

ELECTRICAL PARTS LIST

APB EPL
Aerospace Corporation

Program LRO / CRaTER Subsystem Electronics Box Dwg. No. 32-03004.02 rev 12 AS BUILT

Engineer W. Crain Phone 310-336-8530 S/N 5 AS BUILT

Remarks included changes from rev 11 S/N 4 as built. Further changes to reflect S/N 5 as built: update #35A - E selects, update #66A-D, remove #66D, update #30A-E, add #30F, chg #6 qty to 0, chg #21 qty to 4, rm #23B
 chg #18 qty to add 2 parts for noise improvement, chg #29 value to OPEN.

Board Name Analog Processing Board

Item No.	QTY	Part Description	Specification / Part Number	Screening	Value	Manufacturer	PCB Reference Designations
001	1	AD590 Temperature Transducer; SM	AD590LF/QMLR	5962R8757103VXA	n/a	Analog Devices	U8
002	6	RH1814MW, radhard opamp, SM	RH1814MW	Mfgr inhouse	n/a	Linear Tech	U101,U201,U301,U401,U501,U601
003	1	RH1498M, radhard opamp, SM	RH1498MW	Mfgr inhouse	n/a	Linear Tech	U5
004	6	RH119W, radhard comparator, SM	RH119W	Mfgr inhouse	n/a	Linear Tech	U103,U203,U303,U403,U503,U603
005	8	RH1078, radhard precision opamp, SM	RH1078MW	Mfgr inhouse	n/a	Linear Tech	U102,U202,U302,U402,U502,U602,U6,U7
006	0	Dosimeter	ADS-01	Mfgr inhouse	n/a	Aerospace, Teledyne	U9 - NOT INSTALLED
007	1	HCS14KMSR schmitt trigger inverter, SM	5962R9568101VXC	MIL-PRF-58535, Class Q	n/a	Intersil	U1
008	3	HCTS74KMSR flip flop, SM	5962R9576301VXC	MIL-PRF-58535, Class Q	n/a	Intersil	U2,U3,U4
009	1	ACS03, radhard NAND gate, open drain, DIP	5962R9670301VCC	MIL-PRF-58535, Class Q	n/a	Intersil	U10
010	1	2N6989 quad npn bipolar transistor, DIP	JTXV2N6989	MIL-PRF-19500 JANTXV	n/a	Microsemi	Q7
011	1	2N6987 quad pnp bipolar transistor, DIP	JTXV2N6987	MIL-PRF-19500 JANTXV	n/a	Microsemi	Q8
012	7	2N2222A npn bipolar transistor	JTXV2N2222A	MIL-PRF-19500 JANTXV	n/a	Microsemi	Q1,Q2,Q3,Q4,Q5,Q6, Q10
013	1	2N2907A pnp bipolar transistor	JTXV2N2907A	MIL-PRF-19500 JANTXV	n/a	Microsemi	Q9
014	8	1N6642 small signal diode (voidless)	JTXV1N6642	MIL-PRF-19500 JANTXV	n/a	Microsemi	D1,D2,D3,D4,D5,D6,D7,D8
015	12	Ceramic Chip Capacitor, 1%, 100V, 0.01% FR, CC0805	CDR31BP391BFUR	MIL-C-55681	390p	Kemet	C102,C202,C302,C402,C502,C602,C106,C206,C306,C406,C506,C606
016	12	Ceramic Chip Capacitor, 1%, 100V, 0.01% FR, CC0805	CDR31BP101BFUR	MIL-C-55681	100p	Kemet	C103,C203,C303,C403,C503,C603,C113,C213,C313,C413,C513,C613

