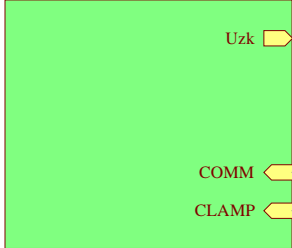
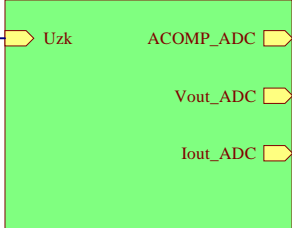


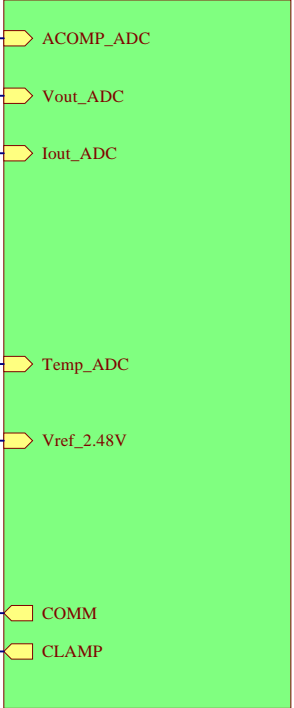
Resonant Tank / Synchron Rectifier
WE-WPC-001-V06-2018_RT.SchDoc



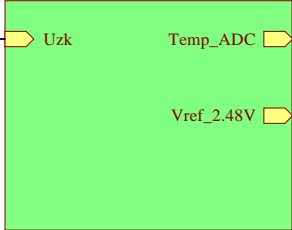
Current Sense & Output
WE-WPC-001-V06-2018_Out.SchDoc



Microcontroller & RS232 Interface
WE-WPC-001-V06-2018_MCU.SchDoc



Aux. Supply & Temperature Sensor
WE-WPC-001-V06-2018_Aux.SchDoc



971100365
Plastic Spacer M3 I/A / 10mm

MP1

971100365
Plastic Spacer M3 I/A / 10mm

MP2

971100365
Plastic Spacer M3 I/A / 10mm

MP3

971100365
Plastic Spacer M3 I/A / 10mm

MP4

970300365
Plastic Spacer M3 I/I / 30mm

MP5

970300365
Plastic Spacer M3 I/I / 30mm

MP6

970300365
Plastic Spacer M3 I/I / 30mm

MP7

970300365
Plastic Spacer M3 I/I / 30mm

MP8

PCB Number
WE-WPC-001-V06-2018

WE-Logo Solder Mask

Hole M3
Diameter 3.2mm

Hole M3
Diameter 3.2mm

Hole M3
Diameter 3.2mm

Hole M3
Diameter 3.2mm

REV.	DATE	BY	CHECKED



Würth Elektronik eiSos GmbH & Co. KG
EMC & Inductive Solutions
Max-Eyth-Str. 1
74638 Waldenburg
Germany
Tel.: +49 (0) 79 42 945 - 0
www.we-online.com
eiSos@we-online.com

DESCRIPTION:

