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HSDC038 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		HSDC038	Any	Printed Circuit Board	
2	C1	1	1000uF	C1005NP01H102J050BA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
3	C2, C5	2	0.22uF	C1608X5R1H224K080AB	TDK	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X5R, 0603	0603
4	C3	1	0.47uF	C1608X5R1H474K080AB	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X5S, 0603	0603
5	C4	1	4.7uF	C1608X6R1V475K080AC	TDK	CAP, CERM, 4.7 uF, 35 V, +/- 10%, X5R, 0603	0603
6	C6	1	10uF	TPSD106K035R0125	AVX	CAP, TA, 10 uF, 35 V, +/- 10%, 0.125 ohm, SMD	7343-31
7	C7, C8, C9, C13, C16, C75, C82, C83	8	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
8	C10, C11	2	10pF	C1A3E20NP01H100D005AA	TDK	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
9	C18, C25, C31, C35, C36	5	0.01uF	GRM155R61C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X5R, 0402	0402
10	C19, C20, C21, C22, C28, C29, C30, C37, C38, C39, C97	11	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
11	C23, C24, C26, C27, C32, C33, C34, C39, C40, C80, C94, C95	12	1uF	GRM155R61C105MA12D	MuRata	CAP, CERM, 1 µF, 16 V,+/- 20%, X5R, 0402	0402
12	C41	1	47uF	GRM21BC80G476ME15L	MuRata	CAP, CERM, 47 µF, 4 V,+/- 20%, X6S, 0805	0805
13	C45, C46	2	22pF	C1A3E22G1N220J080AA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
14	C48, C51, C54, C57	4	0.1uF	C0603C104K8RACTU	Kemet	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0603	0603
15	C59	1	1000pF	GRM42QR71E102KW01L	MuRata	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1808	1808
16	C67	1	4700pF	1812GC472KAT1A	AVX	CAP, CERM, 4700 pF, 2000 V, +/- 10%, X7R, 1812	1812
17	C68, C70, C84	3	10uF	CGA6P1X7R1E106M250AC	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
18	C69, C85	2	22uF	CGA6P1X7R1C226M250AC	TDK	CAP, CERM, 22 uF, 16 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
19	C71	1	1uF	GRM219R61C105KA88D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0805	0805
20	C72	1	0.1uF	GCM21BR71H104KA37K	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
21	C73, C74, C81	3	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
22	C76, C86, C106	3	2.2uF	CGA3E1X7R1C225M080AC	TDK	CAP, CERM, 2.2 uF, 16 V, +/- 20%, X7S, AEC-Q200 Grade 1, 0603	0603
23	C77, C87, C99	3	1uF	GRM155R61A105KE11D	MuRata	CAP, CERM, 1 uF, 35 V, +/- 20%, X5R, 0402	0402
24	C78, C83, C109, C110	4	10uF	C3216X7R1V106M160AC	TDK	CAP, CERM, 10 uF, 35 V, +/- 20%, X7R, 1206_190	1206_190
25	C79, C111	2	0.1uF	C1B0104K0BNNNC	Samsung Electro-Mechanics	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	0603
26	C88, C100, C105, C112	4	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0603	0603
27	C89, C101, C113	3	1000pF	06033A102KAT2A	AVX	CAP, CERM, 1000 pF, 50 V, +/- 10%, C0G/NP0, 0603	0603
28	C90, C102, C107, C108, C114	5	100pF	CC0402JRNPC0BB101G	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
29	C91, C98, C115	3	100uF	293D107X0010D2TE3	Vishay-Sprague	CAP, TA, 100 uF, 10 V, +/- 20%, 0.1 ohm, SMD	7343-31
