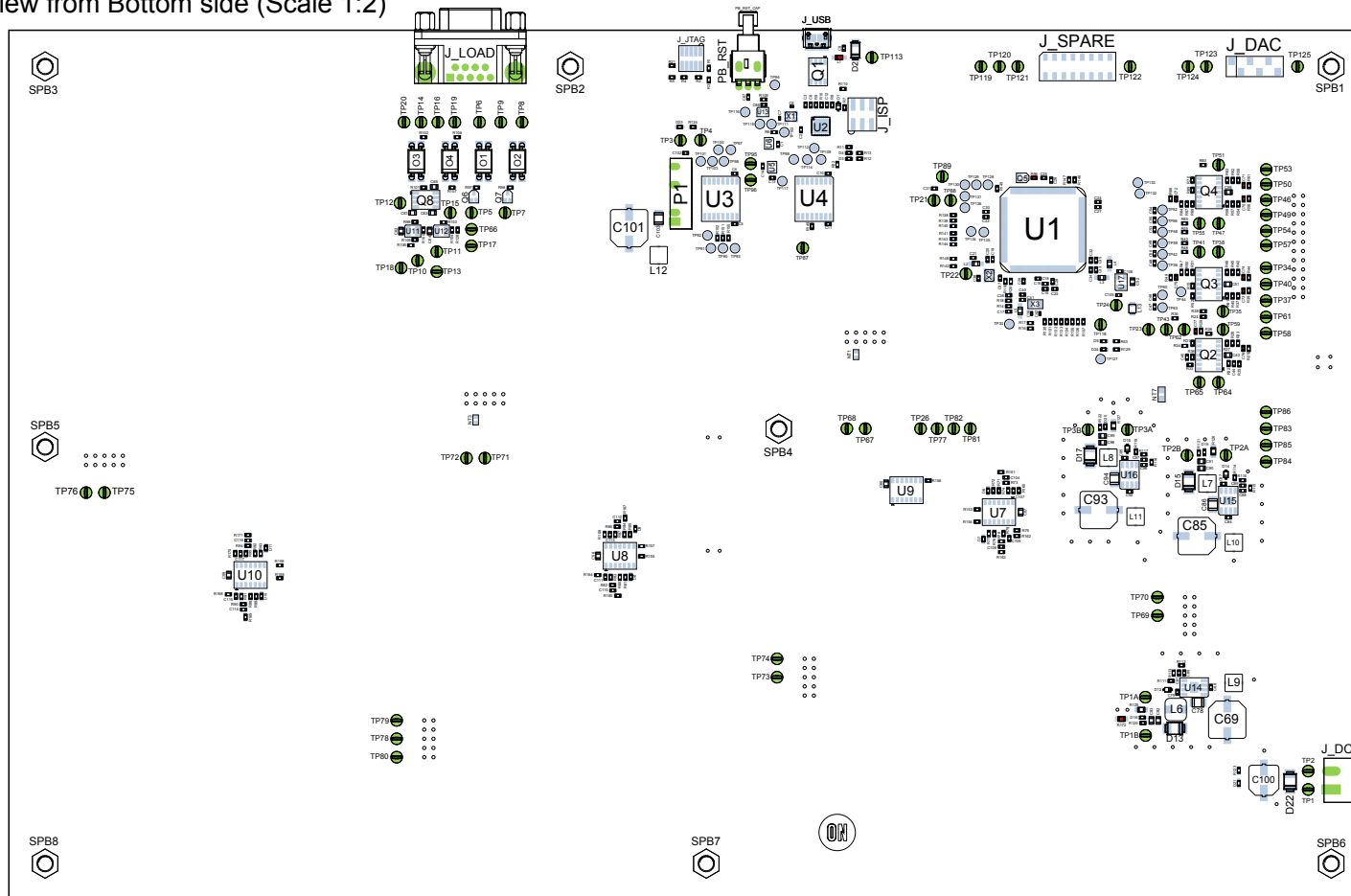
PCB File: OBC_PFC_control_board.PcbDoc


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View from Bottom side (Scale 1:2)



 Components not present in this assembly variant are crossed out by red line

OBC PFC control board		Revision: 0.3	State: released
Variant name: standard_board		Assembly document	Sheet 2 / 5
Engineer: Stefan Kostrec	Date: 29.Mar 2018 16:28		
PCB File: OBC_PFC_control_board.PcbDoc		ON Semiconductor Solution Engineering Center Piestany 	
Repository revision: 897			

