



PTCRB Project 79233

MFAST-A-010-2 Rev B Product Certification

Exhibit C3 – Top Level & Sub Assembly - Bill of Material

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Product Designation:

Manufacturer: Pratt & Whitney Engine Services, Norwood
249 Vanderbilt Avenue
Norwood, MA 02062 USA

Marketing Name: DCTU (Data Collection & Transmission Unit)

HVIN- Part #: MFAST-A-010-2

FCC ID: 2AJ6A-DCTU1

IC_ID: 22451-DCTU1

MFAST-A-010-2 - Bill of Material

The product being submitted for PTCRB testing and registration comprise of three circuit cards mounted within the MFAST assembly. Data and Signal interface is achieved by way of several I/O connectors and cables provided on the top surface of the enclosure.

The attached documents are the Bill of Material that specify the components used in the construction of the PCB Sub-Assembly and top level product assembly within the MFAST product

The chart below illustrates the commonality between the two systems as built:

The following Bill of Materials is attached:

BOM	Description	Function
MFAST-A-010 -2 Rev B	MFAST DCTU Top Level assembly	Product Level Assembly
MFAST-A-013 -2 Rev A3	MFAST PCB Level Assembly	PCB Level Assembly MFAST

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Pratt & Whitney

A United Technologies Company

Pratt & Whitney Engine Services
249 Vanderbilt Avenue, Norwood, MA 02062
Phone 781-762-8600 Fax 781-762-2287

BILL OF MATERIALS

Assy. PN: MFAST-A-010-2_REVB

Assy. Desc. UNIT LEVEL ASSEMBLY, MFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
10	MFAST-D-012-1_REVC	HOUSING, FINISHED CAST, MFAST	1.00	ITEM 1		
20	MFAST-D-011-1_REVA1	HOUSING COVER BOTTOM, MFAST	1.00	ITEM 2		
30	MFAST-A-013-2_REVA3	PWA INTERFACE, MICROFAST	1.00	Item 3		
40	900-00061_REVA	SCREW, MS #10-32 X 1/2 PANHD	10.00	Item 4	Mil-Spec	NAS1635-3-8
50	920-00027_REVA	WASHER, MS #10 FLAT	10.00	Item 5	Mil-Spec	NAS1149-E-0332-R
60	900-00060_REVA	SCREW, #6-32 X 1/2 PANHD #2 PH	7.00	Item 6	McMaster-Carr Supply Co.	91735A148
70	900-00054_REVA	Dust Cap USB	1.00	Item 7	Amphenol	MUSB2E151015BP
80	900-00066_REVA	Atmospheric Vent, M12	1.00	Item 8	WL Gore & Associates, Inc.	PMF200444
90	900-00062_REVA	SCREW, MS #2-56 X 3/8 PANHD	1.00	Item 9	Mil-Spec	NAS1635-02-6
100	900-00057_REVA	Screw, BHCS 4-40 X 3/16" 316SS	2.00	Item 10	McMaster-Carr Supply Co.	98164A429
110	MFAST-D-020-1_REVA	COVER, SIM CARD, MFAST	1.00	Item 11		
120	MFAST-D-021-1_REVA	GASKET, SIM COVER, MFAST	1.00	Item 12		
130	MFAST-D-083-1_REVA	GASKET, NGF M38999 SIZEC,MFAST	1.00	Item 13		
140	MFAST-D-034-1_REVA	GASKET, SIM TO HOUSING, MFAST	1.00	Item 14		
150	MFAST-D-048-1_REVB	GASKET, BOARD DAMPER, MFAST	2.00	Item 15		
160	MFAST-D-027-1_REVA	GASKET, BOARD PERIMETER, MFAST	5.00	Item 16		
170	MFAST-D-016-1_REVA	GASKET, HOUSING, MFAST	1.00	Item 17		
180	MFAST-D-022-1_REVA	GASKET, THERMAL, FLASH, MFAST	1.00	Item 18		
190	FAST-D-058-1_REVB	THERMAL CONDUCTIVE PAD	1.00	Item 19		
200	MFAST-D-038-2_REVA	DATAPLATE, MICROFAST	1.00	Item 20		
210	MFAST-C-031-1_REVA	CABLE ASSY,RF SMA,100MM, MFAST	1.00	Item 21	Samtec	RSP-197068-01
220	MFAST-C-032-1_REVA	CABLE ASSY, RF RPSMA 120MM	1.00	Item 22	Samtec	RSP-197068-02
230	MFAST-C-031-2_REVA	CABLE ASSY,RF SMA,120MM, MFAST	1.00	Item 23	Samtec	RSP-197068-03

