

**LNA Power Supply Consolidated Parts List**  
**Mother Board: v1.1 2/22/08**

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**Resistors**

\* If Tol = 10%, then any standard 5% or 1% value within 10% of the value shown may be substituted

Quan	Value	*Tol	Note	Package	Part Number	Vendor
4	1.00Ω	1%	thin-film (metal-film)	0805		
4	91Ω	5%	may be carbon film or MOX	1/2W Axial		
1	150Ω	10%	may be thick-film	0805		
7	300Ω	10%	may be thick-film	0805		
4	470Ω	10%	thin-film (metal-film)	0805		
1	470Ω	10%	may be thick-film	0805		
4	499Ω	1%	thin-film (metal-film)	0805		
1	1.0k	10%	may be thick-film	0805		
1	1.30k	1%	thin-film (metal-film)	0805		
1	1.50k	1%	thin-film (metal-film)	0805		
4	3.3k	5%	1/4W, thick-film	1206	RHM3.3KERCT-ND	DigiKey
1	4.30k	1%	thin-film (metal-film)	0805		
1	4.70k	1%	thin-film (metal-film)	0805		
1	4.7k	5%	may be thick-film	0805		
1	5.10k	1%	thin-film (metal-film)	0805		
9	5.6k	5%	1/4W, thick-film	1206	RHM5.6KERCT-ND	DigiKey
1	6.20k	1%	thin-film (metal-film)	0805		
4	6.8k	10%	thin-film (metal-film)	0805		
12	10.0k	1%	thin-film (metal-film)	0805		
32	10k	10%	thin-film (metal-film)	0805		
4	20.0k	1%	thin-film (metal-film)	0805		
1	22k	10%	may be thick-film	0805		
3	30.0k	0.5%	thin-film (metal-film)	0805		
6	33k	10%	may be thick-film	0805		
5	100k	10%	may be thick-film	0805		
3	270k	0.5%	thin-film (metal-film)	0805		
5	1.0M	10%	may be thick-film	0805		
1	4.7M	10%	may be thick-film	0805		

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**Capacitors**

\* Low-ESR, 10V (min) tantalum may be substituted. Package may be B/C/3528/3216

Quan	Value	Type	Tol	Volt (min)	Package	Part Number	Vendor
4	15	C0G	20%	10	0805		
1	220	C0G	20%	10	0805		
11	0.01	X7R	20%	10	0805		
56	0.1	X7R	20%	10	0805		
4	2.2u	X5R	20%	10	1206/0805		
12	22u	*X5R	20%	10	1210/1206		
2	68u	Tant	20%	25	D/7343	399-4650-1-ND	DigiKey

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**Integrated Circuits**

Quan	Type	Description	Package	Part Number	Vendor
1	74AC00	Quad 2-input Nand	SOIC-14	74AC00SC-ND	DigiKey
1	74AC11	Triple 3-input And	SOIC-14	74AC11SC-ND	DigiKey
2	74AC112	Dual JK Flip-flop	SOIC-16	296-4224-5-ND	DigiKey
1	74AC138SC	1-of-8 Decoder/Demux	SOIC-16	74AC138SC-ND	DigiKey
1	74AC139	Dual 1-of-4 Decoder/Demux	SOIC-16	74AC139SCXCT-ND	DigiKey
2	74AC157	Quad 2:1 Multiplexer	SOIC-16	74AC157SC-ND	DigiKey
4	AD620ARZ	Instrumentation Amp	SOIC-8	AD620ARZ-ND	DigiKey
4	AD712KRZ	Dual OpAmp	SOIC-8	AD712KRZ-ND	DigiKey
1	AD8674ARZ	Quad Precision OpAmp	SOIC-14	AD8674ARZ-ND	DigiKey
1	ADM707ARZ	Supervisory Circuit	SOIC-8	ADM707ARZ-ND	DigiKey
1	ADR293GRZ	Voltage Reference 2.5V	SOIC-8	ADR293GRZ-ND	DigiKey
1	ADR421ARZ	Voltage Reference 5.0V	SOIC-8	ADR421ARZ-ND	DigiKey
1	LS7184	Quadrature Clock Converter	SOIC-8	LS7184-SOIC	US Digital
1	LT1175CT	Regulator, Neg, Adj, 0.5A	TO-220-5	LT1175CT-ND	DigiKey
2	LT1963AET	Regulator, Pos, Adj, 1.5A	TO-220-5	LT1963AET-ND	DigiKey
4	LT3020EMS8	Regulator, Pos, Adj, 0.1A	MSOP-8	57M7946	Newark
2	MAX4052AC	CMOS Analog Multiplexer	SOIC-16	MAX4052ACSE	Maxim
1	MAX4649	SPDT Analog Switch	SOT23-8	MAX4649EKA+TCT-ND	DigiKey
2	MAX6817	Dual CMOS Switch Debouncer	SOT23-6	MAX6817EUT+TCT-ND	DigiKey
4	MOCD223-M	Dual Channel Optocoupler	SOIC-8	MOCD223M-ND	DigiKey
1	TLC555	CMOS Timer	SOIC-8	296-10341-1-ND	DigiKey
4	WMS7101050	Dig pot, 256 taps, 50K	MSOP-8	WMS7101050M-ND	DigiKey
4	WMS7171050	Dig pot, Buf, 100 taps, 50K	MSOP-8	WMS7171050M-ND	DigiKey