Bill Of Materials - Bottom side components


Designator	Comment	Quantity
C104, C107-C117	220 pF	12
C17	22 pF	1
C1-C5, C8-C11, C16, C18, C19, C22-C30, C32, C34, C40, C43, C51, C56-C66, C68, C79, C84, C87, C92, C95, C105, C106	100 nF	45
C6, C7, C37, C38, C97	12 pF	5
C39, C42, C89	10 pF	3
C12-C14, C33, C35, C44, C45, C102	1 µF	8
C15, C20, C21, C36, C41, C52, C82, C83, C90, C91, C98, C99	10 µF	12
C31, C46-C50, C53-C55, C67	10 nF	10
C69, C85, C93, C100, C101	100 µF	5
C78, C86, C94, C103, L8	4µ7	5
C80	4n7	1
C81	100 pF	1
C88	1n8	1
C96	2n2	1
D1	BAS16H	1
D6-D11, TP1A, TP16, TP21, TP67, TP71, TP75, TP77, TP113	RED	14
D12, D14, D16	NSR0340H	3
D13, D15, D17	MBRS2040L	3
D18-D21, D23, TP3A, TP12-TP14, TP58, TP61, TP82, TP85, TP89, TP123	GREEN	15
D2	SMA6J5.0	1
D22	SMBJ24A	1
D24	SUPER RED	1
D4, TP10, TP37, TP38, TP50, TP51, TP53, TP88, TP120	YELLOW	9
D3, D5, TP3, TP15, TP17, TP19, TP23, TP59, TP69, TP73, TP78, TP84, TP87, TP118	BLUE	14

Designator	Comment	Quantity
J_DAC	610 006 11 921	1
J_DCIN	691 313 510 002	1
J_ISP	610 006 211 21	1
J_JTAG	621 310 210 21	1
J_LOAD	618 009 231 321	1
J_SPARE	610 016 218 21	1
J_USB	47346-0001	1
L13	33 µH	1
L2-L5	30 Ohm @ 100 MHz	4
L6, L9-L12	22 µH	5
L7	6µ8	1
O1-O4	SFH615A-3	4
P1	MEF1S2405SP3C	1
PB_RST	465 031 772 505	1
PB_RST_CAP	red cap for RESET button	1
Q1	LC03 6R2	1
Q2-Q4	NCS4333	3
Q5-Q7	MUN5111T1G	3
Q8	NCS2333	1
R9, R10	22R	2
R1-R6, R22, R99, R100, R103-R106	47k	13
R101, R107, R124	1k5	3
R102, R108, R115	12k	3
R111	3k9	1
R113	220R	1
R114	487R	1
R116	93R1	1
R117	31R6	1
R119	100R	1
R120	91k	1
R121	20k	1
R122	7k5	1
R123	150k	1

Designator	Comment	Quantity
R130-R159	10R	30
R160-R171	33R	12
R19, R20	39R	2
R25, R27	6k65	2
R32	8k2	1
R33	2k55	1
R28, R34	1k82	2
R35	2k74	1
R36	4k32	1
R14, R39, R41, R44, R46, R49, R51	6k8	7
R53, R72, R77, R81, R85, R89, R93, R129	2k2	8
R17, R21, R110, R125-R127	0R	6
R54, R57, R59, R62, R64, R67	330R	6
R56, R58, R61, R63, R66, R68	402R	6
R15, R52, R69, R70	4k7	4
R7, R8, R11, R18, R23, R26, R29, R31, R37, R40, R42, R45, R47, R50, R71, R76, R80, R84, R88, R92, R109, R112, R118, R128	10k	24
R16, R73-R75, R78, R79, R82, R83, R86, R87, R90, R91, R94, R95	100k	14
R12, R13, R97, R98	1k	4
SPB1-SPB8	spacer M4 M/F 40 mm	8
TP1, TP24, TP64-TP66, TP86	PURPLE	6
TP11, TP40, TP41, TP54, TP55, TP57, TP70, TP74, TP79, TP121	BROWN	10
TP1B, TP2B, TP2, TP4, TP18, TP20, TP80, TP96, TP122, TP3B	BLACK	10