BILL OF MATERIALS

Assy. PN: MFAST-A-010-2_REVB

Assy. Desc. UNIT LEVEL ASSEMBLY, MFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
240	MFAST-D-039-1_REVA	GASKET, THERMAL, RAM, MFAST	1.00	Item 24		
250	900-00065_REVA	SCREW, M2.0X0.40X6MM 18-18 SS	4.00	Item 27	McMaster-Carr Supply Co.	92000A013
260	MFAST-D-037-1_REVA	MICROPROCESSOR MODULE, MFAST	1.00	Item 28	Phytec America	PFL-A-02-KSP057-C.A1
270	990-00003_REVA	THREADLOCKER, 222MS	A/R	Item 29	McMaster-Carr Supply Co.	LOCTITE 222MS
280	990-00146_REVA	ADHESIVE SEALANT RTV CLEAR	A/R	Item 30	Dow Corning	732
					Locitite	5040
290	900-00059_REVA	SCREW, #4-40 X 5/8 FLTHD HEX	4.00	Item 31	McMaster-Carr Supply Co.	90585A205
300	900-00063_REVA	SCREW, MS #2-56 X 1/4 PANHD	1.00	Item 32	Mil-Spec	NAS1635-02-4
310	990-00165_REVA	LUBRICANT, CONNECTOR	A/R	Item 33	Nye Lubricants	8917
320	990-00004_REVA	ADHESIVE, INSTANT 444 TAK-PAK	A/R	Item 34	Contact East, Inc.	121-315
					Hardware Specialties Co., Inc.	20419
					Locitite	444
330	MFAST-D-080-1_REVA	SPACER, LEFT/INBOARD SIDE	1.00	Item 35		
340	MFAST-D-080-2_REVA	SPACER, RIGHT/OUTBOARD SIDE	1.00	Item 36		

***** **END** *****

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BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
5	MFAST-S-015-2_REVA1	SCHEMATIC, INTERFACE, MICROFAST	1.00			
10	MFAST-D-014-2_REVA1	PWB INTERFACE, MICROFAST	1.00			
15	700-00025_REVA	BATT LITH COIN 3.6V 550mAh	1.00	BT1	Tadiran	TLH-2450
20	200-00134_REVA	CAP, CER, 3.3UF, X7T 250V STCKD	2.00	C1, C5	TDK	CKG57NX7T2E335M500JJ
25	200-00135_REVA	CAP, CER, 1UF, X7T 250V 1812	2.00	C2, C4	TDK	CGA8P3X7T2E105K250KA
30	200-00149_REVA	CAP, CER, 0.22UF X7T 250V 1206	5.00	C3, C122, C123, C222, C223	Digi-Key Corp.	C3216X7T2E224K160AA
35	200-00156_REVA	CAP, CER, 3.3UF, X7R 0805	1.00	C34	MURATA	GRM21BR71E335KA73L
40	200-00157_REVA	CAP, CER, 4700PF, NP0 0603	2.00	C97, C106	TDK	C2012X7R1E335K125AB
45	200-00066_REVA	CAP, CER, .1uF, 25V, 0603	25.00	C6, C33, C47, C49, C51, C52, C63, C67, C79, C82, C83, C92, C101, C131, C136, C207, C217, C219, C224 C303, C304, C400, C401, C403, C405	AVX Panasonic Yageo MURATA	06033C104KAT4A ECJ1VF1E104Z CC0603KRX7R8BB104 GRM188R71E104KA01D
50	200-00057_REVA	CAP 1UF 25V 10% CER 0805 XR7	10.00	C7, C9, C15, C16, C18, C54, C71, C73, C124, CX (ECO1365)	Digi-Key Corp. Yageo TDK	445-1354-1-ND CC0805KKX7R8BB105 C2012X7R1E105M125AB
55	200-00094_REVA	CAP, CER, 220nF, 10V, 0402	1.00	C10	TDK	CGA2B1X7R1A224K050BC
60	200-00073_REVA	CAP, 1000pF, 10V, 0402	2.00	C11, C13	Kemet	C0402C102K3RACTU
65	200-00093_REVA	CAP, CER, 10pF, 10V, 0402	2.00	C12, C14	Kemet	C0402C100C8GACTU

