

# TPPFCSIC-EVK-301 PCB3051 BOM

Ref.Designator	Part Number	Manufacturer	Description	Quantity
A1	AUX_PSU_12V_18V	ROHM	Auxiliary Power Supply Daughter Board	1
A3	DSD -Tech HM-19	DSD -Tech	Bluetooth 5.0 Module	1
C1, C2, C3, C4, C15, C16, C17, C18, C57, C66	B32021A3332M000	EPCOS - TDK Electronics	Cap Film Suppression Y2 0.0033uF 300VAC PP 20% (13 X 4 X 9mm) Radial 10mm 110C Bulk	10
C5, C13, C14	890334026027	Würth Elektronik	Film Capacitor, Polypropylene, 10% +Tol, 10% -Tol, 1uF, Through Hole Mount	3
C6, C7, C8, C9	B43647B5567M05#	EPCOS - TDK Electronics	CAP ALUM 560UF 20% 450V SNAP, 35x35mm	4
C10, C11	C2220C104KBRAC7800	KEMET	0.1 µF ±10% 630V Ceramic Capacitor X7R 2220	2
C12	890334027025	Würth Elektronik	CAP FILM 3.3UF 10% 310VAC RADIAL	1
C19, C26, C28, C42, C45, C46, C49	885012207103	Würth Elektronik	CAP CER 1UF 50V X7R 0805	7
C20, C22	CL31B106KLHNNNE	Samsung Electro-Mechanics	10 µF ±10% 35V Ceramic Capacitors X7R 1206	2
C21, C23, C24, C25, C27, C29, C30, C35, C36, C38, C40, C51, C52, C53, C54, C58, C59, C61, C63, C64	885012206095	Würth Elektronik	CAP CER 0.1UF 50V X7R 0603	20
C31, C32, C33, C34, C37, C39	885012006059	Würth Elektronik	CAP CER 220PF 50V C0G/NP0 0603	6
C41, C50	865060543005	Würth Elektronik	CAP ALUM 47UF 20% 35V SMD	2
C43, C44, C47, C48	885012207098	Würth Elektronik	CAP CER 0.1UF 50V X7R 0805	4
C55, C56, C60, C62, C65	885012107018	Würth Elektronik	CAP CER 4.7UF 25V X5R 0805	5
C67, C68, C69, C78	C1608X7R1H103K080AA	TDK Corporation	CAP CER 10000PF 50V X7R 0603	4
C70, C71, C73, C87	C0805C104K1REC7210	KEMET	CAP CER 0805 0.1UF 100V X7R	5
D1, D4, D5, D6, D7, D9, D10, D11, D12	RB160MM-60TR	Rohm Semiconductor	DIODE SCHOTTKY 60V 1A PMDU	9
D2, D3, D8, D20	RFN2LAM6STR	Rohm Semiconductor	DIODE GEN PURP 600V 1.5A PMDTM	4
D13, D14, D15, D16, D17, D18, D19	SML-H12M8TT86	Rohm Semiconductor	LED GREEN CLEAR 0805 SMD	7
J1	G2RL-1A-E2-CV-HADC12	Omron Electronics Inc-EMC Div	RELAY GEN PURPOSE SPST 23A 12V	1
J2	691250610002	Würth Elektronik	6.35 MM TERMINAL BLOCK, HORIZONT	1
J3	691210910002	Würth Elektronik	TERM BLOCK 2P HORIZON 2.54MM PCB	1
J4, J5, J6	5019	Keystone Electronics	PC TEST POINT MINIATURE	3
L1, L2, L3	7448052502	Würth Elektronik	CMC 2.5MH 25A 2LN TH	3
L4	750344728	Würth Elektronik	PFC Choke, 185µH, 26A, custom-made	1
M1	LAM35012	Fischer Elektronik	Universal rectangular aluminum heatsink, 1.3K/W, 50 x 30 x 30mm, PCB Mount Mount	1
P1	691250610003	Würth Elektronik	6.35 MM TERMINAL BLOCK, HORIZONT	1
P8	61300211121	Würth Elektronik	CONN HEADER VERT 2POS 2.54MM	1
P9	N2514-6002RB	3M	CONN HEADER VERT 14POS 2.54MM	1
Q1, Q2	RYC002N05T316	Rohm Semiconductor	MOSFET N-CHANNEL 50V 200MA SST3	2
Q3, Q5	SCT4045DR	Rohm Semiconductor	SiC MOSFET, 750V, 45mOhm, TO-247-4L	2
Q4, Q6	R6076ENZ4	Rohm Semiconductor	MOSFET N-CH 600V 76A TO247	2
Q8	RU1C001UNTCL	Rohm Semiconductor	MOSFET N-CH 20V 100MA UMT3F	1
Q9	RU1C002ZPTCL	Rohm Semiconductor	MOSFET P-CH 20V 200MA UMT3F	1