WPC-200W Receiver Board

Main Sheet

WE-WPC-001-V06-2018

SIZE

A4

A

A

B

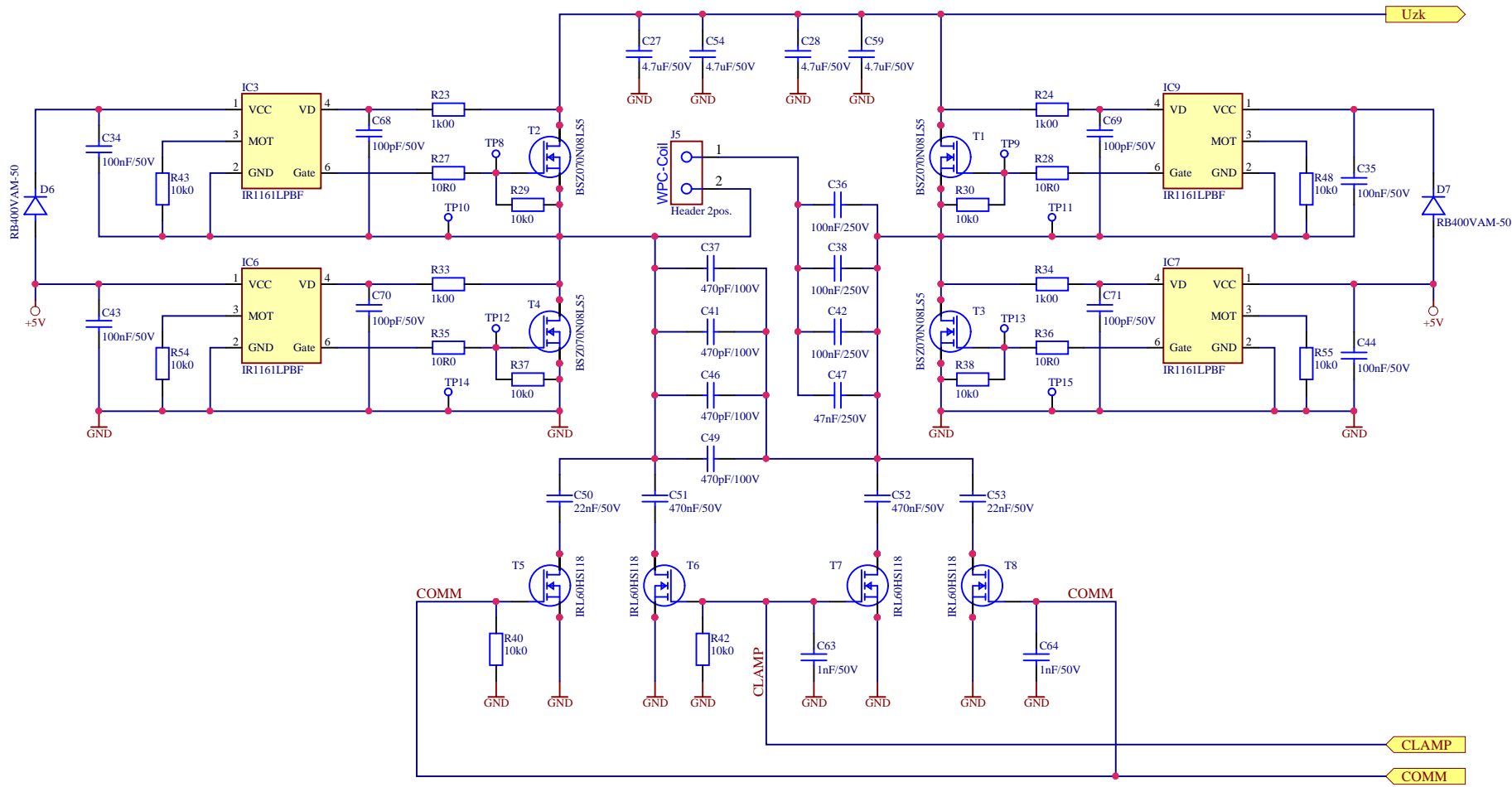
B

C

C

D

D



REV.	DATE	BY	CHECKED



Würth Elektronik eiSos GmbH & Co. KG
EMC & Inductive Solutions
Max-Eyth-Str. 1
74638 Waldenburg
Germany
Tel.: +49 (0) 79 42 945 - 0
www.we-online.com
eiSos@we-online.com

DESCRIPTION:	
WPC-200W Receiver Board	
Resonant Tank / Synchron Rectifier	SIZE
WE-WPC-001-V06-2018_RT	
WE-WPC-001-V06-2018	A4