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
70	200-00040_REVA	CAP 120PF 50V 5% CER 0603 SMT	3.00	C17,C72,C301	Kemet	C0603C121J5GACTU
75	200-00158_REVA	CAP, CER, .033UF, X7R 1210	2.00	C132,C134	Panasonic	ECJ-1VC1H121J
80	200-00041_REVA	CAP .01UF 50V 10% CER 0603 X7R	5.00	C50,C125,C126 ,C221,C404	Kemet	C1210C333KFRACTU
85	200-00140_REVA	CAP, CER,10000PF,X7R 100V 0603	1.00	C32	Digi-Key Corp.	CL10B103KB8NNNC
90	200-00159_REVA	CAP, CER, 0.1UF, 250V X7T 0805	2.00	C200,C216	Kemet	C0603C103K5RACTU
95	200-00142_REVA	CAP, CER, 100UF, X6T 6.3V 1206	9.00	C35,C36,C37,C 38,C39,C40,C7 5,C77,C78	Vishay	VJ0603Y103KXAA
100	200-00170_REVA	CAP, X2Y, 0.1UF, X7R 25V 0805	8.00	C41,C48,C58,C 59,C62,C65,C6 6,C74	MURATA	GRM188R71H103KA01D
105	200-00143_REVA	CAP, CER, 4.7UF, X7R 80V 1210	3.00	C42, C43, C215	TDK	C1608X7R2A103K080AA
110	200-00144_REVA	CAP, ALUM, 560UF,80V 12.5X36.5	1.00	C44	TDK	C2012X7T2E104K125AA
115	200-00118_REVA	CAP, CER, 10uF, X7R 10V 0805	2.00	C53,C68	MURATA	GRM31CD80J107ME39L
120	200-00145_REVA	CAP, CER, 0.5PF, NP0 50V 0402	2.00	C60.C61	TDK	C3216JB1A107M160AC
125	200-00104_REVA	CAP, CER, 47uF, 10V, 1210	5.00	C76,C93,C102, C218,C220	Johanson Dielectrics	250X15W104MV4E
130	200-00132_REVA	CAP, X2Y, 5.6PF, C0G 50V 0603	2.00	C84,C309	MURATA	GRM32ER71K475KE14L
135	200-00110_REVA	CAP, CER, 33pF, 50V, 0402	2.00	C87,C308	Taiyo Yuden	HMK325C7475KN-TE
140	200-00160_REVA	CAP, CER, 0.33UF,250V X7T 1210	2.00	C201, C202	United Chemi-Con	EKYB800ELL561MK35S
145	200-00161_REVA	CAP, CER, 1000PF,100V NP0 0402	1.00	C212	Taiyo Yuden	LMK212AB7106MG-T
150	100-00277_REVA	RES, SMT 0402, 0.0, 1/16W	2.00	R301,R305	Johanson Dielectrics	500R07S0R5AV4T
155	200-00152_REVA	CAP, CER, 470PF, NP0 50V 0402	2.00	C129,C130	MURATA	GRM32ER71A476KE15L
160	200-00163_REVA	CAP, CER, 3300PF, X7R 0402	1.00	C214	Taiyo Yuden	LMK325B7476MM-TR
165	300-00096_REVA	DIODE, TVS 45V BIDIR, 5000W	2.00	D200,D201	Johanson Dielectrics	500X14N5R6DV4T
170	300-00113_REVA	DIODE, TVS 33V BIDIR, 600W	2.00	D4,D5	Kemet	C0402C330J5GACTU
175	300-00102_REVA	DIODE, TVS 58V BIDIR, 600W	1.00	D203	TDK	C3225X7T2E334K200AA

