TEXAS INSTRUMENTS

Bill of Materials

TI DESIGNS

TIDM-TM4C129SDRAMNVM

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	9	C1, C2, C3, C4, C5, C6, C7, C8, C9	0.1uF	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603		C0603YC104JAT2A		0603	
2	1	C10	10 uF	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603		C0603C106M9PACTU		0603	
3	1	J1		Header, 100mil, 3x1, Gold, TH		TSW-103-07-G-S			
4	1	J2		Conncetor, micro SD Card, 1.1 mm, R/A, SMT	Samtec	502774-0891			
5	2	P1		Connector 49 Pins Dual Row Thru Hole	Samtec	SAM1212-49-ND			
6	4	R1, R2	0 Ohms	RES, 0, 5%, 0.063 W, 0402		ERJ-2GE0R00X		0402	
7	1	R3, R4, R5, R6	19 Kohms	RES, 10.0 k, 1%, 0.063 W, 0402		CRCW040210K0FKED		0402	
8	1	U1	512 Mbit	ISSI 512Mb SDRAM	ISSI	IS42S163202D			
9	1	U2	512 Mbit	Macronix Quad SPI Serial Flash	Macronix	MX66L51235F		TSOP16	

Bill of Materials
TI DESIGNS

EK-TM4C1294XL

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	C1	1000pF	Capacitor, 1000pF, 2kV, 20%, X7R, 1210	Kemet	C1210C102MGRACTU		1210	
2	26	C3, C4, C5, C10, C11, C12, C13, C16, C17, C18, C19, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C40, C41, C42, C43, C46	0.1uF	Capacitor, 0.1uF 16V, 10%,0402 X7R	Taiyo Yuden	EMK105B7104KV-F		0402	
3	1	C31	4700pF	Capacitor, 4700pF, 2kV, 10%,X7R, 1812	AVX	1812GC472KAT1A		1812	
4	2	C32, C33	3300pF	Capacitor, 3300pF, 50V, 10%, X7R, 0603	TDK	C1608X7R1H332K		0603	
5	2	C6, C14	1uF	Capacitor, 1uF , X5R, 10V, Low ESR, 0402	Johanson Dielectrics Inc	100R07X105KV4T		0402	
6	3	C7, C15, C20	2.2uF	Capacitor, 2.2uF, 16V, 10%, 0603, X5R	Murata	GRM188R61C225KE15D		0603	
7	6	C8, C9, C44, C45, C47, C48	12pF	Capacitor, 12pF, 50V, 5%, 0402, COG	Murata	GRM1555C1H120JZ01D		0402	
8	5	D0, D1, D2, D3, D4		Green LED 0603	Everlight	19-217/G7C-AL1M2B/3T		0603	
9	7	J1, J2, J3, J4, J5, J6, J7		Jumper, 0.100, Gold, Black, Open	3M	969102-0000-DA			
10	1	JP1		Header, 2x3, 0.100, T-Hole, Vertical Unshrouded, 0.230 Mate, gold	FCI	67996-206HLF			
11	2	JP2, JP3		Header, 1x2, 0.100, T-Hole, Vertical Unshrouded, 0.220 Mate	FCI	68001-102HLF			
12	2	JP4, JP5		Header, 2x2, 0.100, T-Hole, Vertical Unshrouded, 0.230 Mate	FCI	67997-104HLF			
13	8	R1, R2, R3, R4, R5, R29, R35, R44	10 KOhm	Resistor, 10k ohm, 1/10W, 5%, 0402 Thick Film	Yageo	RC0402FR-0710KL		0402	
14	3	R17, R26, R36	100 KOhm	100k 5% 0402 resistor smd	Rohm	MCR01MRTJ104		0402	
15	2	R18, R51	100 Ohm	Resistor 0402 100 ohm 5%	Rohm	MCR1MRTJ101		0402	
16	4	R23, R21, R22, R24	49.9 Ohm	Resistor 49.9 ohm 0402. 1 %	Rohm	MCR01MRTF49R9		0402	
17	1	R25	4.87 Kohm	Resistor 4.87k 1% 0402 smd	Rohm	MCR01MRTF4871		0402	
18	1	R28	5.6 Kohm	Resistor, 5.6k ohm, 1/10W, 5%, 0402	Panasonic	ERJ-2GEJ562X		0402	
19	4	R32, R43, R45, R46	75 Ohm	resistor 75 ohm 0402 5%	Rohm	MCR01MRTJ750		0402	
20	2	R34, R52	1 MOhm	Resistor, 1M OH, 1/10W, 5% 0603 SMD	Panasonic	ERJ-3GEYJ105V		0603	
21	1	R38	51 Ohm	Resistor, 51 ohm, 1/10W, 5%, 0402	Panasonic	ERJ-2GEJ510X		0402	
