

Bill of materials for ELEC.UNIT.0002.0001

1 Revision History

Issue	Date	Engineer	Checked	C/N	Notes
0	14/12/01	K Singh	Name	—	Draft.
1	30/01/02	K Singh	M. Gjessing		First Issue
2	26/03/02	K Singh	M. Gjessing	32/02	Up dated part field 1 on all 10nF 0805 caps

2 Bill of Materials

AEM3000 Minorplanet (MPL) versions only.

Item	Part Type	Description	Part Field 1	Part Field 2
BAT1	CABLE	GSM POWER LEAD	CABL.ASSY.3000.0001	
BIM1	RADIO TRANSCIVER	LOW POWER RADIO	COMP.MODL.S005.0418	COMP.MODL.S005.0433
C1	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C2	CAPACITOR	22pF. 50V. 5%. COG. 0805	COMP.MLCC.S003.0220	
C3	CAPACITOR	22pF. 50V. 5%. COG. 0805	COMP.MLCC.S003.0220	
C4	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C5	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C6	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C7	CAPACITOR	15pF. 50V. 5%. COG. 0805	COMP.MLCC.S003.0150	
C8	CAPACITOR	15pF. 50V. 5%. COG. 0805	COMP.MLCC.S003.0150	
C9	CAPACITOR	0.22F. 50V. Double Layer	COMP.ALEC.T005.0224	
C10	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C11	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C12	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C13	CAPACITOR	4.7uF. 10%. 10V. Tantalum	COMP.TANC.S001.0475	
C14	NOT FITTED			
C15	CAPACITOR	2.2uF. 10%. 10V. Tantalum	COMP.TANC.S002.0225	
C16	CAPACITOR	100uF 35V	COMP.ALEC.T003.0001	
C17	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C18	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C19	CAPACITOR	470uF 6.3V	COMP.ALEC.T004.0001	
C20	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C21	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C22	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C23	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C24	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C25	CAPACITOR	100nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0104	
C26	Reference not used			
C27	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	

Item	Part Type	Description	Part Field 1	Part Field 2
C28	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C29	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C30	CAPACITOR	10nF. 50V. 10%. X7R. 0805	COMP.MLCC.S002.0103	
C31	Reference not used			
C32	NOT FITTED			
D1	DIODE	SOT23. BAS 16	COMP.RECT.S003.0001	
D2	DIODE	SOT23. BAS 16	COMP.RECT.S003.0001	
D3	DIODE	2A. 1000V. S2M	COMP.RECT.S005.0001	
D4	Reference not used			
D5	DIODE	3A. 40V. Schottky Barrier	COMP.RECT.S001.0001	
D6	DIODE	SOT 23. BAV 99	COMP.RECT.S006.0001	
D7	DIODE	SOT 23. BAV 99	COMP.RECT.S006.0001	
D8	DIODE	SOT 23. BAV 99	COMP.RECT.S006.0001	
D9	DIODE	SOT 23. BAV 99	COMP.RECT.S006.0001	
FS1	FUSE	2.50A RESETTABLE FUS E	COMP.PROT.T001.0001	
FS2	FUSE	2.50A RESETTABLE FUS E	COMP.PROT.T001.0001	
FS3	FUSE	0.40A RESETTABLE FUS E	COMP.PROT.T002.0001	
L1	INDUCTOR	220uH 5%, 400mA	COMP.INDR.T001.0224	
L2	INDUCTOR	220uH 5%, 400mA	COMP.INDR.T001.0224	
L3	NOT FITTED			
L4	NOT FITTED			
LED1	LED TRI	LED MULTI COLOR	COMP.OPTO.T001.0001	
LED2	LED RED	VERTICAL	COMP.OPTO.T002.0001	
LED3	LED GREEN	VERTICAL	COMP.OPTO.T002.0002	
LED4	LED RED	VERTICAL	COMP.OPTO.T002.0001	
PL1	CONNECTOR	Molex 43045-800	COMP.CONN.T016.0008	
PL2	CONNECTOR	2mm Pitch Pin Header	COMP.CONN.T020.0001	
PL3	Reference not used			
PL4	NOT FITTED			
Q1	NOT FITTED			
Q2	TRANSISTOR NPN	BCX19. SOT-23	COMP.TRNS.NS04.0001	
Q3	TRANSISTOR NPN	BCX19. SOT-23	COMP.TRNS.NS04.0001	
Q4	TRANSISTOR PNP	BCX17. SOT-23	COMP.TRNS.PS04.0001	
Q5	TRANSISTOR NPN	BCX19. SOT-23	COMP.TRNS.NS04.0001	
Q6	TRANSISTOR PNP	BCX17. SOT-23	COMP.TRNS.PS04.0001	
Q15	NOT FITTED			
R1	Reference not used			
R2	RESISTOR	47K. 5%. 0805	COMP.RSTR.S001.0473	
R3	RESISTOR	4K7. 5%. 0805	COMP.RSTR.S001.0472	
R4	RESISTOR	1M0. 5%. 0805	COMP.RSTR.S001.0105	
R5	RESISTOR	2K7. 5%. 0805	COMP.RSTR.S001.0272	
R6	RESISTOR	1K0. 5%. 0805	COMP.RSTR.S001.0102	
R7	RESISTOR	470R. 5%. 0805	COMP.RSTR.S001.0471	

