## TEXAS INSTRUMENTS

## TIDM-TM4C129USBHS REV A0 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		TIDM-TM4C129USBHS	Any	Printed Circuit Board	
C1, C3, C4, C5,	15	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 μF, 16 V, +/- 10%, X7R, 0402	0402
C6, C7, C8, C9,						
C10, C11, C12,						
C13, C14, C19,						
C26						
C2, C18	2	1uF	C1005X5R1C105K050BC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0402	0402
C15, C16	2	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
C17	1	2.2uF	GRM155R61C225KE11D	MuRata	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0402	0402
C20, C21	2	22pF	C1005C0G1H220J050BA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C22, C28, C29	3	0.1uF	C0603C104J3RAC	Kemet	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
C23, C24	2	0.1uF	EMK107B7104KA-T	Taiyo Yuden	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
C25	1	2.2uF	GRM188R61C225KE15D	MuRata	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0603	0603
C27	1	3300pF	C0603X332K5RACTU	Kemet	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	0603
C30, C31, C33,	4	0.1uF	C1005X5R0J104K	TDK	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X7R, 0003	0402
C34	4	o. rui	C1003/(31(03104)(	TDR	ολί , σειτίνι, σ. τ μι , σ.σ ν , τ/- το /σ, λοιτ, στος	0402
C32	1	0.1uF	08053C104KAT2A	AVX	CAP, CERM, 0.1 μF, 25 V, +/- 10%, X7R, 0805	0805
C35, C36, C37,	4	0.1uF	GCM155R71C104KA55D	MuRata	CAP, CERM, 0.1 μF, 16 V, +/- 10%, X7R, 0402	0402
C38						
C39, C52	2	4700pF	1812GC472KA1	AVX	CAP, CERM, 4700 pF, 2000 V, +/- 10%, X7R, 1812	1812
C40, C41, C42,	7	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C43, C45, C47,				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
C51						
C44, C46	2	4.7uF	C2012X7R1A475M	TDK	CAP, CERM, 4.7 μF, 10 V, +/- 20%, X7R, 0805	0805
C48, C49	2	15pF	06035A150JAT2A	AVX	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C50	1	1uF	GRM188R71A105KA61D	MuRata	CAP, CERM, 1 µF, 10 V, +/- 10%, X7R, 0603	0603
D1, D2, D3	3	Green	QTLP630C4TR	Everlight	LED, Green, SMD	2x1.25mm
D4	1	0.00	SLVU2.8-4.TBT	Semtech	Diode, TVS, Uni, 2.8 V, 400 W, SO-8	SO-8
FB1, FB2	2	120 ohm	BLM18AG121SN1D	MuRata	Ferrite Bead, 120 ohm @ 100 MHz, 0.5 A, 0603	0603
FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
.11	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J2, J4	2		FTSH-110-01-L-DV-K	Samtec	Header (Shrouded), 1.27mm, 10x2, Tin, SMT	Header (Shrouded),
02, 01	_		1 1011 110 01 2 2 7 10	Cames	Troduct (Criticulary), T.E. Tilli, Toxe, Till, Citt	1.27mm, 10x2, SMT
J3	1		FTSH-105-01-F-DV	Samtec	Header, 1.27mm, 5x2, Gold, Black, SMT	Header, 1.27mm, 5x2,
00	•			Camer	1.0000., 1.2.1, 0.12, 0.00., 0.00.	SMT
J5	1		1734354-1	TE Connectivity	Receptacle, D-Sub, 9 Position, R/A, TH	Receptacle, D-Sub, 9
	•		17010011	1 2 Gormoonvily	Trooptadio, B dab, or dollari, revi, rri	Position, R/A, TH
J6	1	1	A-2014-3-4-N-T-R	Assman WSW	Modular Connector, Jack, 4P4C, Gold, TH	CONN MOD JACK
	'		7 2014 0 4 14 1 10	Accinal WOW	Modulal Collinotor, Cack, 41 40, Cola, 111	4P4C VERT
						UNSHLD, TH
J7	1		TSM-110-01-L-DV-P	Samtec	Header, 2.54mm, 10x2, Gold, SMT	1000x180x290mil
J8	1		182-009-213R171	NorComp	CONN DB9 FEMALE R/A SOLDER TH	D-SUB 9 PIN
J9	1		J0011D21BNL	Pulse Engineering	Connector, RJ-45 with integrated magnetics, 1x1, Gold, R/A, TH	Connector, RJ-45
J10	1		1981568-1	TE Connectivity	Connector, Receptacle, Micro-USB Type B, R/A, Bottom Mount SMT	MICRO USB CONN,
	'		1301300-1	TE COMMECTIVITY	Toolinestor, reseptacie, inicio-ood Type D, IVA, Dottom Mount Sivi	R/A