Designator	Comment	Quantity
TP2A, TP7, TP9, TP22, TP34, TP35, TP46, TP47, TP49, TP68, TP72, TP76, TP81, TP95, TP119	ORANGE	15
TP5, TP6, TP62, TP83, TP124	WHITE	5
TP8, TP26, TP43, TP125	GRAY	4
U1	ATSAM3X8EA-AU	1
U7, U8, U10	MC74ACT74	3
U11, U12	CAT5172 100k	2
U14-U16	NCV890100	3
U17	REF1933	1
U2	ATmega16U2-MU	1
U3, U4	ISO7741DW	2
U5	NCP508SQ33	1
U6, U13	MC74VHC1GT08D FT1G	2
U9	MC74HC30A	1
X1	16 MHz 30 ppm	1
X2	12 MHz 30 ppm	1
X3	32.768 kHz	1

OBC PFC control board		Revision: 0.3	State: released
Variant name: standard_board		Assembly document	Sheet 3 / 5
Engineer: Stefan Kosterec	Date: 29.Mar 2018 16:28		
PCB File: OBC_PFC_control_board.PcbDoc		ON Semiconductor	
Repository revision: 897		Solution Engineering Center Piestany	



4 Only components present in this assembly variant are listed in BoM table

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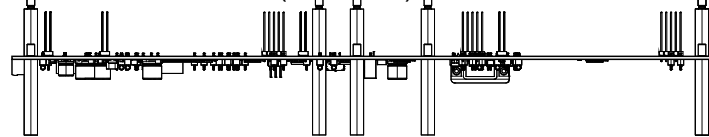
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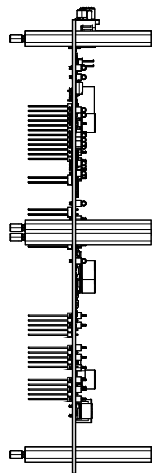
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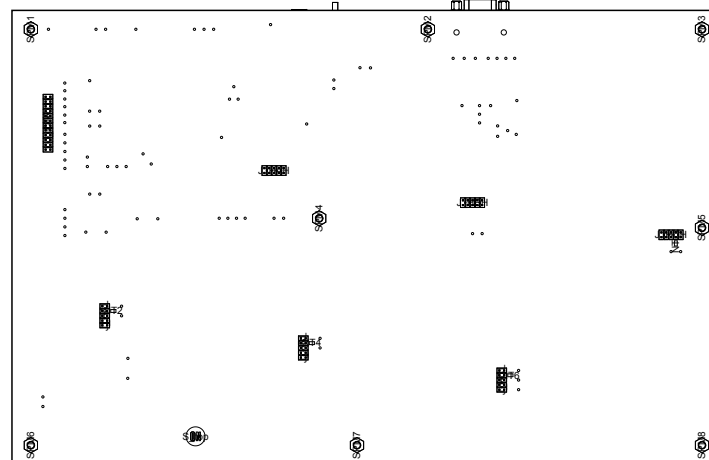
View from Front side (Scale 1:4)



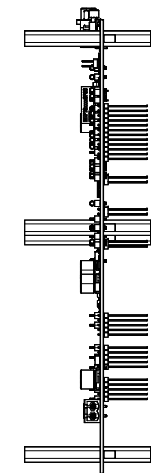
View from Right side (Scale 1:4)



View from Top side (Scale 1:4)



View from Left side (Scale 1:4)



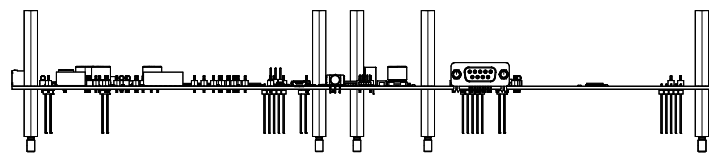
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C

C

View from Back side (Scale 1:4)



D

D

OBC PFC control board		Revision: 0.3	State: released
Variant name: standard_board		Assembly document	Sheet 4 / 5
Engineer: Stefan Kostrec	Date: 29.Mar 2018 16:28		
PCB File: OBC_PFC_control_board.PcbDoc		ON Semiconductor	
Repository revision: 897		Solution Engineering Center Piešťany	