Item	Part Type	Description	Part Field 1	Part Field 2
R8	RESISTOR	330R. 5%. 0805	COMP.RSTR.S001.0331	
R9	RESISTOR	10K. 5%. 0805	COMP.RSTR.S001.0103	
R10	NOT FITTED			
R11	RESISTOR	1K0. 5%. 0805	COMP.RSTR.S001.0102	
R12	RESISTOR	0R. 5%. 0805	COMP.RSTR.S001.00R0	
R13	RESISTOR	2K7. 5%. 0805	COMP.RSTR.S001.0272	
R14	Reference not used			
R15	RESISTOR	1K5. 5%. 0805	COMP.RSTR.S001.0152	
R16	RESISTOR	10K. 5%. 0805	COMP.RSTR.S001.0103	
R17	RESISTOR	10K. 5%. 0805	COMP.RSTR.S001.0103	
R18	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R19	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R20	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R21	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R22	RESISTOR	2K7. 5%. 0805	COMP.RSTR.S001.0272	
R23	RESISTOR	10R. 5%. 0805	COMP.RSTR.S001.0100	
R24	RESISTOR	2K0. 5%. 0805	COMP.RSTR.S001.0202	
R25	RESISTOR	1K5. 5%. 0805	COMP.RSTR.S001.0152	
R26	RESISTOR	2K7. 5%. 0805	COMP.RSTR.S001.0272	
R27	RESISTOR	1K0. 5%. 0805	COMP.RSTR.S001.0102	
R28	RESISTOR	47R. 5%. 0805	COMP.RSTR.S001.0470	
R29	NOT FITTED			
R30	NOT FITTED			
R31	RESISTOR	10R. 5%. 0805	COMP.RSTR.S001.0100	
R32	Reference not used			
R33	Reference not used			
R34	Reference not used			
R35	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R36	RESISTOR	10K. 5%. 0805	COMP.RSTR.S001.0103	
R37	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R38	RESISTOR	100K. 5%. 0805	COMP.RSTR.S001.0104	
R39	RESISTOR	10K. 5%. 0805	COMP.RSTR.S001.0103	
R40	RESISTOR	10K. 5%. 0805	COMP.RSTR.S001.0103	
SK1	CONNECTOR	BNC SOCKECT	COMP.CONN.T021.0001	
SK2	CONNECTOR	FCC-68 Modular Socket	COMP.CONN.T014.0066	
SK3	NOT FITTED			
SK4	CONNECTOR	R/A MICRO HEADER	COMP.CONN.T022.0005	
U1	MEMORY	128Kx8 CMOS Ram. 32pin	COMP.MEMO.S009.0001	
U2	RESET CONTROLLER	MC34064D	COMP.SFIC.S006.0001	
U3	CLOCK	Real Time Clock- DS14285S	COMP.SFIC.S005.0001	
U4	MICRO CONTROLLER	16Bit QFP	COMP.PROC.S007.0001	
U5	RESET CONTROLLER	PIC16F84A	COMP.PROC.S006.0001	
U6	NOT FITTED			
U7	RS232	RS232 LEVEL SHIFTER	COMP.IFCE.S001.0001	
U8	REGULATOR	2A Step Down Switching Reg	COMP.PSUA.S010.0001	

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Item	Part Type	Description	Part Field 1	Part Field 2
XTAL 1	CRYSTAL	10.240 MHz	COMP.XTAL.T002.0001	
XTAL2	CRYSTAL	16.00 MHz	COMP.XTAL.T0020002	
XTAL3	CRYSTAL	32.7680 kHz	COMP.XTAL.T001.0001	
PCB	CIRCUIT BOARD	PCB AEM3000	COMP.PCBR.0002.0001	

Notes:

1. Part field 2 is to permit different build options. Refer to specified drawings for details.
2. Blank fields denote parts not fitted.
3. Part fields separated by horizontal lines may be selected independently of each other.

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