

**BILL OF MATERIALS**

PROJECT : DS90UX948\_940-Q1EVM

REV : 1E

DATE : 09\_16\_2014

Item	Quantity	Reference	Value	PCB Footprint	Part number	Manufacturer	Digi-Key P/N	Description	Comments
1	35	C1,C2,C5,C8,C9,C10,C11,C17,C23,C24,C25,C26,C27,C30,C31,C32,C35,C48,C50,C53,C56,C61,C65,C69,C73,C77,C79,C83,C90,C93,C99,C100,C102,C103,C104	0.1uF	0402_1005_Metric	CGA2B3X7R1H104K050BB	TDK Corporation	445-6899-1-ND	CAP CER 0.1UF 50V 10% X7R 0402	
2	4	C3,C4,C6,C7	0.033uF	0402_1005_Metric	CGA2B3X7R1H333K050BB	TDK Corporation	445-6896-1-ND	CAP CER 0.033UF 50V 10% X7R 0402	
3	3	C12,C66,C80	10uF	1206_3216_Metric	C3216X7R1C106K	TDK Corporation	445-4042-1-ND	CAP CER 10UF 16V 10% X7R 1206	
4	2	C13,C89	2.2uF	3528-21_EIA	T491B225K020AT	KEMET	399-3714-1-ND	CAP TANT 2.2UF 20V 10% 1411	
5	10	C14,C47,C55,C60,C64,C68,C72,C76,C82,C92	1uF	0603_1608_Metric	CGA3E1X7R1E105K080AC	TDK Corporation	445-6931-1-ND	CAP CER 1UF 25V 10% X7R 0603	
6	15	C15,C44,C51,C57,C58,C62,C70,C74,C78,C84,C85,C86,C87,C94,C95	0.01uF	0402_1005_Metric	GCM155R71H103KA55D	Murata Electronics North America	490-4762-1-ND	CAP CER 10000PF 50V 10% X7R 0402	
7	2	C16,C88	22uF	CAP_N	F931E226MNC	nichicon	493-2391-1-ND	CAP TANT 22UF 25V 20% 2917	
8	2	C18,C21	220PF	603	C1608X7R1H221K	TDK	445-1306-1-ND	CAP CER 220PF 50V 10% X7R 0603	
9	2	C19,C20	30pF	603	C1608C0G1H300J	TDK	445-5054-1-ND	CAP CER 30PF 50V 5% NP0 0603	
10	1	C22	2200PF	603	C1608X7R1H222K	TDK	445-1309-1-ND	CAP CER 2200PF 50V 10% X7R 0603	
11	5	C28,C46,C49,C52,C63	4.7uF	0805_2012_Metric	GRM21BR71C475KA73L	Murata Electronics North America	490-4522-1-ND	CAP CER 4.7UF 16V 10% X7R 0805	
12	1	C29	470nF	603	C1608X7R1H474K080AC	TDK	445-5952-1-ND	CAP CER 0.47UF 50V 10% X7R 0603	
13	2	C33,C34	4.7pF	C-0402	ECD-G0E4R7C	Panasonic	PCC2260CT-ND	CAP CER 4.7PF 25V NP0 0402	
14	1	C36	0.022uF	CAP_HDC-0805_2012_Metric	C0805C223K5RACTU	Kemet	399-1163-1-ND	CAP CER 0.022UF 50V 10% X7R 0805	
15	1	C37	10uF	1210_3225_Metric	C3225X7R1E106M250AC	TDK Corporation	445-1434-1-ND	CAP CER 10UF 25V 20% X7R 1210	
16	1	C38	100uF	CAP_7343-31_EIA	EEF-UD0K101R	Panasonic	PCE3601CT-ND	CAP ALUM 100UF 8V 20% SMD	
17	1	C39	270uF	CAP_0p327Lx0p327W_8p30mm x8p30mm	APXA100ARA271MHC0G	United Chemi-Con	565-3068-1-ND	CAP ALUM 270UF 10V 20% SMD	