**Diodes and Transistors**

Quan	Type	Description	Package	Part Number	Vendor
24	1N4148W	Small signal	SOD-323	1N4148WXTFMSCT-ND	DigiKey
4	Schottky	20V 200mW	SOD-323	SD103CWS-FDICT-ND	DigiKey
8	Zener	3.3V 0.3W	SOD-323	568-3826-1-ND	DigiKey
2	Avalanche	16V TVS Bipolar 400W	DO-214AC	SMAJ16CALFCT-ND	DigiKey
2	Avalanche	5.0V TVS Unipolar 400W	DO-214AC	SMAJ5.0ALFCT-ND	DigiKey
2	Avalanche	7.0V TVS Unipolar 400W	DO-214AC	SMAJ7.0ALFCT-ND	DigiKey
4	LED	50mA continuous Red	T1-3/4 Rad	160-1498-ND	DigiKey
7	LED	Red CML 5310F1	T1 Vert PC	L20261-ND	DigiKey
1	PZT2222A	NPN Switching	SOT-223	PZT2222ACT-ND	DigiKey

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**Other components**

<b>Quan</b>	<b>Type</b>	<b>Description</b>	<b>Package</b>	<b>Part Number</b>	<b>Vendor</b>
26	Ferrite Bead	120Ω Murata BLM31PG121SN1	1206	490-1056-1-ND	DigiKey
1	100uH 10%	Shielded Panasonic ELJ-SA101K	1210	PCD1109CT-ND	DigiKey
1	Resettable Fuse	60V 0.5A 60R050 Littelfuse	Radial 0.2"	576-060R0050U	Mouser
1	Resettable Fuse	60V 0.3A 60R030 Littelfuse	Radial 0.2"	576-060R0030U	Mouser
1	Resettable Fuse	60V 0.4A 60R040 Littelfuse	Radial 0.2"	576-060R0040U	Mouser

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**Connectors**

Quan	Manufacturer Description	Manufacturer	Part Number	Vendor
1	2x15 Male 0.1" CGrid-III Vert Thru Keyed 90130-1230	Waldom/Molex	WM8257-ND	Digikey
1	2x15 0.1" CGrid-III Housing 90142-0030	Waldom/Molex	WM8046-ND	Digikey
5	Fem Crimp terminals 22-24 AWG Molex 90119-2110	Waldom/Molex	WM2559-ND	DigiKey
25	Fem Crimp terminals 26-28 AWG Molex 90119-2121	Waldom/Molex	WM2561-ND	DigiKey
1	2x8 Fem 0.1" Header Vert Thru PPPC082LFBN-RC	Sullins	S7111-ND	DigiKey
1	1x10 Fem 0.1" Header Vert Thru PPPC101LFBN-RC	Sullins	S7043-ND	DigiKey
1	1x2 Fem 0.1" Header Vert Thru PPPC021LFBN-RC	Sullins	S7035-ND	DigiKey
1	2x8 Male Hdr, Vert Thru, 0.1", 0.230"-0.240" contact len			
1	1x10 Male Hdr, Vert Thru, 0.1", 0.230"-0.240" contact len			
1	1x2 Male Hdr, Vert Thru, 0.1", 0.230"-0.240" contact len			
1	1x3 Male Hdr, R/A Thru, 0.1", 0.230"-0.244" contact len			
2	Fem Thru-hole, 2 pos, Low profile, P/N 44812-0020	Molex/Waldom	WM18601-ND	DigiKey
2	Fem Thru-hole, 10 pos, Low profile, P/N 44812-0028	Molex/Waldom	WM18609-ND	DigiKey
2	Fem Thru-hole, 4 pos, Low profile, P/N 44812-0022	Molex/Waldom	WM18603-ND	DigiKey
4	25-pos Male Hdr w/boss 1mm SMT DF9A-25P-1V	Hirose	H10365CT-ND	DigiKey
4	25-pos Fem Hdr w/boss 1mm SMT DF9A-25S-1V	Hirose	H1645-ND or H10377CT-ND	DigiKey

**Panel Meters**

Quan	Manufacturer Description	Manufacturer	Part Number	Vendor
2	BL-330302-01-U: 2VDC, 5V Pwr, Backlight, Pin terms	Jewel Instrumts	180-1012-ND	Digikey

**Hardware**

Quan	Manufacturer Description	Manufacturer	Part Number	Vendor
8	Spacer, 12mm height, M/F 3mm, P/N R30-3001202	Harwin	56K2879	Newark
4	Hex Nut, metric 3mm		H762-ND	Digikey
4	Machine Screw, Pan Head, metric 3x5mm		H742-ND	Digikey
3	Hex Nut, #4-40			
3	Machine Screw, Flat Head, #4-40 5/16"			
3	Nylon Washer/Bushing, #4x.093"	Keystone Elec	3053K-ND	Digikey
2	Machine Screw, Flat Head, #6-32 3/8"			
3	Heatpad, TO-220, P/N SP900S-54	Bergquist	BER175-ND	Digikey

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**Switches**

<b>Quan</b>	<b>Type</b>	<b>Description</b>	<b>Package</b>	<b>Part Number</b>	<b>Vendor</b>
1	C&K 7101K2CQE	Locking SPDT, On-On, PC Pin	Mini Panel	CKN1216-ND	DigiKey
1	C&K 7105SYCQE	SPDT, Mom-Off-Mom, PC Pin	Mini Panel	CKN1007-ND	DigiKey
1	C&K 7301K2ZQE	Locking 3PDT, On-On, Lug	Mini Panel	CKN1496-ND	DigiKey
2	C&K 8125SDCBE	PB SPDT, PC Pin	Mini Panel	CKN1632-ND	DigiKey
1	Grayhill 62P22-L6	Opt Encoder w/button	PC Mount	GH7296-ND	DigiKey