Bill of Material

200W WPC Receiver

Project: 200W WPC Eval. Kit

File: Pro723F.tmp

Variant: None



Report Date: 23.07.2018 10:19:41
Print Date: 23-Jul-18 10:19:54 AM

#	Designator	Comment	Description	Mounting Style	Package	Manufacturer	Distributor	Distr. Part No.	Quantity
1	C1, C3, C8, C67	1uF/50V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207103	4
2	C2, C6, C13, C14, C15, C16, C18, C39, C40, C58	10nF/50V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207092	10
3	C4, C5, C7, C12, C28, C34, C35, C43, C44, C45, C65, C66	100nF/50V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207098	12
4	C9, C10	4.7uF/25V/X5R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012107018	2
5	C11, C30, C31, C32, C33, C48, C62, C63, C64	1nF/50V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207086	9
6	C17	22nF/50V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207094	1
7	C19, C20, C55, C56	47uF/16V/X7R	Ceramic Capacitor	SMD	1210	Würth Elektronik eSos	Würth Elektronik eSos	885012109011	4
8	C21	100nF/50V/X7R	Ceramic Capacitor	SMD	1206	Würth Elektronik eSos	Würth Elektronik eSos	885012208087	1
9	C22, C23, C24, C27, C28, C54, C57, C58, C60, C61	4.7uF/50V/X7R	Ceramic Capacitor	SMD	1210	Würth Elektronik eSos	Würth Elektronik eSos	885012209048	10
10	C25	220nF/50V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207100	1
11	C29	33pF/25V/NP0	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012007031	1
12	C36, C38, C42	100nF/250V/C0G	Ceramic Capacitor	SMD	1812	Kemet	Mouser	80-C1812C104JAGA.UTO	3
13	C37, C41, C46, C49	470pF/100V/C0G	Ceramic Capacitor	SMD	1206	Kemet	Mouser	80-C1206C471J1GAC	4
14	C47	47nF/250V/C0G	Ceramic Capacitor	SMD	1812	TDK	Mouser	810-C4532C0G2E473J	1
15	C50, C53	22nF/50V/X7R	Ceramic Capacitor	SMD	1206	Würth Elektronik eSos	Würth Elektronik eSos	885012208083	2
16	C51, C52	470nF/50V/X7R	Ceramic Capacitor	SMD	1206	Würth Elektronik eSos	Würth Elektronik eSos	885012208091	2
17	C68, C69, C70, C71	100pF/50V/NP0	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012007057	4
18	C72	2.2uF/25V/X7R	Ceramic Capacitor	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	885012207079	1
19	C73	68uF/25V_PSLC-Series	Polymer-Eko PSLC-Series	SMD	8mm x 11.5mm	Würth Elektronik eSos	Würth Elektronik eSos	875075555003	1
20	CE4, CE5, CE6, CE7	1000uF/35V/ATLL-Series	AL-Eko ATLL-Series	THT	13mm x 35mm	Würth Elektronik eSos	Würth Elektronik eSos	860180578032	4
21	D1	LED_red	LED Red 0805	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	150080BS75000	1
22	D2	LED_blue	LED blue 0805	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	150080BS75000	1
23	D3	LED_green	LED Green 0805	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	150080GS75000	1
24	D4	TS432ALT	1.24 adj. shunt voltage reference	SMD	TOC2-3	ST Microelectronics	Mouser	511-TS432AL	1
25	D5, D6	LED_green_0805	LED Green 0805	SMD	0805	Würth Elektronik eSos	Würth Elektronik eSos	150080GS75000	2
26	D6, D7	RB400V/AM-50	Schottky Diode 40V/0.5A	SMD	SOD-323HW	Rohm	Mouser	755-RB400V-AM-50TR	2
27	IC1	FX1763LD-V	Low Noise 500mA LDO	SMD	PG-TSON-10	Infineon	Mouser	726-FX1763LDVXUMA1	1
28	IC2	171032401	Variable Step Down Regulator Module	SMD	TOC63-7EP	Würth Elektronik eSos	Würth Elektronik eSos	171032401	1
29	IC3, IC6, IC7, IC9	RI161LPRBF	Synchronous Rectifier Controller	SMD	TOC23-5	Infineon	Mouser	942-RI161LTPRBF	4
30	IC4	TCA051TR	3.3 Level Shifting Bus Repeater	SMD	SC8	Texas Instruments	Mouser	566-TCA051TRK	1
31	IC5	AD8215TRZ	Current Shunt Monitor	SMD	SC8	Analog Devices	Mouser	584-AD8215TRZ	1
