Parts List

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		1001R 301-HC-C2 MOTOR BC	OARD		Type Revision Status Date By	PL D U 10/3/2011	PCB Package ION Footprint Package Qty Bin Loc.	1 SUBA	
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Item	Qty Unit	Part Number	Type Rev	Title Detail				Referenc	e
		ION Footprint				Mfr P/N	l		Mfr Name
1	1 each	515501-0001R	DWG D	PWB,DR	₹V830X-HC-	C2 MOTOR B	OARD		
2	1	515502-0001	DOC	LOGIC,	DRV830X-HC	C-C2 MOTOR	BOARD		
	each		D	SCH					
4	1	103742-0001R	PS	IC,TSSO	P16,TRANS	SLATOR,6-BI	Γ	U7	
	each			MATL	•	,	TXB0106PWR		
		pw16-14x70	•						Texas Instruments
5	1	103808-0001R	PS	IC,TSSO	P56,THREE	PHASE PRE	E-DRIVER DRV8301DCA	U1	
	each			WATL			BRVOODIBOX	l	Texas Instruments
7	2	103805-0001R	PS	IC,SOT2	3-5,OP AMF)		U13, U	9
	each			MATL			OPA365AIDBVR		
		dbv-20x60-5	•	'					Texas Instruments
8	1	103806-0001R	PS		HIGH SPEE	D QUAD DIG		U5	
	each			MATL			ISO7241ADW		
		dw16-25x75-375							Texas Instruments
9	1	103518-0001R	PS	IC,SMT8	ISOLATED	CAN TRANS	CEIVER	U4	
	each			MATL			ISO1050DUBR		
		dub8-35x90							Texas Instruments
10	1	103743-0001R	PS	IC,DBV6	DUAL SCH	MITT-TRIGGI		U6	
	each			MATL		SN	N74LVC2G17DBVR		
		dbv6-27x39-6							Texas Instruments
11	2	103807-0033R	PS	IC,DBV5	,LDO REGU	ILATOR,3.3V	,400mA	U3, U8	
	each			MATL		TF	PS73633MDBVREP		
		dbv-20x60-5							Texas Instruments

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Item	Qty Unit	Part Number	Type Rev	Title Detail		Reference
		ION Footprint			Mfr P/N	Mfr Name
12	1 each	103739-0005R	PS	POWER MODULE,5V,1W,A	DCH010505SN7	U2
		edj4-6040				Texas Instruments
15	2 each	103825-0001R	PS	TRANSISTOR,SOT23,MOS MATL	FET,150V,530mA SI2325DS-T1-E3	Q1, Q2
	ı			'		Vishay Intertechnology
16	1 each	103824-0001R	PS	TRANSISTOR,SOT23,MOS MATL	FET,N CHANNEL 2N7002E,215	Q3
	eacii	SOT23-28X44-GSD		MATE	2.11.0022,2.10	NXP Semiconductors
17	6	103810-0001R	PS	TRANSISTOR,TO263,MOS	FET,60V,110A SUM110N06-3M9H-E3	Q4, Q5, Q6, Q7, Q8, Q9
	each			MATL	SOM FOMOG-SMAH-ES	Vishay Intertechnology
18	3	103952-0001R	PS	IC,SO5,OP AMP,1.8V	T	U10, U11, U12
	each	dbv5-27x39		MATL	TLV2781IDBVR	Texas Instruments
		30,0 20,000				
20	1 each	103820-0001R	PS	DIODE,SMT,SCHOTTKY,2A MATL	A,100V CDBB2100-G	D1
]			1 =		Comchip Technology
25	5	103827-0002R	PS	LED,SMT 0805,GREEN		LED1, LED10, LED11,
	each	1, 10, 47		MATL	LTST-C170KGKT	LED12, LED3
		led2-47sq				LITEON
26	1	103827-0001R	PS	LED,SMT 0805,SUPER REI	D LTST-C170KRKT	LED6
	each	led2-47sq		MATL	LISI-CITURRA	LITEON
		1002 47 04				EFFECIN
27	1	103330-0003R	PS	LED,SMT 0805,YELLOW	LTST-C171YKT	LED5
	each			MATL	LIGI GITTIKI	LITEON
30	1 each	103135-0331R	PS	INDUCTOR,SMT,33uH MATL	DR74-330-R	L1
	I	dr74-98x126		1		Coiltronics Incorporated

