Texas Instruments

Bill of Materials

TI DESIGNS

TIDA-00131: High-Def (HD) Digital Video Over Twisted Pair for Automotive TFT LCD Displays
DS90UB927QEVM BOM

Item	Quantity	Reference	Comments	MFR	Part Number	Critical?	
1	2	CR1,CR2	SUPPRESSOR ESD 24VDC 0603 SMD	Littelfuse Inc	PGB1010603MR		
2	16	C1,C5,C8,C9,C10,C12,C13,C14,C16,C17,C22,C26,C28,C33,C35,C37	CAP CER .1UF 50V 10% X7R 0603	Murata Electronics North America	GRM188R71H104KA93D		
3	2	C2,C3	CAP CER .1UF 16V X7R 0402	Murata	GCM155R71C104KA55D	0.1uF, X7R, recommend 50V	
4	2	C6,C7	CAP CERAMIC 4.7PF 25V C0G 0402	Panasonic	ECD-G0E4R7C		
5	5	C11,C27,C29,C36,C38	CAP CER 10UF 10V X5R 0603	Taiyo Yuden	LMK107BJ106MALTD		
6	1	C15	CAPACITOR TANT 1.0UF 16V 10% SMD	Kemet	T491A105K016AT		
7	2	C18,C19	CAP CERAMIC 15PF 50V NP0 0603	Kemet	C0603C150J5GACTU		
8	1	C21	CAP CER 22UF 6.3V 10% X7R 1206	Murata	GCM31CR70J226KE23L		
9	2	C23,C32	CAPACITOR TANT 2.2UF 20V 10% SMD	KEMET	T491B225K020AT		
10	2	C24,C31	CAP TANTALUM 22UF 25V 20% SMD	nichicon	F931E226MNC		
11	11	C25,C40,C41,C42,C43,C44,C45,C46,C48,C51,C52	CAP CER 4.7UF 16V X7R 0805	Murata	490-5332-1-ND		
12	1	C30	CAP CERM 33000PF 5% 50V X7R 0603	AVX Corporation	06035C333JAT2A		
13	2	LED1,D1	LED ORN/CLEAR 610NM 0402 SMD	Lumex Opto/Components Inc	SML-LX0402SOC-TR		
14	2	D3,D4	DIODE SCHOTTKY 400MW 20V SOD123	Diodes Inc.	SD103CW-13-F		
15	1	JP3	CONN HEADER 16POS .100 STR 30AU	FCI	68602-116HLF		
16	3	JP4,JP5,JP6	CONN HEADER VERT .100 2POS 30AU	AMP/Tyco	87220-2		
17	1	JP7	CONN HEADER VERT .100 3POS 15AU	AMP/Tyco	87224-3		
18	2	J1,J2	End Launch Jack Receptacle - Tab Contact	Johnson Components	142-0701-851		

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19	1	J3	CONN HEADER 20 POS STRGHT GOLD.	3M	N2520-6002RB		
20	1	J4	Automotive HSD Connector, Right Angle	Rosenberger	D4S20B-40ML5-Z		
21	1	J5	CONN HEADER 4POS .100 VERT GOLD	Molex/Waldom Electronics Corp	22-11-2042		
22	1	J6	CONN RECEPT MINI USB2.0 5POS	Hirose	UX60-MB-5ST		
23	1	J7	CONN POWER JACK 2.1MM.	CPU Inc	PJ-002A		
24	2	J8,J9	BANANA-female (non-insulated)	Johnson	108-0740-001		
25	1	L1	CHOKE COIL COMMON MODE 280MA SMD	Murata	DLW21SN900HQ2L	recommended for EMI/BCI optimization	
26	2	L2,L4	FERRITE CHIP 1000 OHM 0402	Murata	BLM15AX102SN1D	critical for noise isolation, recommended p/n (or equivalent)	
27	2	Q1,Q2	MOSFET N-CH 50V 200MA SC70-3	Diodes Inc	BSS138W-7-F		
28	3	R1,R59,R60	RES 4.7K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ472V		
29	2	R2,R67	RES 68 OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ680X		
30	5	R5,R6,R7,R8,R10	RES 100 OHM 0201 SMD. 1/20W .5%	Susumu	RR0306P-101-D		
31	2	R18,R52	RES 90.9K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF9092X	1% critical	
32	1	R19	RES 124K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1243X	1% critical	
33	1	R20	RES 137K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1373X	1% critical	
34	1	R21	RES 154K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1543X	1% critical	
35	1	R22	RES 169K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1693X	1% critical	
36	1	R23	RES 182K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1823X	1% critical	
37	1	R24	RES 196K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1963X	1% critical	
38	2	R25,R44	RES 210K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2103X	1% critical	
39	1	R26	RES 226K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2263X	1% critical	
40	2	R27,R43	RES 243K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2433X	1% critical	
41	1	R28	RES 240K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2403X	1% critical	
42	1	R29	RES 267K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2673X	1% critical	