32	IC8	XMCT302-T038X0064 AB	XMCT300 Cortex M0 MCU Series	SMD	TSSOP98	Infineon	Mouser	726-13027038X0064AB	1
33	IC10	AD8031	Rail to Rail Op. Amplifier	SMD	TOC23-5	Analog Devices	Mouser	584-AD8031ARTZ-R7	1
34	J1	Header 6pos.	6 Pos. dual Pin Header	THT	N/A	Würth Elektronik eSos	Würth Elektronik eSos	61300621121	1
35	J2, J3	Header 8pos.	8 Pos. dual Pin Header	THT	N/A	Würth Elektronik eSos	Würth Elektronik eSos	61300821121	2
36	J4, J5	Header 2pos.	2pos. RM 5.08 Horizontal PCB Header	THT	N/A	Würth Elektronik eSos	Würth Elektronik eSos	691313510002	2
37	J6	Header 4pos.	4 Pos. angled dual socket header	THT	N/A	Würth Elektronik eSos	Würth Elektronik eSos	613004243121	1
38	L1	10uH/1.2A	SMD Shielded Inductor	SMD	3020	Würth Elektronik eSos	Würth Elektronik eSos	74438336100	1
39	L2	1180R/100MHz/10A	SMD EMI Suppression Power Ferrite	SMD	WE-12807040	Würth Elektronik eSos	Würth Elektronik eSos	742792901	1
40	MP1, MP2, MP3, MP4	Plastic Spacer M3 10mm	Plastic Space M3 I/A 10mm	N/A	N/A	Würth Elektronik eCan	Würth Elektronik eCan	971100365	4
41	MP5, MP6, MP7, MP8	Plastic Spacer M3 11 / 30mm	Plastic Space M3 I/A 10mm	N/A	N/A	Würth Elektronik eCan	Würth Elektronik eCan	970300365	4
42	PCB1	PCB	Placeholder for PCB No. in BOM						1
43	R1, R46	0R00 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW08050000ZSTC	2
44	R2, R25, R26	1M00 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW08051M00FKFB	3
45	R3, R4, R5, R41, R63, R64, R65, R66	4k70 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW08054K70FKFB	8
46	R6, R7, R27, R28, R35, R36	10R0 / 1%	Thick Film Resistor	SMD	1206	Vishay	Mouser	71-CRCW120610R0FKFA	6
47	R8, R23, R24, R33, R34, R47	1k00 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805-1.0K-E3	6
48	R9, R15, R29, R30, R37, R38, R40, R42, R43, R45, R48, R49, R50, R51, R52, R54, R55	10k0 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW080510K0FKFB	17
49	R10	4k70	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805-4.7K	1
50	R11, R44	6k80 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805-6.8K-E3	2
51	R12	100k / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805100KFKFB	1
52	R13	75k0 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW080575K0FKFB	1
53	R14, R18	2k20 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW08052K20FKFB	2
54	R16	1k30 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW08051K30FKFB	1
55	R17	15k0 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW080515K0FKFB	1
56	R19	NTC Thermistor 10K J62B4500	NTC Thermistor 10K J62B4500	SMD	0805	TDK	Mouser	871-B57431V2103J62	1
57	R20	0R005/3W	Current Sense Resistor 3W	SMD	2512	Vishay / Dale	Mouser	71-WSLP2512S000FEA	1
58	R21, R22	470k / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805470KFKFB	2
59	R31, R32	43k0 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW080543K0FKFA	2
60	R39	100R / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805100RFKFB	1
61	R53, R59	NP	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW08050000ZSTC	2
62	R56, R57	20k0 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW080520K0FKFB	2
63	R58, R60	24k0 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW080-24K-E3	2
64	R61	9k10 / 1%	Thick Film Resistor	SMD	0805	Vishay	Mouser	71-CRCW0805-9.1K-E3	1
65	R67	100R / 1%	Thick Film Resistor	SMD	1206	Vishay	Mouser	71-CRCW1206-100-E3	1
66	T1, T2, T3, T4	BSZ070N08LS5	N-Channel MOSFET	SMD	TSDSON-8 FL	Infineon	Mouser	726-BSZ070N08LSA TMA	4
67	T5, T6, T7, T8	RL60HS118	N-Channel MOSFET	SMD	POFN-6_2x2	Infineon	Mouser	726-RL60HS118	4