18	2	C40,C41	100uF	CAP_HDC-1210_3225_Metric	JMK325BJ107MM-T	Taiyo Yuden	587-1387-1-ND	CAP CER 100UF 6.3V 20% X5R 1210	
19	1	C42	180pF	CAP_HDC-0805_2012_Metric	CC0805JRN09BN181	Yageo	311-1114-1-ND	CAP CER 180PF 50V 5% NPO 0805	
20	1	C43	150pF	CAP_HDC-0805_2012_Metric	08055A151JAT2A	AVX Corporation	478-1318-1-ND	CAP CER 150PF 50V 5% NP0 0805	
21	1	C45	560pF	CAP_HDC-0805_2012_Metric	CC0805KRX7R9BB561	Yageo	311-1125-1-ND	CAP 560PF 50V CERAMIC X7R 0805	
22	7	C54,C59,C67,C71,C75,C81,C91	10uF	0805_2012_Metric	JMK212AB7106KGHT	Taiyo Yuden	587-3388-1-ND	CAP CER 10UF 6.3V 10% X7R 0805	
23	1	C101	2.2nF	C-0402	CGA2B2X7R1H222K050BA	TDK Corporation	445-5606-1-ND	CAP CER 2200PF 50V 10% X7R 0402	
24	1	D1	1SMB5922	DO-214AA_SMB	1SMB5922B-13	Diodes Inc		DIODE ZENER 7.5V 3W SMB	
25	1	D3	DIODE	DIODE	B340A-13-F	Diodes Inc	B340A-FDICT-ND	DIODE SCHOTTKY 3A 40V SMA	
26	1	F1	FUSE	1206	1206L050/15YR	Littelfuse Inc	F3733CT-ND	PTC RESET 15V .500A SMD 1206	
27	2	JP1,JP2	2-Pin Header_open	Header_2P	87220-2_open	AMP/Tyco	A26542-ND_open	CONN HEADER VERT .100 2POS 30AU. DO NOT PURCHASE, DO NOT MOUNT.	<b>DNL</b>
28	1	JP3	2-Pin Header_open	Header_2P	87220-2_open	AMP/Tyco	A26542-ND_open	CONN HEADER VERT .100 2POS 30AU. DO NOT PURCHASE. DO NOT POPULATE.	<b>DNL</b>
29	7	JP4,JP6,JP7,JP8,JP9,JP10,JP11	2-Pin Header	Header_2P	87220-2	AMP/Tyco	A26542-ND	CONN HEADER VERT .100 2POS 30AU	
30	2	JP5,JP12	3-Pin Header	Header_3P	87224-3	Tyco	A26545-ND	CONN HEADER VERT .100 3POS 15AU	
31	1	J1	HSD_2X2	CON_HSD-4P	D4S20D-40ML5-Y	Rosenberger		Automotive HSD Connector - Right Angle Plug for PCB. DO NOT PURCHASE. TI WILL PROVIDE.	
32	2	J2,J7	FAKRA	59S20X-40ML5-Y	59S20X-40ML5-Y_open	Johnson Components		FAKRA-HF PCB RIGHT ANGLE PLUG	<b>DNL</b>
33	6	J3,J4,J5,J6,J8,J9	SMA	Edge_mount	142-0701-851	Emerson	J658-ND	CONN SMA JACK 50 OHM EDGE MNT	
34	1	J10	mini USB 5pin	mini_B_USB_surface_mount	UX60-MB-5ST	Hirose	H2959CT-ND	CONN RECEIPT MINI USB2.0 5POS.	
35	1	J11	HEADER 7X2_open	0_100inchx2X7	PBC07DFAN_open	Sullins	S2211E-07-ND_open	CONN HEADER .100 DUAL STR 14POS. DO NOT PURCHASE. DO NOT POPULATE.	<b>DNL</b>
36	1	J12	HEADER 5X2	Through_Hole	PBC05DFAN	Sullins	S2211E-05-ND	CONN HEADER .100 DUAL STR 10POS	
37	1	J13	IDC1X4	IDC-1x4	22-11-2042	Molex/Waldom Electronics Corp	WM2702-ND	CONN HEADER 4POS .100 VERT GOLD	
38	1	J14	HEADER 7X2	0_100inchx2X7	PBC07DFAN	Sullins	S2211E-07-ND	CONN HEADER .100 DUAL STR 14POS	
39	2	J15,J16	2X10-Pin Header	N2520_6002RB	N2520-6002RB	3M	MHC20K-ND	CONN HEADER 20 POS STRGHT GOLD.	
40	1	J17	2X10-Pin Header	Header_2X10P	PBC10DFAN	Sullins Connector Solutions	S2211E-10-ND	CONN HEADER .100 DUAL STR 20POS	

