Hermes-Lite 2.0beta2 BOM

No PA Build - January 10, 2017

Reference	Spec	Part No.	Supplier	SKU	Price	Qty	Total
B1,B2,B3,B4,B5,B6, B7,B8,B9,B10,B11, B12,B13,B14,B15,B16, B17,B18,B19,B20,B21, B22,B23,B24,B25,B26, B27,B28,B29,B30,B31, B32,B33,B34,B35,B36, B37,B38,B39,B40,B41, B42,B43,B44,B45,B46, B47,B48,B49,B50,B51, B52,B53,B54,B56,B57, B59,B60,B61,B62,B63, B64,B68,B72,B73,B74, B75,B78,B80,B81,B83, B84,B85,B86,B87,B88, B89,B90,B91,B92,B113, B114,B115,B116	0.1uF 0603$\geq$X5R$\geq$50V$\leq$20%	C0603C104M5RACTU	Mouser	80-C0603C104M5R	0.01	84	1.18
C1,C2,C3,C4,C6,C7, C8,C9,C12,C25,C35, C38,C39,C40,C41,C44, C45,C62,C64,C66,C70	10uF 0603$\geq$X5R$\geq$6.3V$\leq$20%	GRM188R60J106KE47D	Digi-Key	490-12538-1-ND	0.09	21	1.95
C5,C16,C22	100uF 1206$\geq$X5R$\geq$6.3V$\leq$20%	GRM31CR60J107ME39K	Digi-Key	490-7217-1-ND	0.60	3	1.80
C13,C19	4.7nF 0603$\geq$X5R$\geq$25V$\leq$20%	CL10B472KB8NNNC	Digi-Key	1276-1098-1-ND	0.10	2	0.20
C14,C15,C20,C21	22uF 0805$\geq$X5R$\geq$6.3V$\leq$20%	GRM21BR60J226ME39L	Digi-Key	490-1719-1-ND	0.24	4	0.96
C17,C23,C43	10uF 1206$\geq$X5R$\geq$25V$\leq$20%	CL31A106KAHNNNE	Digi-Key	1276-1075-1-ND	0.22	3	0.66
C18,C24	4.7uF 0805$\geq$X5R$\geq$25V$\leq$20%	GRM21BR61E475KA12L	Digi-Key	490-3335-1-ND	0.15	2	0.30
C26,C60,C61,C63,C65, C67,C68,C69,C71,C72, C73,C74	1uF 0603$\geq$X5R$\geq$6.3V$\leq$20%	GRM188R61C105KA93D	Mouser	81-GRM39R105K16	0.02	12	0.22
C28,C29	22uF 0805$\geq$X5R$\geq$25V$\leq$20%	GRM21BR61E226ME44L	Mouser	81-GRM21BR61E226ME4L	0.40	2	0.80
C36,C37	15pF 0603NP0$\geq$6.3V$\leq$5%	CC0603JRNPO9BN150	Digi-Key	311-1060-1-ND	0.10	2	0.20
C46	1uF 0805$\geq$X5R$\geq$25V$\leq$20%	CL21B105KAFNNNE	Digi-Key	1276-1066-1-ND	0.10	1	0.10
C48	10uF 0805$\geq$X5R$\geq$6.3V$\leq$20%	GRM21BR60J106ME19L	Mouser	81-GRM21BR60J106ME19	0.10	1	0.10
C49	75pF 0805NP0$\geq$100V$\leq$5%	08051A750JAT2A	Digi-Key	478-3743-1-ND	0.26	1	0.26