Approved Notes 186

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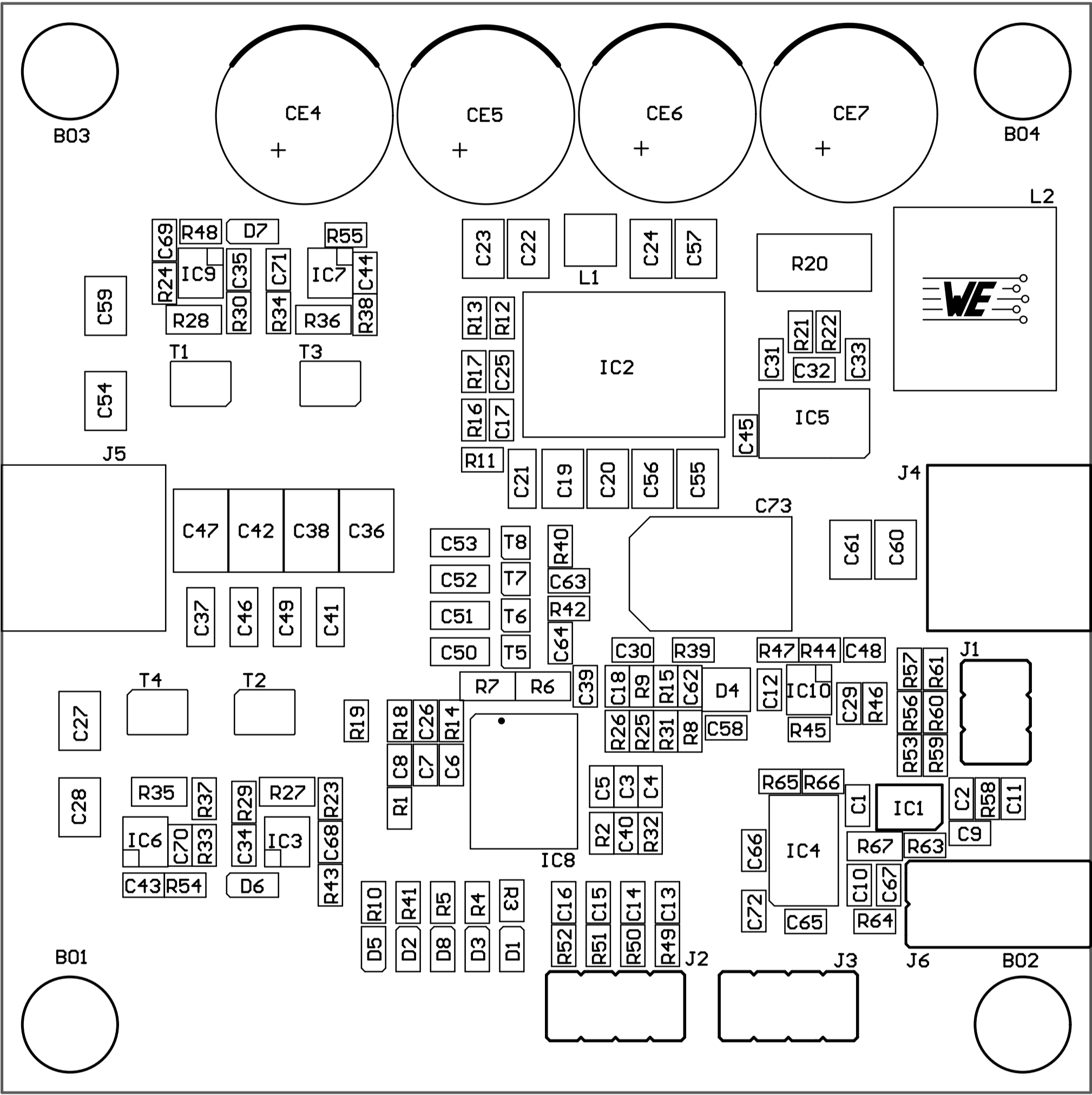
A