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Item	Qty Unit	Part Number	Type Rev	Title Detail		Reference
		ION Footprint			Mfr P/N	Mfr Name
40	1 each	103818-0222R	PS	MATL	SMT,220uF,10V EEE-1AA221XP	C57 Panasonic
45	2 each	103819-0332R	PS	CAP,ELEC,I	RADIAL,330uF,100V,20% UVZ2A331MHD	C93, C94 Nichicon Corporation
46	1 each	103817-0103R	PS	MATL	RADIAL,1000uF,100V,20% ECA-2AHG102	C50 Panasonic
50	1 each	103815-0471R c1210-70x102	PS	CAP,CER,SI MATL	MT 1210,47uF,16V,X5R,+/-20% EMK325BJ476MM-T	C11 Taiyo Yuden
51	5 each	103814-0220R c1210-70x102	PS	CAP,CER,SI MATL	MT 1210,2.2uF,100V,X7R,+/-10% C3225X7R2A225K	C6, C7, C81, C82, C83 TDK Corporation
55	1 each	101415-0220R c805-35x60	PS	CAP,CER,SI	MT 0805,2.2uF,25V,X7R,10% 08053C225KAT2A	C14 AVX Corporation
56	3 each	103813-1100R c805-35x60	PS	CAP,CER,SI MATL	MT 0805,.1uF,100V,+10/-10%,X7R C0805C104K1RACTU	C5, C51, C8 Kemet Electronics Corporation
58	1 each	100993-1682R c603-35x45	PS	CAP,CER,SI MATL	MT 0603,6800pF,50V,+/-10%,X7R ECJ-1VB1H682K	C1 Panasonic
59	1 each	101002-1394R c603-35x45	PS	CAP,CER,SI MATL	MT 0603,39pF,50V,+/-5%,NPO ECJ-1VC1H390J	C2 Panasonic
60	5 each	102965-0220R c603-35x45	PS	MATL	MT 0603,2.2uF,10V,+/-10%,X7R GRM188R71A225KE15D	C20, C22, C44, C46, C48 Murata Electronics

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Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference	
		ION Footprint		Mfr P/N	Mfr Name	
61	5 each	103594-0100R	PS	CAP,CER,SMT 0603,1uF,25V,+/-10%,X5R MATL	C10, C12, C15, C19, C23	
		c603-35x45		I	Murata Electronics	
62	4 each	103816-1470R	PS	CAP,CER,SMT 0603,.47uF,25V,+/-10%,X7R MATL	C29, C30, C31, C33	
	,	c603-35x45		'	Murata Electronics	
63	29 each	100993-1100R	PS	CAP,CER,SMT 0603,.1uF,50V,+/-10%,X7R MATL 06035C104KAT2A	C13, C16, C17, C18, C21, C24, C25, C26, C27, C28, C32, C34, C35, C42, C43, C45, C47, C58, C59, C67, C68, C69, C72, C73, C74, C76, C77, C85, C9	
		c603-35x45			AVX Corporation	
64	1 each	100993-1221R	PS	CAP,CER,SMT 0603,.022uF,50V,+/-10%,X7R MATL	C3	
		c603-35x45		•	Murata Electronics	
65	1 each	102482-1101R	PS	CAP,CER,SMT 0603,.01uF,100V,+/-10%,X7R MATL	C53	
		c603-35x45		ı	TDK Corporation	
66	1 each	100993-1151R	PS	CAP,CER,SMT 0603,.015uF,50V,+/-10%,X7R MATL ECJ-1VB1H153K	C4	
		c603-35x45		•	Panasonic	
67	12 each	100993-1102R	PS	CAP,CER,SMT 0603,.001uF,50V,+/-10%,X7R MATL 06035C102KAT2A	C36, C37, C38, C39, C40, C41, C75, C78, C79, C80, C84, C98	
		c603-35x45			AVX Corporation	
75	1 each	103811-1003R	PS	POT,12mm SQ,10K,1/8 WATT,SINGLE TURN MATL 296UD103B1N	R28	
					CTS Electronics Corporation	
80	each	100687-0001R	PS	RES,SMT 0603,0 OHM,1/16 WATT MATL ERJ-3GEY0R00V	R109, R110, R111, R112, R117, R119, R130, R132, R133, R134, R135, R5, R50, R91, R97, R98	
		r603-35X45			Panasonic	