30	C92	1	4.7uF	293D475X9035D2TE3	Vishay-Sprague	CAP, TA, 4.7 uF, 35 V, +/- 10%, 1.3 ohm, SMD	7343-31
31	C103, C104	2	1000uF	GRM155R61E102KA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 10%, X5R, 0402	0402
32	C116	1	1uF	0805YD105KAT2A	AVX	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0805	0805
33	C117	1	4.7uF	CC0805ZRY5V9BB475	Yageo America	CAP, CERM, 4.7 uF, 10 V, +80/-20%, Y5V, 0805	0805
34	C118	1	27pF	C1L0C270FB8NNNC	Samsung Electro-Mechanics	CAP, CERM, 27 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
35	D1, D2, D3	3	Rig	HSMF-C165	Avago	LED, Rig, SMD	1.6x0.8mm
36	D4	1	60V	MBVBA160T3G	ON Semiconductor	Diode, Schottky, 60 V, 1 A, AEC-Q101, SMA	SMA
37	D5, D6, D7, D8, LD1, LD2, LD3, LD4, LD5, LD6	10	Green	CTLP630C4TR	Everlight	LED, Green, SMD	2x1.25mm
38	F1	1		F0603E.3R00FS-TR	AVX	Fuse, 3 A, 32 VDC, SMD	0603
39	H1	1		127-A113I-203T	Amphenol Canada	SFP Single Cage	SFP Single Cage
40	J1	1		TSW-102-07-G-D	Samtec	Header, 100mil, 2x2, Gold, TH	2x2 Header
41	J2, J4, J7, J21, J22, J23, J27, J28, J33, J34, J35, J36	12		HTSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	Header, 100mil, 3x1, TH
42	J3	1		1367073-1	TE Connectivity	Receptacle, 0.8mm, 10x2, Gold, R/A, SMT	Connector, 2x10, Body 11.2x7.4mm, Pitch 0.8mm
43	J6, J8, J10, J11, J19, J26	6		HTSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 100mil, 2x1, TH
44	J15	1		90122-0763	Molex	Header, 2.54mm, 3x2, Gold, R/A, TH	Header, 2.54mm, 3x2, R/A, TH
45	J20	1		1-406541-1	TE Connectivity	RJ45, No LED, tab up, R/A, TH	16.26x14.54x15.75
46	J24, J29, J30, J31	4		1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
47	J25	1		PJ-037AH	CUI Inc.	Power Jack, 2mm, R/A, TH	Power Jack, R/A, TH
48	J32	1		475890001	Molex	Connector, Receptacle, Micro-USB Type AB, R/A, Bottom Mount SMT	6.6x2.5x8.2mm
49	L1, L2	2	6uH	IFSC2806AJER1R0M01	Vishay-Dale	Inductor, Shielded, Ferrite, 1 uH, 1.6 A, 0.115 ohm, SMD	Inductor, 2x1x1.6mm
50	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
51	P1	1		TSW-108-07-G-D	Samtec	Header, 100mil, 8x2, Gold, TH	8x2 Header
52	R1, R2, R3, R4, R5, R6, R108, R109, R110	9	470	CRCW0402470RJNED	Vishay-Dale	RES, 470, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
53	R7, R8, R9, R10, R19, R20, R25, R27, R30, R32, R35, R37, R42, R44, R88, R90, R92, R93	18	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
54	R11, R15	2	0	CRCW0402000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
55	R12	1	47k	CRCW0402470KJNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
56	R13	1	1.40k	CRCW04021K40FKED	Vishay-Dale	RES, 1.40 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
57	R14	1	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
58	R16, R17	2	27	CRCW04027R0JNED	Vishay-Dale	RES, 27, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
59	R18, R21, R24, R28, R29, R36	6	470	RC0603FR-07470RL	Yageo America	RES, 470, 1%, 0.1 W, 0603	0603
60	R22	1	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
61	R26	1	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
