Texas Instruments

Bill of Materials

TI DESIGNS

TIDM-KEYBOARD F5529

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	2	C1, C2	10pF	CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C100J5GACTU		0603	
2	1	C3	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU		0603	
3	1	C4	4.7µF	CAP, TA, 4.7uF, 10V, +/-10%, 5 ohm, SMD	Vishay-Sprague	293D475X9010A2TE3		3216-18	
4	1	C5	4.7uF	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C475K8PACTU		0603	
5	1	C6	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H103KA01D		0603	
6	1	C7	1uF	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	Kemet	C0603C105K4PACTU		0603	
7	2	C8, C9	0.22uF	CAP, CERM, 0.22uF, 16V, +/-10%, X7R, 0603	TDK	C1608X7R1C224K080AC		0603	
8	2	C10, C11	33pF	CAP, CERM, 33pF, 50V, +/-5%, C0G/NP0, 0603	TDK	C1608C0G1H330J080AA		0603	
9	3	C12, C14, C15	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0603	Kemet	C0603C104K4RACTU		0603	
10	2	C13, C16	10uF	CAP, TA, 10uF, 10V, +/-20%, 3.4 ohm, SMD	Vishay-Sprague	293D106X0010A2TE3		3216-18	
11	1	C17	0.47uF	CAP, CERM, 0.47uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C474K8PACTU		0603	
12	0	C18, C34	2200pF	CAP, CERM, 2200pF, 100V, +/-5%, X7R, 0603	AVX	06031C222JAT2A		0603	DNP_F5529
13	2	C19, C20	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	AVX	0603YC104JAT2A		0603	
14	0	C30, C32	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0603	Kemet	C0603C104K4RACTU		0603	DNP_F5529
15	0	C31, C33	10uF	CAP, TA, 10uF, 10V, +/-20%, 3.4 ohm, SMD	Vishay-Sprague	293D106X0010A2TE3		3216-18	DNP_F5529
16	3	D1, D2, D3	Green	LED, Green, SMD	Lite-On	LTST-C171GKT		LED_LTST-C171	
17	1	D4	SD103AW-13-F	DIODE, SCHOTTKY, 0.35A, 40V, SOD-123	DIODES INC	SD103AW-13-F		D_SOD123	
18	1	D5	LL103A-GS08	Diode, Schottky, 40V, 0.2A, 3.7x1.6x1.6mm	Vishay-Semiconductor	LL103A-GS08		SOD-80	
19	1	J1	Connector	Header (shrouded), 100 mil, 7x2, Gold, TH	Sullins Connector Solutions	SBH11-PBPC-D07-ST-BK		CONN_SBH11-PBPC-D07-ST-BK	
20	2	J2, JP1	Connector	Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S		TSW-103-07-G-S	
21	1	J3	Keyboard connector	CONN FPC 24POS 1MM RT ANG SMD	TE Connectivity	2-84952-4		CON24_SMT-RA_FCC	
22	2	J4, J5	Connector	Connector, Receptacle, 100mil, 10x2, Gold	Samtec	SSW-110-23-F-D		CONN_SSW-110-23-F-D	
23	1	J6	USB Connector	CONNECTOR, MICRO-USB-AB, RECEPTACLE,	HIROSE	ZX62D-AB-5P8		USB-ZX62D-AB-5P8_REVISED	
24	5	JP2, JP3, JP4, JP5, JP6	Jumper	Header, 100mil, 2x1, Gold, TH	Samtec	TSW-102-07-G-S		TSW-102-07-G-S	
25	1	R1	1.40k	RES, 1.40k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K40FKEA		0603	
26	1	R2	1M	RES, 1.0Meg ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031M00JNEA		0603	
27	2	R3, R4	27	RES, 27 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060327R0JNEA		0603	
28	1	R5	33k	RES, 33k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060333K0JNEA		0603	
29	1	R6	330	RES, 330 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603330RJNEA		0603	
30	3	R7, R8, R9	560	RES, 560 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603560RJNEA		0603	
31	9	R10, R11, R12, R13, R14, R15, R16	47k	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA		0603	
32	2	R18, R19	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA		0603	
33	2	R21, R22	2.2k	RES, 2.2k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06032K20JNEA		0603	
34	0	R30	47K	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA		0603	DNP_F5529
35	0	R31, R32	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA		0603	DNP_F5529
36	1	U1	MSP430F5529	Mixed Signal MicroController, PN0080A	Texas Instruments	MSP430F5529IPN		PN0080A_L	
37	1	U2	TPD2E001DZDR	IC, LOW-CAPACITANCE 2-Chan ±15-kV ESD-	TEXAS INSTRUMENTS	TPD2E001DZDR		DZD	
38	0	U3	MSP430G2744	MSP430G2744, VQFN40	Texas Instruments	MSP430G2744IRHA40R		QFN50P600X600X100-40N	DNP_F5529
39	1	U4	TPS73533	Single Output High PSRR LDO, 500 mA, Fixed	Texas Instruments	TPS73533DRBT		DRB8_1P75X1P5	
40	1	Y1	XTAL4M	Crystal, 4MHz, 30pF, SMD	Auris-GmbH	Q- 4,000000M-HC49USSMD-F-30-30-D-16-TR	HCM49-4.000MABJT	Auris_HC49USSMD	