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Item	Qty Unit	Part Number	Type Rev	Title Detail			
		ION Footprint			Mfr P/N	Mfr Name	
81	7 each	100687-0100R	PS	RES,SMT MATL	0603,1 OHM,5%,1/16 WATT ERJ-3RQJ1R0V	R66, R67, R68, R69, R70, R71, R8	
		r603-35X45				Panasonic	
82	1 each	100642-1000R	PS	RES,SMT MATL	0603,10 OHM,1%,1/16 WATT ERJ-3EKF10R0V	R87	
		r603-35x45		'		Panasonic	
84	1 each	100687-1201R	PS	RES,SMT	0603,120 OHM,5%,1/16 WATT ERJ-3GEYJ121V	R17	
	,	r603-35X45		ı		Panasonic	
85	9 each	100687-1002R	PS	RES,SMT MATL	0603,1K OHM,5%,1/16 WATT RC0603JR-071KL	R12, R13, R21, R29, R30, R31, R32, R33, R34	
		r603-35X45		•		Yageo	
86	1 each	100687-8201R	PS	RES,SMT MATL	0603,820 OHM,5%,1/16 WATT ERJ-3GEYJ821V	R49	
	,	r603-35X45		'		Panasonic	
87	4 each	100687-4701R	PS	RES,SMT MATL	0603,470 OHM,5%,1/16 WATT ERJ-3GEYJ471V	R20, R22, R23, R26	
	,	r603-35X45		'		Panasonic	
88	5 each	100687-3301R	PS	RES,SMT	0603,330 OHM,5%,1/16 WATT ERJ-3GEYJ331V	R14, R15, R18, R24, R27	
	,	r603-35X45				Panasonic	
93	4 each	100642-1003R	PS	RES,SMT	0603,10K OHM,1%,1/16 WATT ERJ-3EKF1002V	R10, R11, R7, R9	
	ı	r603-35x45		ı		Panasonic	
94	1 each	100642-2054R	PS	RES,SMT	0603,205K OHM,1%,1/16 WATT ERJ-3EKF2053V	R1	
]	r603-35x45		140, 172		Panasonic	
95	1 each	100642-2803R	PS	RES,SMT	0603,28K OHM,1%,1/16 WATT ERJ-3EKF2802V	R4	
	I	r603-35x45		1		Panasonic	

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Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		ION Footprint		Mfr P/N	Mfr Name
96	13 each	100642-4992R	PS	RES,SMT 0603,4.99K OHM,1%,1/16 WATT MATL ERJ-3EKF4991	R122, R123, R124, R125, R126, R127, R19, R25, R36, R48, R62, R64, R65
		r603-35x45			Panasonic
97	2 each	100642-4993R	PS	RES,SMT 0603,49.9K OHM,1%,1/16 WATT MATL ERJ-3EKF4992	R128, R129
	J	r603-35x45			Panasonic
98	1 each	100642-5363R	PS	RES,SMT 0603,53.6K OHM,1%,1/16 WATT MATL ERJ-3EKF5362V	R6
	J	r603-35x45			Panasonic
99	4 each	100642-9533R	PS	RES,SMT 0603,95.3K OHM,1%,1/16 WATT MATL ERJ-3EKF9532	R35, R60, R61, R63
	,	r603-35x45			Panasonic
101	6 each	103951-2003R	PS	RES,SMT 0603,20K OHM, .1%,1/10 WATT MATL ERA-3AEB203	R103, R105, R107, R108, R113, R95
	ı	r603-35x45			Panasonic
102	2 each	103951-1003R	PS	RES,SMT 0603,10K OHM, .1%,1/10 WATT MATL ERA-3AEB103	R37, R38
		r603-35x45			Panasonic
103	6 each	103951-1002R	PS	RES,SMT 0603,1K OHM, .1%,1/10 WATT MATL ERA-3AEB102	R99, R101, R104, R92, R94, R102
	1	r603-35x45			Panasonic
106	1 each	100155-0100R	PS	RES,SMT 1206,1 OHM,5%,1/4 WATT MATL ERJ-8GEYJ1R0	R16 /
	1	r1206-40x70			Panasonic
108	1 each	100155-0330R	PS	RES,SMT 1206,3.3 OHM,5%,1/4 WATT MATL ERJ-8GEYJ3R3	R39
		r1206-40x70			Panasonic
110	3 each	103809-0002R	PS	RES,SMT 4527,.002 OHM,1%,5W MATL WSR52L000FE	R80, R81, R82
	J				Vishay Intertechnology

