

**TIDM-1003 REV E1 Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDM-1003	Any	Printed Circuit Board	
C1, C16, C25, C26, C27, C35, C36, C37, C39, C?, C?	11	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C2, C3, C4, C5, C6, C7, C8, C9	8	3300pF	C0603C332K5RACTU	Kemet	CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0603	0603
C10, C11, C12, C13, C14, C44, C46	7	2.2uF	C0603C225K8PACTU	Kemet	CAP, CERM, 2.2uF, 10V, +/-10%, X5R, 0603	0603
C18, C19, C20	3	680pF	C0603C681J5GACTU	Kemet	CAP, CERM, 680pF, 50V, +/-5%, C0G/NP0, 0603	0603
C21	1	470uF	UVZ1J102MHD	Nichicon	CAP, AL, 1000uF, 63V, +/-20%, TH	12.5x30mm
C22, C23, C24	3	2.2uF	HMK325B7225KN-T	Taiyo Yuden	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210
C28, C29, C30	3	2.2uF	GRM21BR71E225KA73L	MuRata	CAP, CERM, 2.2uF, 25V, +/-10%, X7R, 0805	0805
C31, C32, C33, C34	4	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	0603
C38	1	3.3uF	C3216X7S2A335M160AB	TDK	CAP, CERM, 3.3uF, 100V, +/-20%, X7S, 1206_190	1206_190
C40	1	1800pF	GRM188R71E182KA01D	MuRata	CAP, CERM, 1800pF, 25V, +/-10%, X7R, 0603	0603
C41	1	47uF	T495D476K020ATE100	Kemet	CAP, TA, 47uF, 20V, +/-10%, 0.1 ohm, SMD	7343-31
C42	1	56pF	GRM1885C1H560JA01D	MuRata	CAP, CERM, 56pF, 50V, +/-5%, C0G/NP0, 0603	0603
C43	1	47uF	C3216X5R1C476M160AB	TDK	CAP, CERM, 47uF, 16V, +/-15%, X5R, 1206	1206
C45	1	0.010uF	0603YC103KAT2A	AVX	CAP, CERM, 0.010uF, 16V, +/-10%, X7R, 0603	0603
D1	1	6.8V	BZT52C6V8T-7	Diodes Inc.	Diode, Zener, 6.8V, 300mW, SOD-523	SOD-523
D3	1	70V	B370-13-F	Diodes Inc.	Diode, Schottky, 70V, 3A, SMC	SMC
FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
J1	1		TSW-105-07-G-S	Samtec	Header, 100mil, 5x1, Gold, TH	5x1 Header
J2, J3, J5, J6, J7	5		N/A	N/A	1, Solder, connector	
J4	1		5-146278-3	TE Connectivity	Header, 100mil, 3x1, Tin, TH	Header, 3x1, 100mil, TH
J9	1		BC03207C202000380LB	FCI	CONN HEADER 7POS 1MM VERT SMD	BC03207C202000380 LB
JP?	2			Generic Components	Header, 4-Pin	
L1, L2	2	120 ohm	BLM18SG121TN1D	MuRata	Ferrite Bead, 120 ohm @ 100MHz, 3A, 0603	0603
L3	1	33uH	SDR1105-330KL	Bourns	Inductor, Drum Core, Ferrite, 33uH, 2.6A, 0.1 ohm, SMD	SDR1105-330KL
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
LED4	1				Diode	
Q1, Q2, Q3, Q4, Q5, Q6	6	80V	CSD19506KCS	Texas Instruments	MOSFET, N-CH, 60V, 195A, TO-220AB	TO-220AB
R1, R?, R?	3	2.7k	RC0603JR-072K7L	Yageo America	RES, 2.7k ohm, 5%, 0.1W, 0603	0603
R2, R4	2	2.2k	RC0603JR-072K2L	Yageo America	RES, 2.2k ohm, 5%, 0.1W, 0603	0603
R3	1	3.9k	RC0603JR-073K9L	Yageo America	RES, 3.9k ohm, 5%, 0.1W, 0603	0603
R5, R6, R7, R8, R9, R10, R11, R12, R47	9	56.0	RC0603FR-0756RL	Yageo America	RES, 56.0 ohm, 1%, 0.1W, 0603	0603
R13, R14, R15, R57, R58, R59	6	1.5k	RC0603JR-071K5L	Yageo America	RES, 1.5k ohm, 5%, 0.1W, 0603	0603
R16, R17, R18, R23, R24, R25	6	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.1W, 0603	0603

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R19, R20, R21, R22	4	86.6k	RG1608P-8662-B-T5	Susumu Co Ltd	RES, 86.6k ohm, 0.1%, 0.1W, 0603	0603
R26, R27, R28, R29	4	4.99k	RG1608P-4991-B-T5	Susumu Co Ltd	RES, 4.99k ohm, 0.1%, 0.1W, 0603	0603
R30, R31, R32	3	0.002	CRE2512-FZ-R001E-2	CTS Resistor	RES 0.001 OHM 2W 1% 2512 SMD	2512
R33, R34, R35, R42, R43, R44	6	33.0k	RC0603FR-0733KL	Yageo America	RES, 33.0k ohm, 1%, 0.1W, 0603	0603
R36, R37, R38, R39, R40, R41	6	1.00k	RC0603FR-071KL	Yageo America	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
R45, R46	2	330	RC0603FR-07330RL	Yageo America	RES, 330 ohm, 1%, 0.1W, 0603	0603
R48	1	32.4k	CRCW060332K4FKEA	Vishay-Dale	RES, 32.4k ohm, 1%, 0.1W, 0603	0603
R49	1	178k	CRCW0603178KFKEA	Vishay-Dale	RES, 178k ohm, 1%, 0.1W, 0603	0603
R50	1	118k	CRCW0603118KFKEA	Vishay-Dale	RES, 118k ohm, 1%, 0.1W, 0603	0603
R51	1	8.45k	CRCW06038K45FKEA	Vishay-Dale	RES, 8.45k ohm, 1%, 0.1W, 0603	0603
U1	1	Value	TMS320F28027FPTQ	Texas Instruments	48 pin, PQFP, 2802x, tms320	48PQFP
U2	1		SN74LVC3G07QDCURQ1	Texas Instruments	Automotive Catalog Triple Buffer/Driver With Open-Drain Output, DCU0008A (VSSOP-8)	DCU0008A
U3, U4, U5	3		UCC27211D	Texas Instruments	120-V Boot, 3-A Peak, High Frequency, High-Side/Low-Side Driver, D0008A	D0008A
U6	1		OPA4374AIPWT	Texas Instruments	Quad 6.5 MHz, 585 uA, Rail-to-Rail I/O CMOS Operational Amplifier, 2.3 to 5.5 V, -40 to 125 degC, 14-pin SOP (PW14), Green (RoHS & no Sb/Br)	PW14
U7	1		TPS54360DDAR	Texas Instruments	60 V Input, 3.5 A, Step-Down DC-DC Converter with Eco-mode	DDA8SOIC
U8	1		LM2940IMP-5.0/NOPB	Texas Instruments	1A Low Dropout Regulator, 4-pin SOT-223, Pb-Free	MP04A
U9	1		TPS73533DRVR	Texas Instruments	Single Output High PSRR LDO, 500 mA, Fixed 3.3 V Output, 2.7 to 6.5 V Input, with Low IQ, 6-pin SON (DRV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRV0006A

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