Variant: 001

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TID #: TIPD215

## **TIPD215 REV E1 Bill of Materials**



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIPD215	Any	Printed Circuit Board	
2	C1, C2, C3, C4, C15, C16, C21, C22, C23, C24, C35, C36, C49, C68	14	10uF	UMK325AB7106KM-T	Taiyo Yuden	CAP, CERM, 10 μF, 50 V, +/- 10%, X7R, 1210	1210
3	C5, C6, C7, C8, C25, C26, C27, C28, C41, C44, C56, C57, C66, C67	14	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
4	C9, C10, C11, C12, C13, C14, C17, C18, C19, C20, C29, C30, C31, C32, C33, C34, C37, C38, C39, C40, C42, C52, C53, C54, C55, C62, C63, C64, C65	29	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0603	0603
5	C43	1	200pF	GRM1885C1H201JA01D	MuRata	CAP, CERM, 200pF, 50V, +/-5%, C0G/NP0, 0603	0603
6	C45	1	3300pF	06031C332JAT2A	AVX	CAP, CERM, 3300 pF, 100 V, +/- 5%, X7R, 0603	0603
7	C46	1	2.2uF	CL31B225KCHSNNE		CAP, CERM, 2.2 μF, 100 V, +/- 10%, X7R, 1206_190	1206_190
8	C47	1	100pF	GCM1885C2A101JA16D	MuRata	CAP, CERM, 100 pF, 100 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
9	C48	1	0.033uF	GRM188R71H333KA61D	MuRata	CAP, CERM, 0.033 µF, 50 V, +/- 10%, X7R, 0603	0603
10	C50, C51, C60, C61	4					0603
11	C58, C59, C69, C70		0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 μF, 50 V, +/- 10%, X7R, 0603	0603
12	D1, D2, D3, D4, D9, D10, D11, D12		60V	MBRX160-TP	Micro Commercial Components	Diode, Schottky, 60V, 1A, SOD-123	SOD-123
13	D5, D6, D7, D8, D13, D14, D15, D16, D19, D20, D23, D24	12	36V	CDSOD323-T36SC	Boums	Diode, TVS, Bi, 36V, 400W, SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
14	D17, D18, D21, D22		75V	BAV99-7-F	Diodes Inc.	Diode, Switching, 75V, 0.3A, SOT-23	SOT-23
15	FB9, FB10, FB11, FB12	4	600 ohm	FBMH3225HM601NT	Taiyo Yuden	Ferrite Bead, 600 ohm @ 100 MHz, 3 A, 1210	1210
16	J1, J2, J4, J5, J6	5		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
17	J3	1		851-43-010-20-001000	Mill-Max	Receptacle, 50mil 10x1, R/A, TH	receptacle 10x1, 50mil
18	L1, L2, L3, L4	4	100uH	74408943101	Wurth Elektronik	Inductor, Shielded Drum Core, Ferrite, 100 µH, 0.52 A, 0.77 ohm, SMD	4.8x3.8x4.8mm
19	L5	1	10uH	74404064100	Wurth Elektronik	Inductor, Wirewound, Ferrite, 10 µH, 2.45 A, 0.048 ohm, SMD	SMD, Body 6x6mm
20	R1, R2, R3, R4, R5, R6, R7, R8, R30, R31, R32, R33, R34, R35, R36, R37	16	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.1W, 0603	0603
21	R9		487k	CRCW0603487KFKEA	Vishay-Dale	RES, 487 k, 1%, 0.1 W, 0603	0603
22	R10, R14	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10k ohm, 5%, 0.1W, 0603	0603
23	R11, R15	2	301k	CRCW0603301KFKEA	Vishay-Dale	RES, 301 k, 1%, 0.1 W, 0603	0603
24	R12, R16	2	0.4.01	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
25 26	R13 R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28	1 12	34.0k 15	CRCW060334K0FKEA CRCW060315R0JNEA	Vishay-Dale Vishay-Dale	RES, 34.0 k, 1%, 0.1 W, 0603 RES, 15 ohm, 5%, 0.1W, 0603	0603 0603
27	U1	1		DAC8775RMP	Texas Instruments	Quad-Channel, 16-Bit Programmable Current Output and Voltage Output Digital-to-Analog Converter with Adaptive Power Management, RMP0072A	
28	U2	1		LM5166QDRCQ1	Texas Instruments	3.5-V to 65-V Input, 500-mA Output, Ultra-Low Quiescent Synchronous Step-Down DC/DC Voltage Regulator, DRC0010J	DRC0010J
29	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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