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
180	300-00090_REVA	DIODE, SUP BARRIER, 150V 1A	2.00	D6,D202	Diodes inc.	SBR1U150SA-13
185	300-00076_REVA	DIODE, SCHOTTKY, BAT-54 SMT	4.00	D7,D12,D13,D303	Diodes inc. ST Microelectronics	1N5819HW-7-F BAT54ZFILM
190	300-00091_REVA	DIODE, STD, 100V 200MA	1.00	D8	On Semiconductor	MMDL914T1G
195	300-00103_REVA	DIODE, TVS 36V BIDIR, 5000W	1.00	D204	Little Fuse	5.0SMDJ36CA
200	300-00097_REVA	DIODE, ZENER 12V	3.00	D15,D16,D225	On Semiconductor	MM3Z12VST1G
205	300-00025_REVA	DIODE ZEN 5.6V 250MA SOT-23	1.00	D18	Fairchild Semiconductor Vishay	BZX84C5V6 BZX84C5V6T
210	300-00023_REV A	DIODE BAT-54S SMT	2.00	D20,D21	Diodes inc. Zetex	BAT54STA BAT54STA
215	300-00104_REVA	DIODE, STD, 600V 5A	8.00	D207,D208,D211,D212,D215,D216,D219,D220	Digi-Key Corp.	CMR5H-06 TR13
220	300-00105_REVA	DIODE, TVS 24V UNIDIR, 1500W	8.00	D209,D210,D213,D214,D217,D218,D221,D222	Little Fuse BOURNS	SMCJ24A SMCJ24A
225	300-00106_REVA	DIODE, LED, GRN RA, SMT 0603	1.00	D226	Digi-Key Corp.	APGA1602CGC/KA
230	MFAST-D-040-1_REVB	D38999 CONN, MICROFAST	1.00	J1	Amphenol	D38999/20MC35PN
235	400-00241_REVA	CONN, PSH-PSH MICRO SIM, SMT	1.00	J4	TE Connectivity	2174803-2
240	400-00225_REVA	CONN, MINIB USB RCPT, RA TH	1.00	J5	Amphenol	MUSBB15134
245	400-00214_REVB	CONN, 160P DUAL ROW, SMT	1.00		Samtec	ASP-167037-05
250	400-00215_REVB	CONN, 120P DUAL ROW, SMT	1.00		Samtec	BTH-060-01-C-D-A
255	400-00156_REVA	Conn, Recepticle Ultra Mini Co	2.00	J8,J300	Hirose U.S.A.	U.FL-R-SMT-1(10)
260	550-00035_REVA	IND, 33uH, 1.2A, SMT	2.00	L1,L2	Würth Elektronik	74404054330
265	575-00010_REVA	FERRITE BEAD CHIP, 4A, SMT 181	3.00	L3,L8,L9	Taiyo Yuden	FBMH4532HM681-T
270	550-00028_REVA	IND, 10uH, 300mA, SMT 0805	1.00	L4	TDK	MLZ2012M100H
275	550-00030_REVA	IND, 2.7nH, 300mA, SMT 0402	3.00	L5,L6,L14	Johanson Dielectrics	L-07C2N7SV6T
280	575-00007_REVA	FERRITE BEAD CHIP, 2A, SMT 080	4.00	L7,L15,L16,L400	MURATA	BLM21PG221SN1D
285	525-00010_REVA	TRANSFORMER COMMON MODE	2.00	L10,L12	Würth Elektronik	744242101
290	550-00036_REVA	IND, 330uH, 640MA, SMT	1.00	L200	Digi-Key Corp.	ASPI-8040S-331M-T

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
295	500-00035_REVA	TRANS,MOSFET,NCH,16A,200V,SMT	1.00	Q3	Fairchild Semiconductor	FDD18N20LZ
300	500-00036_REVA	TRANS,MOSFET,PCH,4.4A,150V,SMT	3.00	Q4,Q5,Q206	Fairchild Semiconductor	FDMS86263P
305	500-00037_REVA	TRANS,MOSFET,NCH,230MA,250V,SM	2.00	Q6,Q7	Vishay Diodes inc.	SIR873DP-T1-GE3 ZVN4525E6TA
310	100-00004_REV A	RES 10K 1/10W 1% 0805 SMT	12.00	R1,R47,R53,R6 1, R96,R97,R99,R 300,R303, R400,R409,RX (ECO1365)	Panasonic Vishay	ERJ-6ENF1002V CRCW08051002F
315	100-00264_REVA	RES, SMT 0603, 200K, 1/10W, 0.1%	1.00	R27	Panasonic	ERA-3AEB204V
320	100-00021_REV A	RES 100K 1/10W 1% 0805 SMT	14.00	R4,R29,R38,R3 9,R41,R42, R57,R82,R222, R223,R227, R228,R229,R41 2	NIC Componets Panasonic Vishay	NCR10F1003TR ERJ-6ENF1003V CRCW08051003F
325	100-00265_REVA	RES, SMT 0603, 4.99K, 1/10W, 0.1%	1.00	R28	Panasonic	ERA-3AEB4991V
330	100-00266_REVA	RES, SMT 1210, 54.9, 1/2W, 1%	4.00	R68,R69,R70,R 71	Panasonic	ERJ-14NF54R9U
335	100-00280_REVA	RES,SMT 0402,49.9K,1/10W, 0.1%	2.00	R32,R35	Panasonic	ERA-2AEB4992X
340	100-00269_REVA	RES, SMT 0402,23.7K,1/16W,0.1%	1.00	R204	Panasonic	ERA-2AEB2372X
345	100-00246_REVA	RES,SMT 0402,9.53K,1/16W, 0.1%	1.00	R16	Panasonic	ERA-2ARB9531X
350	100-00247_REVA	RES, SMT 0402, 475K, 1/10W, 1%	1.00	R18	Panasonic	ERJ-2RKF4753X
355	100-00248_REVA	RES, SMT 0603,300K,1/10W, 0.1%	1.00	R20	Panasonic	ERA-3AEB304V
360	100-00249_REVA	RES, SMT 0603, 10K, 1/4W, 1%	5.00	R21,R25,R90,R 91,R94	Panasonic	ERJ-PA3F1002V
365	100-00007_REV A	RES 10 1/10W 1% 0805 SMT	1.00	R22	Panasonic Vishay	ERJ-6ENF10R0V CRCW080510R0F
370	100-00258_REVA	RES, SMT 0805, 1M, 1/8W, 0.1%	1.00	R205	Panasonic	ERA-6AEB105V
375	100-00250_REVA	RES, SMT 0402,30K,1/16W, 0.1%	2.00	R24,R81	Panasonic	ERA-2ARB303X
380	100-00270_REVA	RES, SMT 0805, 23.2K, 1/8W, 0.1%	1.00	R207	Panasonic	ERA-6AEB2322V
385	100-00230_REVA	RES, SMT 0805,510K,1/8W,0.1%	1.00	R98	Panasonic	ERA-6AEB514V
390	100-00271_REVA	RES, SMT 1218, 1K, 1.5W, 1%	1.00	R208	Vishay	CRCW12181K00FKEKHP

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
395	100-00217_REVA	RES, SMT 0603, 1M, 1/10W, 1%	3.00	R49,R67,R73	Panasonic	ERJ-3EKF1004V
400	100-00011_REV A	RES 2.21K 1/10W 1% 0805 SMT	1.00	R34	Panasonic Vishay	ERJ-6ENF2211V CRCW08052211F
405	100-00232_REVA	RES, SMT 0603,75K,1/10W,0.1%	1.00	R36	Panasonic	ERA-3AEB753V
410	100-00219_REVA	RES, SMT 0603,162K,1/10W,0.1%	1.00	R37	Panasonic	ERA-3AEB1623V
415	100-00006_REV A	RES 1K 1/10W 1% 0805 SMT	7.00	R44,R217,R218 ,R219,R220,R2 21, R410	Panasonic Vishay Yageo	ERJ-6ENF1001V CRCW08051001F 9C08052A1001FKHFT
420	100-00233_REVA	RES, SMT 0402,100K,1/16W,0.1%	5.00	R51, R62, R203, R213, R214	Panasonic	ERA-2AEB104X
425	100-00234_REVA	RES, SMT 0402,15.4K,1/16W,0.1%	1.00	R52	Panasonic	ERA-2AEB1542X
430	100-00189_REVA	RES, SMT 0603,1.87k,1/10W,0.1%	1.00	R63	Panasonic SUSUMU	ERA-3AEB1871V RG1608P-1871-B-T1
435	100-00216_REVA	RES, SMT 0603, 887K, 1/10W, 1%	1.00	R65	Panasonic	ERJ-3EKF8873V
440	100-00218_REVA	RES, SMT 0603, 240K, 1/10W, 1%	1.00	R66	Panasonic	ERJ-3EKF2403V
445	100-00272_REVA	RES, SMT, HI-SURGE, 5, 2W	4.00	R209,R210,R21 1,R212	RCD Components Inc	PRM1/2XB-5R00-F
450	100-00251_REVA	RES, SMT 0603,20K,1/10W, 0.1%	1.00	R80	Panasonic	ERA-3ARB203V
455	100-00237_REVA	RES, SMT 0402, 100, 1/5W, 5%	2.00	R85,R86	Panasonic	ERJ-PA2J101X
460	100-00238_REVA	RES, SMT 0603, 4.7K, 1/10W, 1%	0.00		Panasonic	ERJ-3EKF4701V
465	100-00252_REVA	RES, SMT 0402, 49.9, 1/10W, 1%	7.00	R100,R101,R10 2,R103,R104,R 105, R411	Panasonic	ERJ-2RKF49R9X
470	100-00253_REVA	RES, SMT 0402, 499, 1/10W, 1%	2.00	R106,R107	Panasonic	ERJ-2RKF4990X
475	100-00273_REVA	RES, SMT, HI-SURGE, 100, 1W	2.00	R215,R216	RCD Components Inc	PRM1/4B-1000-F
480	100-00274_REVA	RES, SMT 0805, 33K, 1/2W, 1%	1.00	R225	Panasonic	ERJ-P6WF3302V
485	100-00210_REVA	RES, SMT 0603, 2.49K, 1/10W,1%	1.00	R226	Panasonic	ERJ-3EKF2491V
490	100-00275_REVA	RES, SMT 0603, 240K,1/10W,0.1%	1.00	R31	Panasonic	ERA-3AEB244V
495	100-00276_REVA	RES, SMT 0603,48.7K,1/10W,0.1%	1.00	R230	Panasonic	ERA-3AEB4872V
500	600-00190_REVA	IC, SIM CARD SWITCH	1.00	U1	Texas Instruments	TXS4558RUKR

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
505	600-00191_REVA	IC, EMBEDDED SIM	1.00	U2	Gemalto M2M	G0705
510	600-00233_REVA	IC, LOW SIDE DRIVER	2.00	U202,U203	ST Microelectronics	VNL5090S5TR-E
515	600-00215_REVA	IC, SWITCH HI SIDE 500MA	3.00	U4,U28,U300	Microchip Technology	MIC2033-05AYM6-TR
520	600-00194_REVA	IC, USB EMI/ESD PROTECT	1.00	U5	On Semiconductor	EMI2121MTTAG
525	600-00231_REVA	IC, SMPS CNTRL, 150V	1.00	U200	Linear Technology	LTC3895HFE#PBF
530	600-00230_REVA	IC, 2-1 MUX	1.00	U204	NXP Semiconductor	74LVC1G157GV,125
535	600-00205_REVA	IC, COMPARATOR	2.00	U10,U19	Linear Technology	LT6703HVIS5-3#TRMPBF
540	600-00232_REVA	IC, SURGE STOPPER	1.00	U201	Linear Technology	LT4356HMS-1#PBF
545	600-00200_REVA	IC, INVERTER 1CH	1.00	U13	NXP Semiconductor	74AHC1GU04GW,125
550	600-00201_REVA	IC, UMODULE DUAL 8A	1.00	U14	Linear Technology	LTM4616IV
555	600-00202_REVA	IC, UMODULE 4A	1.00	U15	Linear Technology	LTM8027IV
560	600-00203_REVA	IC, NAND GATE 1CH	1.00	U16	Texas Instruments	SN74AHC1G00DBVR
565	600-00204_REVA	IC, MCU 32BIT	1.00	U17	NXP Semiconductor	LPC824M201JHI33
570	600-00182_REVA	IC, SDIO/UART VOLTAGE TRANS.	1.00	U20	Texas Instruments	TWL1200IPFBRQ1
575	600-00188_REVA	IC, WIFI MODULE, SMT	1.00	U21	Digi-Key Corp.	TIWI-BLE
580	600-00206_REVA	IC, AND GATE 1CH	3.00	U22,U29,U402	Texas Instruments	SN74AHC1G08DBVR
585	600-00207_REVA	IC, LDO 1.8V OUT, 200MA	1.00	U24	Microchip Technology	MCP1700T-1802E/TT
590	600-00237_REVA	IC, 4G CELLULAR MODEM, SMT	1.00	U25	Gemalto M2M	PLS62-W
595	600-00187_REVA	IC, DUAL BUS BUFFER, SMT	1.00	U26	Texas Instruments	SN74LVC2G126DCU
600	600-00183_REVA	IC, RTC I2C	1.00	U30	Maxim Integrated Products	DS3232SN#
605	600-00189_REVA	IC, DELAY, SMT SOT23-6	1.00	U31	Linear Technology	LTC6994IS6-1#TRMPBF
610	600-00229_REVA	IC, CAN CONTROLLER	2.00	U34,U38	Holt Integrated Circuits Inc.	HI-3110PST
615	600-00217_REVA	IC, OPAMP SINGLE	2.00	U41,U42	Texas Instruments	OPA347SA
620	625-00012_REVA	OSC, 32.768KHZ, 3.3V, 80PPM	1.00	Y1	AVX	KC2520B32K7680CM2E00
625	625-00015_REVA	OSC, 32MHZ, 3.3V, 10PPM	2.00	Y2,Y3	Microchip Technology	DSC1001DL5-032.0000
630	940-00017_REVA	NUT, BROACHING, 4-40	4.00	J1 (SEE NOTE)	PEM ENGINEERING CO.	KF2-440-ET
635	940-00047_REVA	STANDOFF, M-F, SS 3/16"X13/32"	4.00	J1 (SEE NOTE)	McMaster-Carr Supply Co.	91075A470
640	940-00048_REVA	STANDOFF, SWAGE 5MM M2.0x0.40	4.00	J7	Lyn-Tron, Inc	SS5105B-05.0-00

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
645	990-00160_REVA	MOUNT, CABLE TIE, HITEMP	2.00	C44 (SEE NOTE)	McMaster-Carr Supply Co.	70215K32
650	990-00104_REVA	RTV SILICONE, LOCTITE 5040	0.00	SEE NOTES	McMaster-Carr Supply Co.	LOCTITE 5040
655	800-00029_REVA	WIRE, HOOKUP BUS 22AWG SOLID	2.00	SEE NOTES	Beldon	8021
660	200-00164_REVA	CAP, CER, 10UF, X7R 0805	4.00	C206,C300,C302,C402	Digi-Key Corp.	CL21B106KOQNNNE
665	200-00165_REVA	CAP, CER,10UF,X7S 1210 LOW ESL	2.00	C208, C209	TDK	C3225X7S1H106M250AB
670	200-00119_REVA	CAP, CER, 0.22uF, X7R 50V 0603	1.00	C211	MURATA	GCM188R71H224KA64D
675	200-00166_REVA	CAP, CER, 4.7PF, C0G 0402	1.00	C213	AVX	C1608X7R1H224K080AB
680	100-00278_REVA	RES, SMT 0402,42.2K,1/16W,0.1%	1.00	R206	MURATA	04023A4R7CAT2A
685	200-00167_REVA	CAP, CER, 0.1UF, X7R 1210	1.00	C205	GRM1555C1E4R7BA01D	ERA-2ARB4222X
690	500-00041_REVA	TRANS, MOSFET,NCH,7A,200V,SMT	1.00	C203	Panasonic	RN73C1E42K2BTD
695	500-00042_REVA	TRANS, MOSFET,NCH,24A,200V,SMT	1.00	C204	Yageo	CC1210KKX7RYBB104
700	100-00279_REVA	RES, SMT 1206, 0.075, 1W, 1%	1.00	R202	TDK	C3225X7R2E104K200AA
705	300-00107_REVA	DIODE, TVS 40V BIDIR, 5000W	2.00	D1,D17	Infineon	BSC22DN20NS3
710	300-00108_REVA	DIODE, GEN PURP, 200V 1A	1.00	D19	Panasonic	BSC500N20NS3GATMA1
715	300-00109_REVA	DIODE, TVS 78V BIDIR, 600W	1.00	D300	Infineon	ERJ-8BWFR075V
720	300-00110_REVA	DIODE, TVS 90V BIDIR, 600W	1.00	D301	Little Fuse	5.0SMDJ40CA
725	200-00169_REVA	CAP, CER, 4.7PF, C0G 0402 200V	2.00	C305,C306	Little Fuse	ES1D
730	200-00168_REVA	CAP, ALUM POLYMER, 220uF,6.3V	2.00	C307,C310	BOURNS	SMBJ78CA
735	300-00112_REVA	DIODE, 5 DIODE ARRAY ESD	1.00	D302	Little Fuse	SMBJ90CA
740	550-00037_REVA	IND, 18NH, 400MA, SMT	4.00	L300,L301,L302,L303	Digi-Key Corp.	600L4R7BT200T
745	575-00013_REVA	FERRITE BEAD, 2.5A, SMT 1206	1.00	L304	Panasonic	EEF-CX0J221R
750	100-00003_REVA	RES 4.99K 1/10W 1% 0805 SMT	1.00	R43	NXP Semicondutor	PESD3V3L5UY,115
755	600-00236_REVA	IC, VOLT SUPERVISOR	1.00	U301	Würth Elektronik	744786118A
760	600-00234_REVA	IC, GATE OR 2-INPUT SINGLE	1.00	U302	Würth Elektronik	742792118
					Panasonic	ERJ-6ENF4991V
					Vishay	CRCW08054991F
					Linear Technology	LTC2916HTS8-1
					On Semiconductor	MC74VHC1G32DTT1G

BILL OF MATERIALS

Assy. PN: MFAST-A-013-2_REVA3

Assy. Desc. PWA INTERFACE, MICROFAST

S NO	PART NO.	PART DESCRIPTION	QTY	REF. DES.	VENDOR NAME	VENDOR PN
765	100-00063_REVA	RES 3.3 1/8W 1% 0805 SMT	1.00	R200	NIC Componets Panasonic	NRC10F3R32TR ERJ-6RQF3R3V
770	300-00115_REVA	DIODE, TVS 85V BIDIR, 600W	4.00	D400,D401,D402,D403	BOURNS	SMBJ85CA
775	100-00284_REVA	RES, SMT 0805,14.7K,1/4W 0.1%	4.00	R401,R403,R405,R407	Panasonic	ERJ-PB6B1472V
780	100-00285_REVA	RES, SMT, HI-SURGE, 300, 1W	4.00	R402,R404,R406,R408	RCD Components Inc	PRM1/4B-3000F
785	600-00238_REVA	IC, ARINC-429 HOST, 2RXC,1TXC	1.00	U400	Holt Integrated Circuits Inc.	HI-3584APQT-15
790	600-00239_REVA	IC, DECOD/DEMUX 3-8LINE, TSO16	1.00	U401	NXP Semicondutor	74LVC138APW,118
795	600-00243_REVA	IC, INVERTER 1CH 1.8V SOT-553	1.00	U403	On Semiconductor	NL17SZ06XV5T2G
800	625-00016_REVA	OSC, 1MHz, 3.3V, 20PPM	1.00	Y400	Digi-Key Corp.	SIT8924BM-71-33E-1.000000G
810	MFAST-D-082-1_REVA	PLATE, SHIM MICROFAST (.005)	A/R			
811	MFAST-D-082-2_REVA	PLATE, SHIM MICROFAST (.010)	A/R			
812	MFAST-D-082-3_REVA	PLATE, SHIM MICROFAST (.020)	A/R			

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