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C50	150pF 0805NP0≥100V≤5%	CC0805JRNPO0BN151	Digi-Key	311-1839-1-ND	0.13	1	0.13
C51	160pF 0805NP0≥100V≤5%	GRM2165C2A161JA01D	Mouser	81-GRM2165C2A161JA1D	0.16	1	0.16
C52,C55,C57	100pF 0805NP0≥100V≤5%	CL21C101JCANNNC	Digi-Key	1276-1261-1-ND	0.10	3	0.30
C53	10pF 0805NP0≥6.3V≤5%	CC0805JRNPO9BN100	Digi-Key	311-1099-1-ND	0.10	1	0.10
C56	180pF 0805NP0≥100V≤5%	CC0805JRNPO0BN181	Mouser	603-CC805JRNPO0BN181	0.23	1	0.23
CN1	2x5 M 0.1in	67997-410HLF	Digi-Key	609-3243-ND	0.26	1	0.26
CN2	Power	OSTTC020162	Digi-Key	ED2600-ND	0.46	1	0.46
CN3	Eth MagJack	L829-1J1T-43	Mouser	530-L829-1J1T-43	5.72	1	5.72
CN4	4x2 M 0.1in HDR RA	61300821021	Mouser	710-61300821021	0.74	1	0.74
CN11	2x1 M 0.1in HDR RA	M20-9960245	Mouser	855-M20-9960245	0.15	1	0.15
D1	TVS Diode	CDSOD323-T05L	Mouser	652-CDSOD323-T05L	0.87	1	0.87
D2,D3,D4,D5	LED RA	LTST-S220KFKT	Digi-Key	160-2031-1-ND	0.25	4	1.00
F1	FUSE PTC 3.0A 24V	MF-LSMF300/24X-2	Mouser	652-MF-LSMF300/24X-2	0.56	1	0.56
FB1,FB2,FB3,FB4,FB5, FB6,FB7,FB8,FB9,FB10, FB11,FB12,FB13,FB15, FB17,FB18,FB19,FB20, FB23,FB24,FB25,FB26, FB28,FB30	FB 0603 100MHz 1A≤25%	MPZ1608S601ATA00	Digi-Key	445-2205-1-ND	0.08	24	1.90
J1,J2,J9,J10,J11, J14,J15,J21,J22,J24, J25,J26,J27	0Ohm 0603≤5%≥1/10W	RC0603JR-070RL	Mouser	603-RC0603JR-070RL	0.01	13	0.10
J6	2x1 M 0.1in HDR S	M20-9990245	Mouser	855-M20-9990245	0.14	1	0.14
L1	3.3uH ≥2.4A	SRN5020-3R3M	Mouser	652-SRN5020-3R3M	0.36	1	0.36
L2	2.2uH ≥2.4A	SRN5020-2R2Y	Mouser	652-SRN5020-2R2Y	0.36	1	0.36
L4,L7	240nH	LQW2BASR24J00L	Mouser	81-LQW2BASR24J00L	0.24	2	0.48
L5,L6,L8,L9	270nH	LQW2BASR27J00L	Mouser	81-LQW2BASR27J00L	0.24	4	0.96
L10,L11	330nH	LQW2BASR33J00L	Mouser	81-LQW2BASR33J00L	0.24	2	0.48
PB1	PCB	PCB	Tindie	Tindie	18.00	1	18.00
PG1	Programmer	USB Blaster	EBay	EBay	3.00	1	3.00
Q1	MOSFET P-CH 30V	DMP3099L-7	Mouser	621-DMP3099L-7	0.33	1	0.33
Q5	MOSFET N-CH 60V 300mA	2N7002K-T1-E3	Digi-Key	2N7002K-T1-E3CT-ND	0.20	1	0.20
R1,R42,R50,R64	33 0603≤1%≥1/10W	RC0603FR-0733RL	Digi-Key	311-33.0HRCT-ND	0.10	4	0.40
R2,R3,R4,R5,R6,R7, R14,R21,R22,R23,R24, R25,R27,R28,R29,R70, R75,R76,R79,R80	10K 0603≤5%≥1/10W	RC0603FR-0710KL	Mouser	603-RC0603FR-0710KL	0.01	20	0.20
R10	2.2 0603≤5%≥1/10W	RC0603FR-072R2L	Digi-Key	311-2.2HRCT-ND	0.10	1	0.10