41	1	J18	CONN JACK PWR	3-terminal_thru_hole_power_jack	PJ-002A	CUI Inc	CP-002A-ND	CONN POWER JACK 2.1MM	
42	1	J19	DIP20 SOCKET - MSP430G2403IN20	DIP-20	4820-3004-CP	3M	3M5477-ND	SOCKET IC OPEN FRAME 20POS .3"	
43	1	J20	JTAG-14	JTAG-14	AWHW14G-0202-T-R	Assmann	HRP14H-ND	CONN HEADER LOW-PRO 14POS GOLD	
44	1	J21	2X2-Pin Header	Header_2X2P	87227-2	TEC	A26567-ND	CONN HEADER VERT DUAL 4POS GOLD	
45	2	LED1,LED4	0603_green_LED	d-0603	LTST-C191KGKT	LITE-ON INC	160-1446-1-ND	LED GREEN CLEAR THIN 0603 SMD	
46	1	LED2	0603_orange_LED	0603_SMT	LTST-S270KFKT	Lite-On Inc	160-1477-1-ND	LED ORANGE CLR RT ANG SMD	
47	1	LED3	0603_red_LED	d-0603	LTST-C190KRKT	LITE-ON INC	160-1436-1-ND	LED SUPER RED CLEAR 0603 SMD	
48	2	L1,L2	Z = 90 ohm	L_HDC-0805	DLW21SN900HQ2L	Murata	490-5134-1-ND_open	CHOKE COIL COMMON MODE 280MA SMD. DO NOT PURCHASE. DO NOT POPULATE.	<b>DNL</b>
49	1	L3	BK1608HS600-T	L0603	BK1608HS600-T	Taiyo Yuden	587-1873-1-ND	FERRITE BEAD 60 OHM 0603	
50	1	L4	15uH	SMD	SDR1806-150ML	Bourns Inc.	SDR1806-150MLCT-ND	INDUCTOR POWER 15UH SMD	
51	2	L5,L11	FB 1K@100MHz,0603	L0603_1608_Metric	MPZ1608S102A	TDK Corporation	445-8694-1-ND	FERRITE CHIP BEAD 1000 OHM 0603	
52	5	L6,L7,L8,L9,L10	FB 120@100MHz,0603	L0603_1608_Metric	BLM18SG121TN1D	Murata Electronics North America	490-3996-1-ND	FILTER CHIP 120 OHM 3A 0603	
53	1	Q1	BSS138	SOT23	BSS138	Fairchild	BSS138CT-ND	MOSFET N-CH 50V 220MA SOT-23	
54	4	R1,R2,R75,R98	220 Ohm,0402	RES_HDC-0402	ERJ-2GEJ221X	Panasonic	P220JCT-ND	RES 220 OHM 1/10W 5% 0402 SMD	
55	13	R12,R20,R37,R38,R47,R63,R64,R73,R74,R87,R91,R109,R120	0 Ohm,0402_open	RES_HDC-0402	ERJ-2GEJ0R00X_open	Panasonic	P0.0JTR-ND_open	RES ZERO OHM 1/16W 5% 0402 SMD. DO NOT PURCHASE, DO NOT LOAD.	<b>DNL</b>
56	2	R3, R4						RES 0.0 OHM 1/10W JUMP 0402 SMD	
57	4	R97,R107,R115,R116	0 Ohm,0402	RES_HDC-0402	ERJ-2GEJ0R00X	Panasonic	P0.0JTR-ND	RES 0.0 OHM 1/10W JUMP 0402 SMD	
58	3	R5,R13,R40	45.3K Ohm,0402	RES_HDC-0402	ERJ-2RKF4532X	Panasonic	P45.3KLCT-ND	RES 45.3K OHM 1/10W 1% 0402 SMD	
59	3	R6,R14,R41	90.9K Ohm,0402	RES_HDC-0402	ERJ-2RKF9092X	Panasonic	P90.9KLCT-ND	RES 90.9K OHM 1/10W 1% 0402 SMD	
60	4	R7,R15,R18,R42	107K Ohm,0402	RES_HDC-0402	ERJ-2RKF1073X	Panasonic	P107KLCT-ND	RES 107K OHM 1/10W 1% 0402 SMD	
61	9	R8,R9,R16,R17,R22,R30,R43,R44,R53	113K Ohm,0402	RES_HDC-0402	ERJ-2RKF1133X	Panasonic	P113KLCT-ND	RES 113K OHM 1/10W 1% 0402 SMD	
62	2	R10,R45	107K Ohm,0402	RES_HDC-0402	ERJ-2RKF1073X	Panasonic	P107KLCT-ND	RES 107K OHM 1/10W 1% 0402 SMD	