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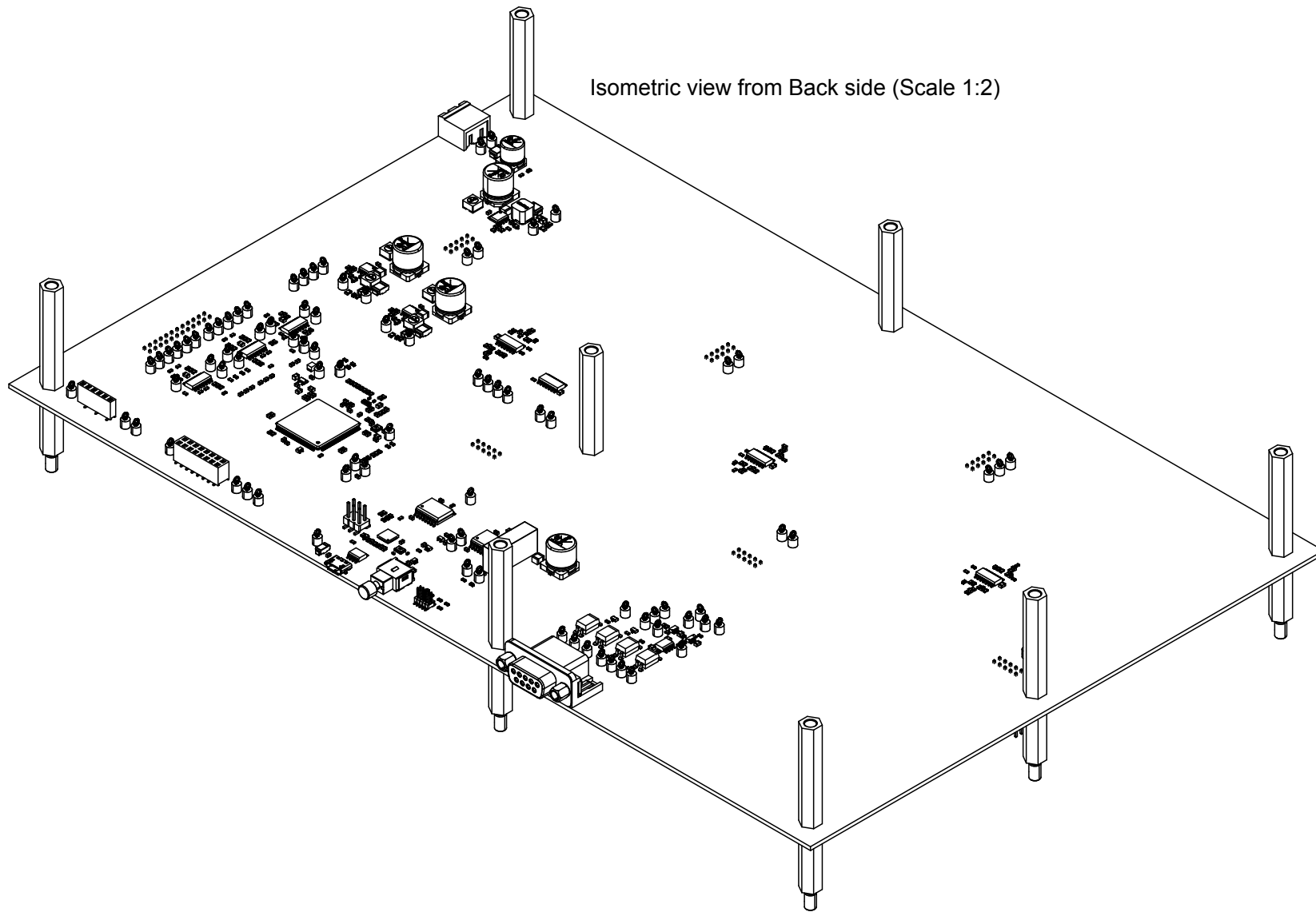
B

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C

D

D



Isometric view from Back side (Scale 1:2)

OBC PFC control board		Revision: 0.3	State: released
Variant name: standard_board		Assembly document	Sheet 5 / 5
Engineer: Stefan Kostrec	Date: 29.Mar 2018 16:28		
PCB File: OBC_PFC_control_board.PcbDoc		ON Semiconductor Solution Engineering Center Piešťany	
Repository revision: 897			



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