Reference	Spec	Part No.	Supplier	SKU	Price	Qty	Total
R11	35.7K 0603≤1%≥1/10W	RC0603FR-0735K7L	Digi-Key	311-35.7KHRCT-ND	0.10	1	0.10
R12	11.5K 0603≤1%≥1/10W	RC0603FR-0711K5L	Mouser	603-RC0603FR-0711K5L	0.10	1	0.10
R15	20K 0603≤1%≥1/10W	RC0603FR-0720KL	Digi-Key	311-20.0KHRCT-ND	0.10	1	0.10
R20,R26,R49,R65	2.2K 0603≤5%≥1/10W	RC0603FR-072K2L	Digi-Key	311-2.20KHRCT-ND	0.10	4	0.40
R30,R31,R56,R59,R71, R72,R73,R74,R77,R78, R81,R82	330 0603≤1%≥1/10W	RC0603FR-07330RL	Mouser	603-RC0603FR-07330RL	0.01	12	0.12
R32,R33,R57,R58,R67, R68	1K 0603≤5%≥1/10W	RC0603FR-071KL	Digi-Key	311-1.00KHRCT-ND	0.10	6	0.60
R34,R91	12.1K 0603≤1%≥1/10W	RC0603FR-0712K1L	Digi-Key	311-12.1KHRCT-ND	0.10	2	0.20
R43,R44,R48,R53	4.7K 0603≤5%≥1/10W	RC0603FR-074K7L	Digi-Key	311-4.70KHRCT-ND	0.10	4	0.40
R51,R63	22 0603≤5%≥1/10W	RC0603FR-0722RL	Digi-Key	311-22.0HRCT-ND	0.10	2	0.20
R52,R62	10 0805≤5%≥1/4W	ESR10EZPF10R0	Mouser	755-ESR10EZPF10R0	0.15	2	0.30
R55	75 0603≤5%≥1/10W	RC0603FR-0775RL	Digi-Key	311-75.0HRCT-ND	0.10	1	0.10
R69,R102	1.6K 0603≤5%≥1/10W	RC0603FR-071K6L	Digi-Key	311-1.60KHRCT-ND	0.10	2	0.20
RF1	SMA Straight	5-1814832-1	Mouser	571-5-1814832-1	1.58	1	1.58
T1,T2	Binocular Core	BN43-2402	Kits&Parts	BN43-2402	0.25	2	0.50
U1	EEPROM 2Mx8bit >40MHz	S25FL116K0XMFI041	Mouser	797-25FL116KOXMFI041	0.48	1	0.48
U2	FPGA	EP4CE22E22C8N	Digi-Key	544-3193-ND	35.52	1	35.52
U3,U16	Switching Regulator	ST1S10PHR	Digi-Key	497-6904-1-ND	1.98	2	3.96
U4	Gigabit EthPhy	KSZ9031RNXCC	Mouser	998-KSZ9031RNXCC	3.38	1	3.38
U6	Clock Generator	5P49V5923B000NLGI	Digi-Key	800-3404-ND	2.80	1	2.80
U7	RF ADC DAC	AD9866BCPZ	Mouser	584-AD9866BCPZ	34.59	1	34.59
U9	RF Preamp OpAmp	OPA2677IDDAR	Digi-Key	296-22968-1-ND	3.90	1	3.90
U12	LDO Regulator	AP2204MP-ADJTRG1	Mouser	621-AP2204MP-ADJTRG1	0.50	1	0.50
U17	LDO Regulator	TPS73025DBVR	Mouser	595-TPS73025DBVR	0.65	1	0.65
X1	25MHz	NX3225SA-25.000M-STD-CSR-3	Digi-Key	644-1267-1-ND	0.76	1	0.76
X2	38.4MHz 3.3V≤10ppm	ASTXR-12-38.400MHZ-514054-T	Digi-Key	535-13192-1-ND	2.18	1	2.18

Total Price: $140.04

Line Items: SMT:56 Assembled TH:4 Manual TH:6 Total:66

Parts: SMT:275 Assembled TH:4 Manual TH:7 Total:286

Pins: SMT:862 Assembled TH:38 Manual TH:17 Total:917

Do Not Include: B55 B58 B65 B66 B67 B69 B70 B71 B76 B77 B79 B82 B93 B94 B95 B96 B97 B98 B99 B100 B101 B102 B103 B104 B105 B106 B107 B108 B109 B110 B111 B112 B117 B118 B119 B120 B121 C10 C11 C27 C30 C31 C32 C33 C34 C42 C47 C54 C58 C59 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C144 C145 C146 C147 C148 C149 C150 C151 CL1 CL2 CL3 CL4 CN5 CN6 CN7 CN8 CN9 CN10 CN12 D6 D7 D8 D9 D10 D11 DB1 DB2 DB3 DB4 DB5 DB6 DB8 DB9 DB10 DB11 DB12 DB13 DB14 DB16 DB17 DB18 DB19 DB20 DB22 DB23 DB24 DB26 DB27 DB28 EN1 FB14 FB27 FB29 J3 J4 J5 J7 J8 J12 J13 J16 J17 J18 J19

J20 J23 J28 J29 K2 L3 L33 L34 Q2 Q3 Q4 Q6 Q7 R8 R9 R13 R16 R17 R18 R19 R35 R36 R37 R38 R39 R40 R41 R45 R46 R47 R54 R60 R61 R83 R84 R85 R86 R87 R88 R89 R90 R92 R93 R94 R95 R96 R97 R98 R99 R100 R101 R103 R104 R105 R106 R107 R108 R109 R110 R111 R112 R113 R114 R115 R116 R117 R118 R119 R120 R121 R122 R125 RF2 RF3 T3 U5 U8 U10 U11 U13 U14 U15 U18 X3