TEXAS INSTRUMENTS

Bill of Materials

TI DESIGNS

TIDM-KEYBOARD G2744

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	2	C1, C2	10pF	CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C100J5GACTU		0603	
2	1	C3	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU		0603	
3	1	C4	4.7µF	CAP, TA, 4.7uF, 10V, +/-10%, 5 ohm, SMD	Vishay-Sprague	293D475X9010A2TE3		3216-18	
4	1	C5	4.7uF	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C475K8PACTU		0603	
5	1	C6	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H103KA01D		0603	
6	1	C7	1uF	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	Kemet	C0603C105K4PACTU		0603	
7	0	C8, C9	0.22uF	CAP, CERM, 0.22uF, 16V, +/-10%, X7R, 0603	TDK	C1608X7R1C224K080AC		0603	DNP_G2744
8	0	C10, C11	33pF	CAP, CERM, 33pF, 50V, +/-5%, C0G/NP0, 0603	TDK	C1608C0G1H330J080AA		0603	DNP_G2744
9	0	C12, C14, C15	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0603	Kemet	C0603C104K4RACTU		0603	DNP_G2744
10	0	C13, C16	10uF	CAP, TA, 10uF, 10V, +/-20%, 3.4 ohm, SMD	Vishay-Sprague	293D106X0010A2TE3		3216-18	DNP_G2744
11	0	C17	0.47uF	CAP, CERM, 0.47uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C474K8PACTU		0603	DNP_G2744
12	0	C18, C34	2200pF	CAP, CERM, 2200pF, 100V, +/-5%, X7R, 0603	AVX	06031C222JAT2A		0603	DNP_G2744
13	2	C19, C20	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	AVX	0603YC104JAT2A		0603	
14	2	C30, C32	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0603	Kemet	C0603C104K4RACTU		0603	
15	2	C31, C33	10uF	CAP, TA, 10uF, 10V, +/-20%, 3.4 ohm, SMD	Vishay-Sprague	293D106X0010A2TE3		3216-18	
16	3	D1, D2, D3	Green	LED, Green, SMD	Lite-On	LTST-C171GKT		LED_LTST-C171	
17	1	D4	SD103AW-13-F	DIODE, SCHOTTKY, 0.35A, 40V, SOD-123	DIODES INC	SD103AW-13-F		D_SOD123	
18	0	D5	LL103A-GS08	Diode, Schottky, 40V, 0.2A, 3.7x1.6x1.6mm	Vishay-Semiconductor	LL103A-GS08		SOD-80	DNP_G2744
19	1	J1	Connector	Header (shrouded), 100 mil, 7x2, Gold, TH	Sullins Connector Solutions	SBH11-PBPC-D07-ST-BK		CONN_SBH11-PBPC-D07-ST-BK	
20	2	J2, JP1	Connector	Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S		TSW-103-07-G-S	
21	1	J3	Keyboard connector	CONN FPC 24POS 1MM RT ANG SMD	TE Connectivity	2-84952-4		CON24_SMT-RA_FCC	
22	2	J4, J5	Connector	Connector, Receptacle, 100mil, 10x2, Gold	Samtec	SSW-110-23-F-D		CONN_SSW-110-23-F-D	
23	1	J6	USB Connector	CONNECTOR, MICRO-USB-AB, RECEPTACLE,	HIROSE	ZX62D-AB-5P8		USB-ZX62D-AB-5P8_REVISED	
24	4	JP2, JP3, JP4, JP5	Jumper	Header, 100mil, 2x1, Gold, TH	Samtec	TSW-102-07-G-S		TSW-102-07-G-S	
25	0	JP6	Jumper	Header, 100mil, 2x1, Gold, TH	Samtec	TSW-102-07-G-S		TSW-102-07-G-S	DNP_G2744
26	1	R1	1.40k	RES, 1.40k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K40FKEA		0603	
27	1	R2	1M	RES, 1.0Meg ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031M00JNEA		0603	
28	2	R3, R4	27	RES, 27 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060327R0JNEA		0603	
29	1	R5	33k	RES, 33k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060333K0JNEA		0603	
30	1	R6	330	RES, 330 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603330RJNEA		0603	
31	3	R7, R8, R9	560	RES, 560 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603560RJNEA		0603	
32	9	R10, R11, R12, R13, R14, R15, R16	47k	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA		0603	
33	0	R20	47k	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA		0603	DNP_G2744
34	0	R18, R19	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA		0603	DNP_G2744
35	2	R21, R22	2.2k	RES, 2.2k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06032K20JNEA		0603	
36	1	R30	47K	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA		0603	
37	2	R31, R32	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA		0603	
38	0	U1	MSP430F5529	Mixed Signal MicroController, PN0080A	Texas Instruments	MSP430F5529IPN		PN0080A_L	DNP_G2744
39	1	U2	TPD2E001DZDR	IC, LOW-CAPACITANCE 2-Chan ±15-kV ESD-	TEXAS INSTRUMENTS	TPD2E001DZDR		DZD	
40	1	U3	MSP430G2744	MSP430G2744, VQFN40	Texas Instruments	MSP430G2744IRHA40R		QFN50P600X600X100-40N	
41	1	U4	TPS73533	Single Output High PSRR LDO, 500 mA, Fixed	Texas Instruments	TPS73533DRBT		DRB8_1P75X1P5	
42	0	Y1	XTAL4M	Crystal, 4MHz, 30pF, SMD	Auris-GmbH	Q- 4,000000M-HC49USSMD-F-30-30-D-16-TR	HCM49-4.000MABJT	Auris_HC49USSMD	DNP_G2744

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