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017	12	Ceramic Chip Capacitor, 10%, 100V, 0.01% FR, CC0805	CDR01BP100BKUR	MIL-C-55681	10p	Kemet	C3,C4,C5,C7,C8,C9,C107,C207,C307,C407,C507,C607
018	68	Ceramic Chip Capacitor, 10%, 100V, 0.01% FR, CC1206	CDR32BX103BKUR	MIL-C-55681	10n	Kemet	C1,C2,C6,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C104,C105,C108,C109,C111,C112,C204,C205,C208,C209,C212,C221,C304,C305,C308,C309,C311,C312,C404,C405,C408,C409,C411,C412,C504,C505,C508,C509,C511,C512,C604,C605,C608,C609,C611,C612,C31,C32,C33,C34,C35,C36,C37,C38,C39,C40,C41,C42, 2x bond terminals
019	6	Ceramic Chip Capacitor, 10%, 100V, 0.01% FR, CC1825	CDR05BX104BKUR	MIL-C-55681	100n	Kemet	C110,C210,C310,C410,C510,C610
020	15	Ceramic Capacitor, 10%, 50V, RAD	M123A02BXB105KC	MIL-PRF-123/02	1uF	Kemet	C10,C11,C12,C101,C101B,C201,C201B,C301,C301B,C401,C401B,C501,C501B,C601,C601B
021	4	Tantalum Capacitor, 10%, 15V, SM	CWR11HH106KD	TBD	10uF	Kemet	C14,C15,C43,C44
022	30	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B1E00R	MIL-PRF-55342	1.00k	State of the Art	R1,R67,R77,R87,R97,R137,R116,216,R316,R416,R516,R616,R127,R227,R327,R427,R527,R627,R107,R207,R307,R407,R507,R607,R54,R56,RR58,R60,R62,R64
023A	18	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B49D9R	MIL-PRF-55342	49.9	State of the Art	R2,R8,R32,R33,R34,R35,R36,R37,R38,R39,R40,R41,R26,R30,R65,R66
024	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B1E10R	MIL-PRF-55342	1.10K	State of the Art	R112,R212,R312,R412,R512(R3=R512),R612
025	7	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B10E0R	MIL-PRF-55342	10.0K	State of the Art	R31,R113,R213,R313,R413,R513(R4=R513),R613
026	8	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B20E0R	MIL-PRF-55342	20.0K	State of the Art	R7,R42,R114,R214,R314,R414,R514,R614
027	8	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B2E00R	MIL-PRF-55342	2.00K	State of the Art	R6,R124,R224,R324,R424,R524,R624, R9
028	6	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B191ES	MIL-PRF-55342	191K	State of the Art	R12,R17,R19,R21,R43,R46
029	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B511DR	MIL-PRF-55342	OPEN	State of the Art	R49,R50,R51
030	34	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B10D0R	MIL-PRF-55342	10	State of the Art	R15,R52,R105,R205,R305,R405,R505,R605,R23,R24,R27,R29,R72,R73,R74,R75,R76,R78,R79,R80,R81,R82,R83,R84,R85,R86, R88, R89

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030A	2	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B51D1S	MIL-PRF-55342	51.1	State of the Art	R110
030B	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B280DS	MIL-PRF-55342	280	State of the Art	R210
030C	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B154DS	MIL-PRF-55342	154	State of the Art	R310
030D	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B383DS	MIL-PRF-55342	383	State of the Art	R410
030E	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B90D9S	MIL-PRF-55342	90.9	State of the Art	R510
030F	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B301DS	MIL-PRF-55342	301	State of the Art	R610
031	1	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B4E99R	MIL-PRF-55342	4.99K	State of the Art	R25
032	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B100DR	MIL-PRF-55342	100	State of the Art	R53,R55,R57,R59,R61,R63
033	1	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B499DR	MIL-PRF-55342	499	State of the Art	R28
034	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B48E7R	MIL-PRF-55342	48.7K	State of the Art	R201, R401, R601
035A	2	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B3E57S	MIL-PRF-55342	3.57K	State of the Art	R102, R502
035B	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B3E48S	MIL-PRF-55342	3.48K	State of the Art	R202
035C	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B3E40S	MIL-PRF-55342	3.40K	State of the Art	R302
035D	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B3E74S	MIL-PRF-55342	3.74K	State of the Art	R402
035E	1	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B2E94S	MIL-PRF-55342	2.94K	State of the Art	R602
036	12	Potentiometer, 0 - 10K, not for flight, SIP	n/a	n/a	SOCKET	n/a	R102T,R202T,R302T,R402T,R502T,R602T, R108T, R208T, R308T, R408T, R508T, R608T
037	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B750DR	MIL-PRF-55342	750	State of the Art	R103,R203,R303,R403,R503,R603
038	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B4E53R	MIL-PRF-55342	4.53K	State of the Art	R104,R204,R304,R404,R504,R604
039	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B5E11R	MIL-PRF-55342	5.11K	State of the Art	R106,R206,R306,R406,R506,R606