J11	1		TSW-103-07-G-D	Samtec	Header, 100mil, 3x2, Gold, TH	3x2 Header
R1	1	51	CRCW060351R0JNEA	Vishay-Dale	RES, 51, 5%, 0.1 W, 0603	0603
R2	1	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
R3	1	4.87k	CRCW04024K87FKED	Vishay-Dale	RES, 4.87 k, 1%, 0.063 W, 0402	0402
NO	1	4.0/K	UNU VV U4UZ4NO / FNED	Visnay-Dale		0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R4, R23, R25	3	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
R5, R24, R26	3	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
R6	1	100k	ERJ-2RKF1003X	Panasonic	RES, 100 k, 1%, 0.1 W, 0402	0402
R7, R21, R22,	5	330	RC0603JR-07330RL	Yageo America	RES, 330, 5%, 0.1 W, 0603	0603
R32, R33				ŭ		
R8, R9	2	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
R10	1	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
R11, R12, R13,	4	33	CRCW060333R0JNEA	Vishay-Dale	RES, 33, 5%, 0.1 W, 0603	0603
R14					,, , ,	
R15, R16, R17,	5	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R18, R27						
R19	1	120	RC0603FR-07120RL	Yageo America	RES, 120, 1%, 0.1 W, 0603	0603
R20, R36	2	1.0Meg	CRCW06031M00JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.1 W, 0603	0603
R28, R29, R30,	4	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402
R31					,,,	
R34, R44	2	1.0Meg	CRCW12061M00JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.25 W, 1206	1206
R35, R39	2	10.0k	RCG060310K0FKEA	Vishay Draloric	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R37		820	RC0603FR-07820RL	Yageo America	RES, 820, 1%, 0.1 W, 0603	0603
R38	1	12.0k	RC0603FR-0712KL	Yageo America	RES, 12.0 k, 1%, 0.1 W, 0603	0603
R40, R41, R42,	4	10k	RC0603JR-0710KL	Yageo America	RES, 10 k, 5%, 0.1 W, 0603	0603
R43						
S1, S2, S3	3		SKRKAEE010	Alps	Switch, Push Button, SMD	2.9x2x3.9mm SMD
S4	1		1825115-1	TE Connectivity	Switch, SPDT, On-On, 2 Pos, TH	433x220mil
TP1, TP2, TP3,	4		TMS-101-02-T-S	Samtec	Header, 1x1, Tin, TH	Header, 1x1, 50mil,
TP4						TH
U1	1		TM4C129ENCPDTI3R	Texas Instruments	Tiva C Series Microcontroller, PDT0128A	PDT0128A
U2	1		TPS73733DCQR	Texas Instruments	Single Output LDO, 1 A, Fixed 3.3 V Output, 2.2 to 5.5 V Input, with	DCQ0006A
					Reverse Current Protection, 6-pin SOT-223 (DCQ), -40 to 125 degC,	
					Green (RoHS & no Sb/Br)	
U3	1		SN65HVD1050D	Texas Instruments	High-Speed EMC Optimized CAN Transceiver, 70 mA, 5 V, -40 to 125	D0008A
	-				degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	
U4	1		MAX3232CPW	Texas Instruments	3-V to 5.5-V Multichannel RS-232 Line Driver / Receiver with ±15-kV ESD	PW0016A
					Protection, 0 to 70 degC, 16-Pin TSSOP (PW), Green (RoHS & no Sb/Br)	
					, , , , , , , , , , , , , , , , , , , ,	
U5	1		TPD2E2U06DRLR	Texas Instruments	DUAL CHANNEL HIGH SPEED ESD PROTECTION DEVICE, DRL0005A	DRL0005A
				- ondo mondinomo		
U6	1		USB3300-EZK	Microchip	Hi-Speed USB Host, Device or OTG PHY with ULPI Low Pin Interface,	5x5 QFN-32
					QFN-32	2
U7	1		TS3USB221ERSER	Texas Instruments	High-Speed USB 2.0 (480 Mbps) 1:2 Multiplexer / Demultiplexer Switch	RSE0010A
			1		with Single Enable, 6 ohm RON, 2.5 to 3.3V, -40 to 85 degC, 10-Pin UQFN	
					(RSE), Green (RoHS & no Sb/Br)	
U8	1		TXB0106PWR	Texas Instruments	6-BIT BIDIRECTIONAL VOLTAGE-LEVEL TRANSLATOR WITH AUTO-	PW0016A
					DIRECTION SENSING AND ±15-kV ESD PROTECTION, PW0016A	
Y1	1		NX5032GA-25.000M-STD-CSK-	NDK	Crystal, 25MHz, SMD	5x3.2mm
			4		2., 2, 2 2, 2	
Y2	1		NX5032GA-24.000M-STD-CSK-	NDK	Crystal, 24MHz, SMD	5x3.2mm
- <u>-</u>			1 1 1 1 2 2 2 2 1 1 2 2 2 1 2 2 2 2 2 2		0.7000, 22, 0.110	0

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