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R1, R3	ESR03EZPF1001	Rohm Semiconductor	RES Thick Film, 0.25W, 1000ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	2
R2, R4, R16, R18, R21, R22, R23, R24, R52, R59, R60, R63, R67, R70, R72, R73	ESR03EZPF1002	Rohm Semiconductor	RES Thick Film, 0.25W, 10000ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	16
R5, R6	B59751C0120A070	EPCOS - TDK Electronics	PTC RESET FUSE 440V 87MA RADIAL	2
R7	PMR18EZPFV2L00	Rohm Semiconductor	RES Thick Film, 0.002 ohm, PMR Series, 1206 [3216 Metric], 1 W, ± 1%	1
R8, R9	ESR03EZPF2700	Rohm Semiconductor	RES Thick Film, 0.25W, 270ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	2
R10, R11, R65, R68	ESR10EZPJ3R3	Rohm Semiconductor	RES Thick Film, 0.4W, 3.3ohm, 150V, 5% +/-Tol, 200ppm/Cel, Surface Mount, 0805	4
R12, R17	ESR10EZPF2000	Rohm Semiconductor	RES Thick Film, 0.4W, 200ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0805	2
R13, R71	ESR18EZPF10R0	Rohm Semiconductor	RES Thick Film, 0.5W, 10ohm, 200V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 1206	2
R14, R19	ESR10EZPF22R0	Rohm Semiconductor	RES Thick Film, 0.4W, 22ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0805	2
R15, R20	ESR18EZPF3R30	Rohm Semiconductor	RES Thick Film, 0.5W, 3.3ohm, 200V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 1206	2
R25, R37	ESR03EZPF2202	Rohm Semiconductor	RES Thick Film, 0.25W, 22000ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	2
R26, R38	ESR03EZPF6201	Rohm Semiconductor	RES Thick Film, 0.25W, 6200ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	2
R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50	ESR18EZPF4703	Rohm Semiconductor	RES Thick Film, 0.5W, 470000ohm, 200V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 1206	20
R39, R69	ESR03EZPF3901	Rohm Semiconductor	RES Thick Film, 0.25W, 3900ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	2
R40, R51	ESR03EZPF1502	Rohm Semiconductor	RES Thick Film, 0.25W, 15000ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	2
R53, R61, R62	ESR10EZPF1001	Rohm Semiconductor	RES Thick Film, 0.4W, 1000ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0805	3
R54	ESR18EZPF3301	Rohm Semiconductor	RES Thick Film, 0.5W, 3300ohm, 200V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 1206	1
R55	ESR10EZPJ222	Rohm Semiconductor	RES Thick Film, 0.4W, 2200ohm, 150V, 5% +/-Tol, 200ppm/Cel, Surface Mount, 0805	1
R56	ESR10EZPJ561	Rohm Semiconductor	RES Thick Film, 0.4W, 560ohm, 150V, 5% +/-Tol, 200ppm/Cel, Surface Mount, 0805	1
R57	ESR10EZPJ221	Rohm Semiconductor	RES Thick Film, 0.4W, 220ohm, 150V, 5% +/-Tol, 200ppm/Cel, Surface Mount, 0805	1
R58	SFR03EZPJ000	Rohm Semiconductor	Fixed Resistor, 0.1W, 0ohm, Surface Mount, 0603	1

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R64	ESR10EZPF1002	Rohm Semiconductor	RES Thick Film, 0.4W, 10000ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0805	1
R66	ESR03EZPJ392	Rohm Semiconductor	RES Thick Film, 0.25W, 3900ohm, 150V, 5% +/-Tol, 200ppm/Cel, Surface Mount, 0603	1
R74, R75, R76, R77	ESR03EZPF56R0	Rohm Semiconductor	RES Thick Film, 0.25W, 56ohm, 150V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	4
R78, R79	KTR18EZPF5103	Rohm Semiconductor	Fixed Resistor, 0.25W, 510000ohm, 500V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 1206	2
U2, U4	BM61M41RFV-CE2	Rohm Semiconductor	Single channel Isolated Gatedriver with active Millerclamp	2
U3, U5	BM61S41RFV-CE2	Rohm Semiconductor	Single channel Isolated Gatedriver with active Millerclamp	2
U6, U7, U9	LMR1802G	Rohm Semiconductor	Low Noise Low Input Offset Rail-to-Rail OpAmp	3
U8, U16	TL4050A25IDBZR	Texas Instruments	Shunt Voltage Reference IC Fixed 2.5V V ±0.1% 15 mA SOT-23-3	2
U10	BD50GA5MEFJ-ME2	Rohm Semiconductor	IC REG LINEAR 5V 500MA 8HTSOP	1
U11	BU33SD2MG-MTR	Rohm Semiconductor	IC REG LINEAR 3.3V 200MA 5SSOP	1
U12	R5F524TBADFP#31	Renesas Electronics America Inc	IC MCU 32BIT 256KB FLSH 100LQFP	1
U13, U14, U15	SN74LVC1T45DBVT	Texas Instruments	Voltage level converter bidirectional 1 circuit 1 channel 420MBit/s SOT-23-6	3
X1	CSTNE20M0V53C000R0	Murata Electronics	CERAMIC RES 20.0000MHZ 15PF SMD	1
-	keratherm 86/60	Kerafol	Kerafol 86/60 heat conducting foil 0.25 mm 4.5 W/mK (L x W) 100 mm x 100 mm	1
-	NTCALUG01A103F800A	VISHAY	NTC LUG01A 10K 1% G24 80MM A	1

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