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040	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B1E24R	MIL-PRF-55342	1.24K	State of the Art	R117,R217,R317,R417,R517,R617
041	6	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B3E01S	MIL-PRF-55342	3.01K	State of the Art	R109,R209,R309,R409,R509,R609
042	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B2E74R	MIL-PRF-55342	2.74K	State of the Art	R111,R211,R311,R411,R511,R611
043	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B19E1R	MIL-PRF-55342	19.1K	State of the Art	R115,R215,R315,R415,R515,R615
044	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B15D0R	MIL-PRF-55342	15	State of the Art	R118,R218,R318,R418,R518,R618
045	12	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B200ER	MIL-PRF-55342	200K	State of the Art	R119,R219,R319,R419,R519,R619,R121,R221,R321,R421,R521,R621
046	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B806DR	MIL-PRF-55342	806	State of the Art	R120,R220,R320,R420,R520,R620
047	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B1E62R	MIL-PRF-55342	1.62K	State of the Art	R122,R222,R322,R422,R522,R622
048	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B20D0R	MIL-PRF-55342	20	State of the Art	R123,R223,R323,R423,R523,R623
049	6	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B42E2S	MIL-PRF-55342	42.2K	State of the Art	R125,R225,R325,R425,R525,R625
050	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B3E83R	MIL-PRF-55342	3.83K	State of the Art	R126,R226,R326,R426,R526,R626
051	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B127ER	MIL-PRF-55342	127K	State of the Art	R228,R428,R628
052A	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B499ER	MIL-PRF-55342	499K	State of the Art	R129,R329,R529
052B	6	Resistor, 1%, 50V, 100mW, Class S, RC0805	M55342K06B499ES	MIL-PRF-55342	499K	State of the Art	R10,R11,R14,R16,R47,R48
053	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B9E09R	MIL-PRF-55342	9.09K	State of the Art	R130,R230,R330,R430,R530,R630
054	2	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B392DR	MIL-PRF-55342	392	State of the Art	R68,R71

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055	2	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B3E92R	MIL-PRF-55342	3.92K	State of the Art	R69,R70
056	5	Inductor, 10%, 0.01% FR	M39010/03B-471KR	MIL-PRF-39010	WIRE SHORT	API	L1,L2,L3,L4,L5
057	1	Connector, 78 pins, High Density, 90deg, Dsub	SDD78M4R70T2G		n/a	Positronic	J1
058	1	Connector, combo, Dsub, Straight PCB	SCBM24W7F65SOT2G		n/a	Positronic	J2
059	7	Contact,Shielded,Female, for 24W7 Dsub	FC4102M		n/a	Positronic	J2 shielded contacts
060	8	SMB coax test connector	2009-1511-000		n/a	AEP	J3,J4,OUT1,OUT2,OUT3,OUT4,OUT5,OUT6
061	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B26E7S	MIL-PRF-55342	26.7K	State of the Art	R128, R328, R528
062	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B118ES	MIL-PRF-55342	118K	State of the Art	R229, R429, R629
063	1	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B15E4S	MIL-PRF-55342	15.4K	State of the Art	R5
064	6	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B12E7S	MIL-PRF-55342	12.7K	State of the Art	R13,R18,R20,R22,R44,R45
065	3	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B45E3S	MIL-PRF-55342	45.3K	State of the Art	R101, R301, R501
066A	2	Resistor, 1%, 50V, 100mW, Class R, RC0805	M55342K06B200DS	MIL-PRF-55342	200	State of the Art	R108