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Item	Qty Unit	Part Number	Type Rev	Title Detail	Reference
		ION Footprint		Mfr P/N	Mfr Name
115	2 each	102984-0001R sw4-50x70-7914J	PS	SWITCH,SMT,PUSHBUTTON,MOMENTARY,4mm MATL 7914J-1-000E	SW1, SW2
120	2 each	103823-0002R	PS	TERMINAL BLOCK,2 POS.,VERT.,15mm SPC.,90A MATL 39920-0502	J25, J26 Molex
121	1 each	103821-0002R	PS	TERMINAL BLOCK,2 POS.,VERT.,5mm SPC. MATL ED500/2DS	J2 On-Shore Technology, Inc.
122	1 each	103823-0004R	PS	TERMINAL BLOCK,4 POS.,VERT.,15mm SPC.,90A MATL 39920-0504	J11 Molex
125	1 each	102232-0100R molex100-71251-5101	PS	CONN,100 PIN,DIMM SOCKET,W/EXTRACTORS MATL 87630-1001	J1 Molex
129	6 each	JUMP1X2-6040	PL	HEADER,2 X 1,VERTICAL,PIN SUBA	J12, J13, J23, J24, JP2, JP4
130	1 each	JUMP1X3-6040	PL	HEADER,3 X 1,VERTICAL,PIN SUBA	J7
133	4 each	JUMP1X5-6040	PL	HEADER,5 X 1,VERTICAL,PIN SUBA	J10, J4, J6, J8
134	1 each	JUMP2X5-6040	PL	HEADER,5 X 2,VERTICAL,PIN SUBA 2011-2X05G00SB/SN	J20 Oupiin
135	1 each	JUMP2X7-6040	PL	HEADER,7 X 2,VERTICAL,PIN SUBA 2011-2X07G00SB/SN	J21 Oupiin

515500-0001R Rev D

Item	Qty Unit	Part Number	Type Rev			
		ION Footprint		Mfr P/N	Mfr Name	
136	1 each	100116-0020R conn40-5638	PL	HEADER,20 X 2,VERTICAL,PIN SUBA	J5	
145	10 each	103020-5003R	PS	TEST POINT,ORANGE MATL 5003	TP12, TP13, TP14, TP16, TP17, TP19, TP23, TP24, TP25, TP3 Keystone Electronics Corp.	
146	4 each	103020-5000R	PS	TEST POINT,RED MATL 5000	TP11, TP4, TP5, TP6	
				I	Keystone Electronics Corp.	
147	5	103020-5001R	PS	TEST POINT,BLACK	TP10, TP20, TP7, TP8,	
	each			MATL 5001	TP9	
					Keystone Electronics Corp.	
150	2	100123-0001R	PS	JUMPER,SHUNT,2 POS	JP2, JP4	
	each			MATL SPC02SYAN	Sullins Electronics, Corp.	
151	8 each	100329-0250R	PS	SCREW,PHILLIPS,PAN,SS,4-40 X .250 MATL 0440X0250PNPHSSPS	XMH1, XMH2, XMH3, XMH4, XMH5, XMH6, XMH7, XMH8 Above Board	
152	8	103812-0875R	PS	SPACER,ROUND,ALUM,4-40,.187 O.D. X .875L	Electronics,Inc. XXMH1, XXMH2,	
	each			MATL 2030	XXMH3, XXMH4, XXMH5, XXMH6, XXMH7, XXMH8	
					Keystone Electronics Corp.	
155	7	C0603-NOPOP	PS	ND	C52, C86, C87, C88, C95, C96, C97	
	each	2002 25v45		NP	000, 000, 007	
		c603-35x45				
160	10 each	R0603-NOPOP	PS	NP	R2, R3, R40, R41, R42, R43, R44, R45, R46, R47	
		r603-35X45				
170	1 each	NO-POP	PS	 NP	D2	

Parts List

ASSY,DRV8301-HC-C2 MOTOR BOARD SUBA

515500-0001R Rev D

Item	Qty Unit	Part Number	Type Rev	Title Detail		Reference
		ION Footprint			Mfr P/N	Mfr Name
200	6 each	TP-27SQ15-NO-POP	PS	NP		TP1, TP15, TP18, TP2, TP21, TP22