62	R31, R38, R45, R47	4	0	MCR01MZPJ000	Rohm	RES, 0, 5%, 0.063 W, 0402	0402
63	R33, R39, R46, R48	4	49.9	CRCW04049R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
64	R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R76, R78, R79, R84	18	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
65	R73	1	11.0k	CRCW020111K0FKED	Vishay-Dale	RES, 11.0 k, 1%, 0.05 W, 0201	0201
66	R74	1	22	ERJ-1GNJ220C	Panasonic	RES, 22, 5%, 0.05 W, AEC-Q200 Grade 1, 0201	0201
67	R75	1	2.21k	TNPW06032K21BEEA	Vishay-Dale	RES, 2.21 k, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
68	R77, R80	2	2.2k	CRCW0201K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.05 W, 0201	0201
69	R81	1	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402
70	R82	1	100	ERJ-2GEJ101X	Panasonic	RES, 100, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
71	R83, R86, R89	3	0	ERJ-1GN0R00C	Panasonic	RES, 0, 5%, .05 W, AEC-Q200 Grade 0, 0201	0201
72	R96, R97, R98, R99	4	75.0	CRCW08057R50FKEA	Vishay-Dale	RES, 75.0, 1%, 0.125 W, 0805	0805
73	R102	1	4.22k	CRCW06034K22FKEA	Vishay-Dale	RES, 4.22 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
74	R103	1	1.39k	RT0603BRD071K39L	Yageo America	RES, 1.39 k, 0.1%, 0.1 W, 0603	0603
75	R104, R106, R113, R116	4	10.0k	CRCW04010K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
76	R105, R111, R115	3	0	ERJ-6GEY0R00V	Panasonic	RES, 0, 5%, 0.125 W, 0805	0805
77	R107	1	750	CRCW0402750RJNED	Vishay-Dale	RES, 750, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
78	R112	1	33	CRCW0402330RJNED	Vishay-Dale	RES, 33, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
79	R114	1	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
80	R117	1	1.13k	CRCW06031K13FKEA	Vishay-Dale	RES, 1.13 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
81	R120	1	4.53k	CRCW06034K53FKEA	Vishay-Dale	RES, 4.53 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
82	S1	1		219-4LPST	CTS Electrocomponents	Switch, SPST 4 Pos, Top Actuated, SMT	SMD, 8-Leads, Body 11.93x8.95mm, Pitch 2.54mm
83	S2, S3	2		KSR221GLFS	C&K Components	Switch, Normally open, 2.3N force, 200k operations, SMD	KSR
84	SH1, SH2, SH3, SH4, SH5, SH6, SH7, SH8, SH9, SH10, SH11, SH12, SH13	13	1x2	881102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
85	T1	1	325uH	H50009NL	Pulse Engineering	Transformer, 325 uH, SMT	SMD, 24-Leads, Body 15.11x13.16mm, Pitch 0.89mm
86	T2	1		ACM5070-701-2PL-TL01	TDK	Coupled Inductor, 5 A, 0.01 ohm, SMD	5x7mm
87	U1	1		MSP430F5529IPN	Texas Instruments	25 MHz Mixed Signal Microcontroller with 128 KB Flash, 8192 B SRAM and 53 GPIOs, -40 to 85 degC, 80-pin QFP (PN), Green (RoHS & no Sb/Br)	PN0080A
88	U2	1		DP83869ERGZT	Texas Instruments	Robust, High Immunity 10/100/1000 Ethernet Physical Layer Transceiver, RGZ0048B (VQFN-48)	RGZ0048B
89	U3	1		SG-2105TF 25.0000ML3	Epson	Oscillator, 25 MHz, SMD	SMD, 2x2.5mm
90	U4, U5	2		TPS4815L05EQ4R	Texas Instruments	4-Channel Ultra-Low-Capacitance IEC ESD Protection Diode, DQA0010A (USON-10)	DQA0010A