63	3	R11,R19,R46	232K Ohm,0402	RES_HDC-0402	ERJ-2RKF2323X	Panasonic	P232KLCT-ND	RES 232K OHM 1/10W 1% 0402 SMD	
64	3	R21,R29,R52	182K Ohm,0402	RES_HDC-0402	ERJ-2RKF1823X	Panasonic	P182KLCT-ND	RES 182K OHM 1/10W 1% 0402 SMD	
65	3	R23,R31,R54	93.1K Ohm,0402	RES_HDC-0402	ERJ-2RKF9312X	Panasonic	P93.1KLCT-ND	RES 93.1K OHM 1/10W 1% 0402 SMD	
66	3	R24,R32,R55	68.1K Ohm,0402	RES_HDC-0402	ERJ-2RKF6812X	Panasonic	P68.1KLCT-ND	RES 68.1K OHM 1/10W 1% 0402 SMD	
67	6	R25,R27,R33,R35,R56 ,R58	47.5K Ohm,0402	RES_HDC-0402	ERJ-2RKF4752X	Panasonic	P47.5KLCT-ND	RES 47.5K OHM 1/10W 1% 0402 SMD	
68	3	R26,R34,R57	31.6K Ohm,0402	RES_HDC-0402	ERJ-2RKF3162X	Panasonic	P31.6KLCT-ND	RES 31.6K OHM 1/10W 1% 0402 SMD	
69	3	R28,R36,R59	40.2K Ohm,0402	RES_HDC-0402	ERJ-2RKF4022X	Panasonic	P40.2KLCT-ND	RES 40.2K OHM 1/10W 1% 0402 SMD	
70	4	R48,R49,R50,R65	49.9ohm,0 402_open	RES_HDC-0402	ERJ-2RKF49R9X_open	Panasonic	P49.9LCT- ND_open	RES 49.9 OHM 1/10W 1% 0402 SMD. DO NOT PURCHASE. DO NOT POPULATE.	<b>DNL</b>
71	5	R60,R61,R62,R76,R77	10K	RES_HDC-0603	ERJ-3EKF1002V	Panasonic	P10.0KHCT-ND	RES 10.0K OHM 1/10W 1% 0603 SMD	
72	2	R66,R67	33 ohm	RES_0603	ERJ-3GEYJ330V	Panasonic	P33GCT-ND	RES 33 OHM 1/10W 5% 0603 SMD	
73	5	R68,R99,R103,R113,R 117	0 Ohm, 0603	R0603_1608_Metric	ERJ-3GEY0R00V	Panasonic	P0.0GTR-ND	RES 0.0 OHM 1/10W JUMP 0603 SMD	
74	3	R69,R78,R79	1.5K	603	ERJ-3GEYJ152V	Panasonic	P1.5KGCT-ND	RES 1.5K OHM 1/10W 5% 0603 SMD	
75	2	R70,R72	33K ohm	603	ERJ-3GEYJ333V	Panasonic	P33KGCT-ND	RES 33K OHM 1/10W 5% 0603 SMD	
76	1	R71	1.2M ohm	603	ERJ-3GEYJ125V	Panasonic	P1.2MGCT-ND	RES 1.2M OHM 1/10W 5% 0603 SMD	