B

B

C

C



WÜRTH ELEKTRONIK

Wuerth Elektronik eiSos GmbH & Co. KG
EMC & Inductive Solutions
Max-Eyth-Eyth. 1
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Germany
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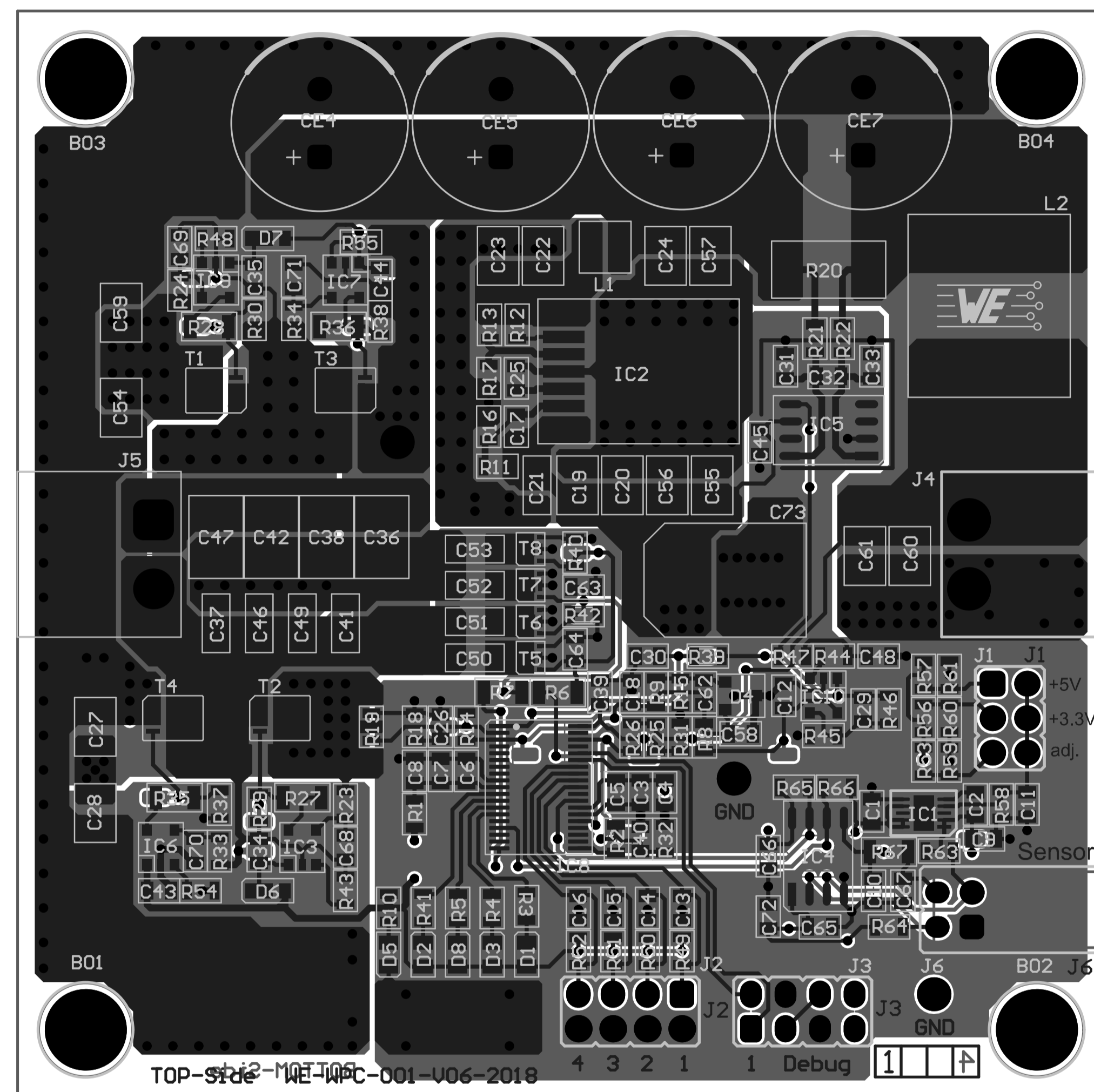
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SIZE

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REV.	DATE	BY	CHECKED			SIZE
						A4

