

## LA-S4GS 4-channel gain stage with on-board PS

version A: complete board including power supply and transformer(s)

version B: board without power supply components (powered by another board or external PS)

description	QTY	Supplier	suggested part number	used in version	board location	Notes:
rectifier	2	Mouser	905-KBU6D	A		
AC terminal block	2	Mouser	649-220316-H021B01LF	A		
smoothing cap	4	Mouser	647-UHE1E182MHD6	A	C21,C22,C31,C32	
2.2R, 1W resistor, 5%	2	Mouser	594-5073NW2R200JA100	A	R20,R30	
1k, 1W resistor, 5%	2	Mouser	594-5073NW1K000JA100	A	R21, R31	
1N4001 diodes	4	Mouser	1N4001E-E3/73	A	D1-D4	
LM317A	1	Mouser	512-LM317AHVT	A		
LM337K	1	Mouser	595-LM337KCSE3	A		
22uF EL cap	2	Mouser	661-EKYB800E220MF11D	A	C24,C34	
220uF EL cap	2	Mouser	667-EEU-EB1E221SB	A,B	C23,C33	
DC terminal block	1	Mouser	649-220316-H031B01LF	A,B		
0.1uF cap (bypassing)	4	Mouser	810-FK26C0G1H104J	A,B	C9,C10,C11,C12	
100pF cap (RF shunt)	8	Mouser	594-K101J10C0GF5UH5	A,B	C1-C8	
1/4 W resistors, 68R	4	Mouser	660-MF1/4DC68R0F	A,B	R13-R16	
1/4 W resistors, 91R	2	Mouser	660-MF1/4DC91R0F	A,B	R22,R32	
1/4 W resistors, 100R	4	Mouser	660-MF1/4DC1000F	A,B	R17,R18,R19,R24	
1/4 W resistors, 1k	6	Mouser	660-MF1/4DC1001F	A,B	R3,R4,R7,R8,R23,R33	see NOTE 2
1/4 W resistors, 3.3k	4	Mouser	660-MF1/4DC3301F	A,B	R9,R10,R11,R12	see NOTE 2
1/4 W resistors, 22k	4	Mouser	660-MF1/4DC2202F	A,B	R1,R2,R5,R6	
DIP-8 socket	2	Mouser	571-2-1571552-2	A,B		
LME49720 op-amp	2	Mouser	926-LME49720NA/NOPB	A,B		
signal I/O connectors	8			A,B	IN 1-4, OUT 1-4	see NOTE 3

NOTE 2: four 1k and four 3.3k resistors set the gain to about 12dB. Other gains will require different resistor values

NOTE 3: designed for pin headers. 2-pole 2.54mm LS screw terminals or directly soldering the wires to the board are also options.