22	1	R42	1 MOhm	Resistor, 1M ohm, 1/10W, 5%, 0402	Rohm	MCR01MRTF1004		0402	
23	1	R47	1 MOhm	RES 1M OHM 5% 1206 TF	Panasonic	ERJ-8GEYJ105V		1206	
24	2	R49, R50	2 Kohm	Resistor, 2.0k ohm, 1/10W, 5%, 0402	Panasonic	ERJ-3GEYJ202V		0402	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
25	12	R6, R7, R8, R10, R11, R15, R16, R19, R20, R39, R40, R41	0 Ohm	Resistor, 0 ohm, 1/10W, 5%, 0402	Panasonic	ERJ-2GE0R00X		0402	
26	5	R9, R27, R30, R31, R33	330 Ohm	Resistor, 330 ohm, 1/10W, 5%, 0402	Yageo	RC0402FR-07330RL		0402	
27	4	RESET, USR_SW1, USR_SW2, WAKE		Switch, Tact 6mm SMT, 160gf	Omron	B3S-1000			
28	1	U1		Tiva, MCU TM4C1294NCPDT 128 QFP with Ethernet MAC + PHY	Texas Instruments	TM4C1294NCPDT		TQFP-128	
29	1	U10		Transformer, ethernet, 1 to 1. SOIC 16	Pulse Electronics	HX1198FNL		SOIC-16	
30	1	U13		Diode, 8 chan, +/-15KV, ESD Protection Array, SO-8	Semtech	SLVU2.8-4.TBT		SO-8	
31	1	U14		Connector, RJ45 NO MAG, shielded THRU HOLE	TE Connectivity	1-406541-5			
32	2	U2, U3		IC 4CH ESD SOLUTION, W/CLAMP 6SON	Texas Instruments	TPD4S012DRYR			
33	1	U20		TIVA MCU TM4C123GH6PMI	Texas Instruments	TM4C123GH6PMI		QFP-64	
34	1	U22		USB Micro B receptacle right angle with guides	FCI	10118194-0001LF			
35	1	U4		Fault protected power switch, dual channel, 8-SON	Texas Instruments	TPS2052BDRBR			
36	1	U5		3.3V LDO TI TPS73733DRV fixed out 5V in	Texas Instruments	TPS73733DRV			
37	1	U6		Header 2x5, 0.050, SM, Vertical Shrouded	Samtec	SHF-105-01-S-D-SM			
38	1	U7		USB Micro AB receptacle. Right angle with through guides	Hirose	ZX62D-AB-5P8			
39	4	X6, X7, X8, X9		Header, 2x10, T-Hole Vertical unshrouded stacking	Samtec	SSW-110-23-S-D			
40	1	Y1	25 MHz	Crystal 25 MHz 3.2 x 2.5 mm	NDK	NX3225GA-25.000M-STD-CRG-2			
41	1	Y2	16 MHz	Crystal 16 MHz 3.2 x 2.5 mm 4 pin	NDK	NX3225GA-16.000M-STD-CRG-2			
42	1	Y3	32768 Hz	Crystal, 32.768 KHz Radial Can	Citizen Finetech Miyota	CMR200T-32.768KDZY-UT			
PCB Do Not Populate List (Shown for Information only)									
43	1	C2	0.1uF	Capacitor, 0.1uF 16V, 10%, 0402 X7R	Taiyo Yuden	EMK105B7104KV-F		0402	
44	3	H1, H4, H6		Screw, #4 x 0.625" Pan Head, Sheet Metal, Phillips/Slotted (for fan)	McMaster	90077A112			
45	3	R12, R12, R14	5.6 KOhm	Resistor, 5.6k ohm, 1/10W, 5%, 0402	Panasonic	ERJ-2GEJ562X		0402	
46	1	R48	52.3 KOhm	Resistor 0402 1% 52.3k	Rohm	TRR01MZPF5232		0402	
47	17	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17		Terminal, Test Point Miniature Loop, Red, T-Hole	Keystone	5000			
48	1	X1		Header, 2x7, 0.100, T-Hole, Vertical, Unshrouded, 0.230 Mate	FCI	67997-114HLF			
49	1	X11A		Valvano style bread board connect. Right Angle extended, 1 x 49 0.100 pitch.	Samtec	TSW-149-09-F-S-RE			
50	1	X11B		valvano style breadboard header.	Samtec	TSW-149-08-F-S-RA			

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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