77	10	R80,R86,R88,R89,R90 ,R92,R93,R94,R95,R9 6	100_open	RES_HDC-0402	ERJ-2GEJ101X_open	Panasonic	P100JCT-ND_open	RES 100 OHM 1/10W 5% 0402 SMD. DO NOT PURCHASE. DO NOT POPULATE.	<b>DNL</b>
78	2	R81,R82	4.7K	R-0603	ERJ-3GEYJ472V	Panasonic	P4.7KGCT-ND	RES 4.7K OHM 1/10W 5% 0603 SMD	
79	3	R83,R84,R85	0 Ohm	R-0402	ERJ-2GEJ0R00X	Panasonic	P0.0JTR-ND	RES ZERO OHM 1/16W 5% 0402 SMD	
80	1	R100	52.3Kohm	RES_HDC-0805_2012_metric	ERJ-6ENF5232V	Panasonic	P52.3KCCT-ND	RES 52.3K OHM 1/8W 1% 0805 SMD	
81	1	R101	9.53Kohm	RES_HDC-0805_2012_metric	RG2012P-9531-B-T5	Panasonic	RG20P9.53KBCT- ND	RES 9.53K OHM 1/8W .1% 0805 SMD	
82	1	R102	3.09Kohm	RES_HDC-0805_2012_metric	ERJ-6ENF3091V	Panasonic	P3.09KCCT-ND	RES 3.09K OHM 1/8W 1% 0805 SMD	
83	1	R104	2.49K	603	ERJ-3EKF2491V	Panasonic	P2.49KHTR-ND	RES 2.49K OHM 1/10W 1% 0603 SMD	
84	3	R105,R111,R114	100K	RES_HDC-0603	ERJ-3EKF1003V	Panasonic	P100KHCT-ND	RES 100K OHM 1/10W 1% 0603 SMD	
85	1	R106	1K	RES_HDC-0603	ERJ-3EKF1001V	Panasonic	P1.00KHCT-ND	RES 1.0K OHM 1/10W 1% 0603 SMD	
86	1	R108	4.99K	603	ERJ-3EKF4991V	Panasonic Electronic Components	P4.99KHTR-ND	RES 4.99K OHM 1/10W 1% 0603 SMD	
87	1	R110	23.2K	402	ERJ-2RKF2322X	Panasonic	P23.2KLCT-ND	RES 23.2K OHM 1/10W 1% 0402 SMD	
88	1	R112	12.1K	402	ERJ-2RKF1212X	Panasonic	P12.1KLCT-ND	RES 12.1K OHM 1/10W 1% 0402 SMD	
89	1	R118	330ohm	R-0402	ERJ-2RKF3300X	Panasonic	P330LCT-ND	RES 330 OHM 1/10W 1% 0402 SMD	
90	1	R119	47Kohm	R-0603	ERA-3AEB473V	Panasonic	P47KBDBCT-ND	RES 47K OHM 1/16W .1% 0603 SMD	



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