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43	1	R30	RES 270K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2703X	1% critical	
44	1	R31	RES 280K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2803X	1% critical	
45	1	R32	RES 294K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF2943X	1% critical	
46	6	R36,R37,R38,R39,R40,R92	RES 10.0K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF1002V	1% critical	
47	1	R45	RES 191K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1913X	1% critical	
48	1	R46	RES 180K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1803X	1% critical	
49	1	R47	RES 165K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1653X	1% critical	
50	1	R48	RES 147K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1473X	1% critical	
51	1	R49	RES 130K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1303X	1% critical	
52	1	R50	RES 115K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1153X	1% critical	
53	1	R51	RES 102K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1023X	1% critical	
54	1	R53	RES 76.8K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF7682X	1% critical	
55	1	R54	RES 71.5K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF7152X	1% critical	
56	1	R55	RES 60.4K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF6042X	1% critical	
57	1	R56	RES 49.9K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF4992X	1% critical	
58	2	R57,R58	RES 40.2K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF4022X	1% critical	
59	6	R62,R63,R64,R65,R94,R95,R96	RES ZERO OHM 1/16W 5% 0402 SMD	Panasonic	ERJ-2GEJ0R00X		
60	4	R66,R91,R99,R101	RES ZERO OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEY0R00V		
61	5	R68,R74,R82,R86,R102	RES 100K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ104X		
62	2	R69,R70	RES 22 OHM 1/16W 3300PPM 5% 0603	Panasonic	ERA-V33J220V		
63	2	R75,R76	RES ZERO OHM 1/4W 5% 1206 SMD	Panasonic	ERJ-8GEY0R00V		
64	1	R81	RES 2.49K OHM 1/10W 1% 0603 SMD	Vishay/Dale	CRCW06032K49FKEA		
65	2	R83,R87	RES 5.62K OHM 1/10W 1% 0603 SMD.	Vishay	CRCW06035K62FKEA		
66	1	R85	RES 9.31K OHM 1/10W 1% 0603 SMD	Vishay/Dale	CRCW06039K31FKEA		
67	2	SW1,SW2	SWITCH TACT	APEM Components	ADTSM31NV		

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68	1	S1	SWITCH DIP EXTENDED SEALED 5POS	Grayhill	78B05ST		
69	2	S2,S3	SWITCH TAPE SEAL 8 POS SMD	CTS Electrocomponents	219-8MST		
70	1	U1	DS90UB927Q FPD-Link III Serializer	TI	DS90UH927QSQ		
71	1	U2	IC AVR MCU 128K 64QFN	Atmel	AT90USB1287-16MU		
72	2	U4,U5	IC REG LDO 500MA ADJ SOT223-4.	TI	LP38693MP-ADJ/NOPB		
73	1	U6	IC REG LDO 300MA 3.3V 8MSOP	TI	LP3982IMM-3.3/NOPB		
74	1	Y1	CRYSTAL 8.000 MHZ 18PF SMD	Abracon Corporation	ABM3-8.000MHZ-D2Y-T		
75	1	-	PCB	-	-		

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