91	U6	1		TL1963AQKTTRQ1	Texas Instruments	Single Output Fast Transient Response LDO, 1.5 A, Adjustable 1.21 to 20 V Output, 2.1 to 20 V Input, 5-pin DDPAK (KTT), -40 to 125 degC, Green (RoHS & no Sb/Br)	KTT0005A
92	U7	1		TPS737233DRVR	Texas Instruments	Single Output LDO, 1A, Adj. (1.2 to 5.5V), Reverse Current Protection, DRV0006A (WSON-6)	DRV0006A
93	U8	1		TPS70933DRVR	Texas Instruments	150-mA, 35-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DRV0006A (WSON-6)	DRV0006A
94	U9	1		TPS73525DRBR	Texas Instruments	Single Output High PSRR LDO, 500 mA, Fixed 2.5 V Output, 2.7 to 6.5 V Input, with Low IQ, 8-pin SON (DRB), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRB0008A
95	U10	1		TPS74701RCR	Texas Instruments	Single Output LDO, 500 mA, Adjustable 0.8 to 3.6 V Output, 0.8 to 5.5 V Input, with Programmable Soft Start, 10-pin SON (DRC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRC0010J
96	XTAL1	1		ECS-250-12-33Q-JES-TR	ECS Inc.	Crystal, 25 MHz, 20 ppm, AEC-Q200 Grade 1, SMD	2.5x3.2mm
97	Y1	1		CSTCR4M00G55B-R0	MuRata	Resonator, 4 MHz, 39 pF, AEC-Q200 Grade 1, SMD	4.5x1.2x2 mm
98	C12, C14, C15, C17	0	0.1uF	1608R0792104KV4T	Johanson Technology	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X5R, 0402	0402
99	C42	0	0.01uF	C0402C103J5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0402	0402
100	C43	0	1000pF	C0402C102J5RACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 5%, X7R, 0402	0402
101	C44	0	100pF	CC0402JRNPC9BB101G	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
102	C47, C48, C50, C52, C53, C55, C56, C58	0	0.033uF	GRM155R61A333KA01D	MuRata	CAP, CERM, 0.033 uF, 10 V, +/- 10%, X5R, 0402	0402
103	C60, C61, C62, C63, C64, C65, C66	0	4700pF	1812GC472KAT1A	AVX	CAP, CERM, 4700 pF, 2000 V, +/- 10%, X7R, 1812	1812
104	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
105	J9, J9, J12, J13	0		901-143-6RFX	Amphenol RF	JACK, SMA, 50 Ohm, Gold, R/A, TH	SMA Jack, 50 Ohm, R/A, TH
106	J14	0		PRPC015DAAN-RC	Sullins Connector Solutions	Header, 2.54mm, 15x2, Gold, TH	Header, 2.54mm, 15x2, TH
107	J16, J18	0		MCX-J-P-H-ST-SM1	Samtec	Mini-RFCable Connector 50 Ohm	Connector , MINI RF SMT
108	J17	0		TSW-104-07-G-D	Samtec	Header, 100mil, 4x2, Gold, TH	4x2 Header
109	R23, R33, R40	0	6.04k	CRCW04026K04FKED	Vishay-Dale	RES, 6.04 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
110	R41, R43	0	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
111	R63, R64, R65, R66, R67, R68, R69, R70, R87, R94, R95	0	0	ERJ-1GN0R00C	Panasonic	RES, 0, 5%, .05 W, AEC-Q200 Grade 0, 0201	0201
112	R71, R72	0	0	MCR01MZPJ000	Rohm	RES, 0, 5%, 0.063 W, 0402	0402
113	R85	0	4.70k	CRCW0201K70FKED	Vishay-Dale	RES, 4.70 k, 1%, 0.05 W, 0201	0201
114	R91	0	1.00Meg	RC0402FR-071ML	Yageo America	RES, 1.00 M, 1%, 0.063 W, 0402	0402
115	R100, R101	0	1.00Meg	HVCB2010FKC1M00	Stackpole Electronics Inc.	RES, 1.00 M, 1%, 1 W, 2010	2010
116	R118, R119	0	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
117	TP1, TP2, TP3, TP4, TP5, TP6	0		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT