











Bill of Materials						
Project:	BMS_AFE.PrjPcb					
Revision:	3.1					
Project Lead:	Kevin Chen, Taiping Li					
Generated On:	2018-02-19 7:45:19 PM					
Production Quantity:	1					
Currency	CAD					
Total Parts Count:	152					



LibRef	Designator	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Order Qty 1	Supplier Subtotal 1
CAP CER 2.2UF 100V ±20% X7R 1206	C1	<u>Murata</u>	GRM31CR72A225MA73L	Digi-Key	490-12773-1-ND	0.77	1	\$ 0.77
CAP CER 10uF 25V 20% X5R 0603	C2	<u>Murata</u>	GRM188R61E106MA73D	Digi-Key	490-7202-1-ND	0.51	1	\$ 0.51
CAP CER 1UF 50V 10% X7R 0603	C3, C18, C19, C22	Taiyo Yuden	UMK107AB7105KA-T	Digi-Key	587-3247-1-ND	0.31	4	\$ 1.26
CAP CER 2.2UF 25V 10% X5R 0603	C4	<u>Murata</u>	GRM188R61E225KA12D	Digi-Key	490-10731-1-ND	0.2	1	\$ 0.20
CAP CER 10nF 50V 5% X7R 0603	C5, C6, C7, C8, C9, C10, C11, C12, C13,	KEMET	C0603C103J5JAC7867	Digi-Key	399-13384-1-ND	0.22	14	\$ 3.15
	C14, C15, C16, C17, C24			,		-		*
CAP CER 0.1UF 100V 10% X7R 0805 CAP CER 0.1UF 50V 10% X7R 0603	C20, C21 C23	Murata Kyocera AVX	GCM21BR72A104KA37L 06035C-104KAT2A	Digi-Key Digi-Key	490-4789-1-ND 478-5052-1-ND	0.2 0.13	2	\$ 0.40 \$ 0.13
CAP CER 20PF 50V ±5% C0G/NP0 0603	C25, C26	Murata	GRM1885C1H200JA01D	Digi-Key	490-1410-1-ND	0.13	2	\$ 0.28
	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10,		GRW1883C11I2003A01D	Digi-Rey	SMBJ5341B-TPMSCT-	0.14		•
DIODE ZENER 6.2V 5W DO214AA	D11, D12	<u>MCC</u>	SMBJ5341B-TP	Digi-Key	ND	0.75	12	\$ 9.01
FUSE SMT 750MA	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13	<u>Bel</u>	<u>C2Q750</u>	Digi-Key	507-1090-1-ND	0.39	13	\$ 5.03
FUSE 250MA 32VDC 0603	F14, F15	Kyocera AVX	F0603E0R25FSTR	Digi-Key	478-2858-1-ND	0.51	2	\$ 1.03
IND 220uH 0.59A 20%	L1	Laird Steward	TYS6045221M-10	Digi-Key	240-2742-1-ND	0.69	1	\$ 0.69
LED RED CLEAR 2V 0603	LED1	Wurth Electronics	150060RS75000	Digi-Key	732-4978-1-ND	0.18	1	\$ 0.18
LED YELLOW CLEAR 2.1V 0603	LED2	Wurth Electronics	150060YS75000	Digi-Key	732-4981-1-ND	0.18	1	\$ 0.18
LED GREEN CLEAR 2V 0603	LED3	Wurth Electronics	150060VS75000	Digi-Key	732-4980-1-ND	0.18	1	\$ 0.18
CONN 6POS DURA-CLIK 0.079"	P1	Molex	560020-0620	Digi-Key	WM10866CT-ND	1.52	1	\$ 1.52
CONN 8POS DURA-CLIK 0.079"	P2, P3, P4	Molex	560020-0820	Digi-Key	WM10868CT-ND	1.81	3	\$ 5.43
CONN 4POS HEADR MALE 0.1"	P5	Wurth Electronics	61300411121	Digi-Key	732-5317-ND	0.23	1	\$ 0.23
CONN 2POS DURA-CLIK 0.079" VERT	P6, P7	Molex	560020-0220	Digi-Key	WM10862CT-ND	1.03	2	\$ 2.06
MOSFET P-CH 16V 2.5A X2-DFN2015	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12	Diodes	DMG3415UFY4Q-7	Digi-Key	DMG3415UFY4Q-7DICT ND	0.5	12	\$ 5.98
RES 33K OHM 1% 1/4W 0603	R1	Panasonic	ERJPA3F3302V	Digi-Key	P33KBYCT-ND	0.2	1	\$ 0.20
	R2, R4, R42, R43, R44, R45, R46, R47, R54,						-	•
RES 3.3K OHM 1% 1/4W 0603	R55, R56, R57, R58, R59	<u>Panasonic</u>	ERJPA3F3301V	Digi-Key	P3.3KBYCT-ND	0.18	14	\$ 2.53
RES 820 OHM 5% 1/4W 0603	R3	<u>Rohm</u>	ESR03EZPJ821	Digi-Key	RHM820DCT-ND	0.13	1	\$ 0.13
RES 10K OHM 1% 1/10W 0603	R5, R60	<u>Yageo</u>	RC0603FR-0710KL	Digi-Key	311-10.0KHRCT-ND	0.13	2	\$ 0.25
RES 191K OHM 1% 1/10W 0603	R6	<u>Yageo</u>	RC0603FR-07191KL	Digi-Key	311-191KHRCT-ND	0.13	1	\$ 0.13
RES 39.2K OHM 1% 1/10W 0603	R7	<u>Yageo</u>	RC0603FR-0739K2L	Digi-Key	311-39.2KHRCT-ND	0.13	1	\$ 0.13
RES 255K OHM 1% 1/10W 0603	R8	Yageo	RC0603FR-07255KL	Digi-Key	311-255KHRCT-ND	0.13	1	\$ 0.13
RES 0.0 OHM 1/4W 0603	R9, R23, R26, R27, R28, R29, R63, R64	Vishay Dale	CRCW06030000Z0EAHP	Digi-Key	541-0.0SBCT-ND	0.19	8	\$ 1.51
RES 100 OHM 1% 1/10W 0603	R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R30, R61	<u>Yageo</u>	RC0603FR-07100RL	Digi-Key	311-100HRCT-ND	0.02	15	\$ 0.28
RES 1.4k OHM 1% 1/10W 0603	R24	Yageo	RC0603FR-071K4L	Digi-Key	311-1.40KHRCT-ND	0.13	1	\$ 0.13
RES 604 OHM 1% 1/10W 0603	R25	Yageo	RC0603FR-07604RL	Digi-Key	311-604HRCT-ND	0.13	1	\$ 0.13
RES 4.7K OHM 1% 1/10W 0603	R31, R32, R33, R34, R35	Yageo	RC0603FR-074K7L	Digi-Key	311-4.70KHRCT-ND	0.13	5	\$ 0.63
RES 15 OHM 1% 2W 2512	R36, R37, R38, R39, R40, R41, R48, R49, R50, R51, R52, R53	TE Connectivity	352115RFT	Digi-Key	A115988CT-ND	0.6	12	\$ 7.22
RES 120 OHM 1% 1/10W 0603	R62, R65	Yageo	RC0603FR-07120RL	Digi-Key	311-120HRCT-ND	0.13	2	\$ 0.25
Thru Test Point	TH TP1			J - ,				
Thru Test Point	TH TP2, TH TP4							1
Thru Test Point	TH_TP3							
Test Point	TP1							1
IC REG BUCK ADJ 0.1A 10UMAX	U1	Maxim	MAX17552AUB+	Digi-Key	MAX17552AUB+-ND	3.37	1	\$ 3.37
IC REG LDO 5V 0.1A SOT23-5	U2	STMicroelectronics	LD2981CM50TR	Digi-Key	497-7787-1-ND	0.74	1	\$ 0.74
IC MONITOR BATT STACK 48SSOP	U3	Linear Technology	LTC6804IG-1#PBF	Digi-Key	LTC6804IG-1#PBF-ND	23.95	1	\$ 23.95
IC MUX/DEMUX 1X16 24SSOP	U4	Texas Instruments	CD74HC4067SM96	Digi-Key	296-9226-1-ND	1.11	1	\$ 1.11
IC OP AMP GEN PURPOSE RR 10MHZ SOT-23-	U5	Texas Instruments	TLV316QDBVRQ1	Digi-Key	296-45323-1-ND	1.07	1	\$ 1.07
IC PULSE XFMR 1CT:1CT 350UH SMD	XFMR1	Bourns	PT61018AAPEL-S	Digi-Key	PT61018AAPEL-SCT-ND	2.32	1	\$ 2.32
				 			Total:	\$ 84.43
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