

# Demonstration Board DC266A

## Description

The **DC266A** board features LTC1562 and LTC1562-2 quad active RC filter building blocks.

Assembly **DC266A-A** is available with the LTC1562 in a 20-pin SSOP package for very low noise and low distortion filter applications in the frequency range 10kHz to 150kHz.

Assembly **DC266A-B** is available with the LTC1562-2 in a 20-pin SSOP package for very low noise and low distortion filter applications in the frequency range 50kHz to 300kHz.

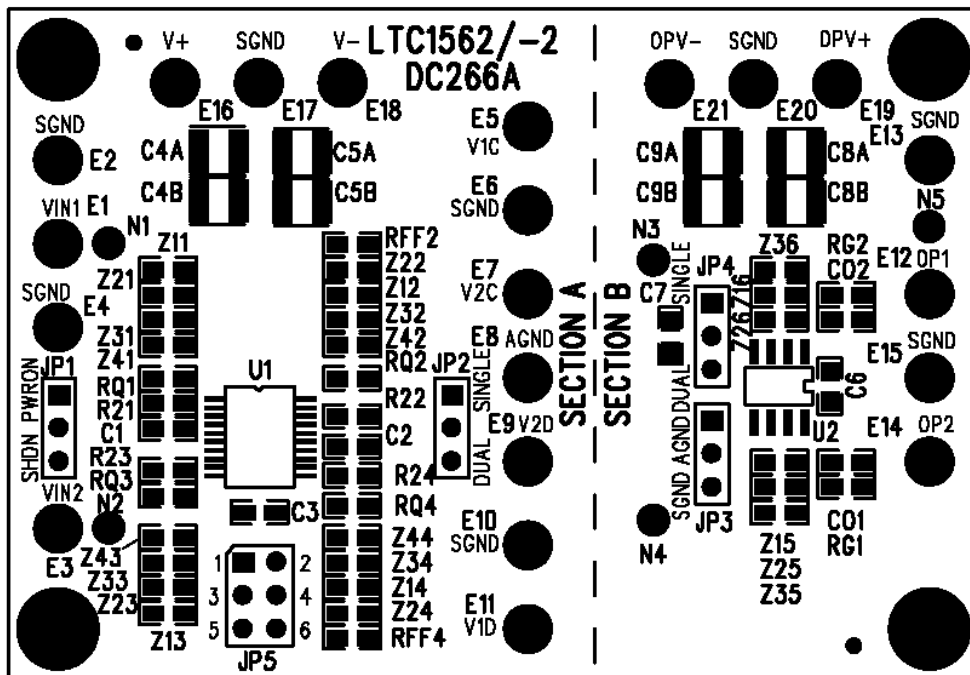
A **DC266A-A** or a **DC266A-B** board has two sections, SECTION A and SECTION B. SECTION A of a **DC266A** board is assembled with a filter IC (LTC1562 or LTC1562-2) in a 20-pin SSOP package with power supply decoupling capacitors and on the board jumpers for dual or single supply operation and power shutdown. Also provided are pads for 0805 size surface mount resistors and capacitors and terminals for filter inputs, outputs and power supply. The printed circuit layout of a **DC266A-A** or a **DC266A-B** assembly allows SECTION A to be configured as single eighth order filter or as dual fourth order filters. SECTION B of a **DC266A** board has a printed circuit layout for a dual op amp configured as two inverting summing amplifiers with a feedback capacitor.

## Applications

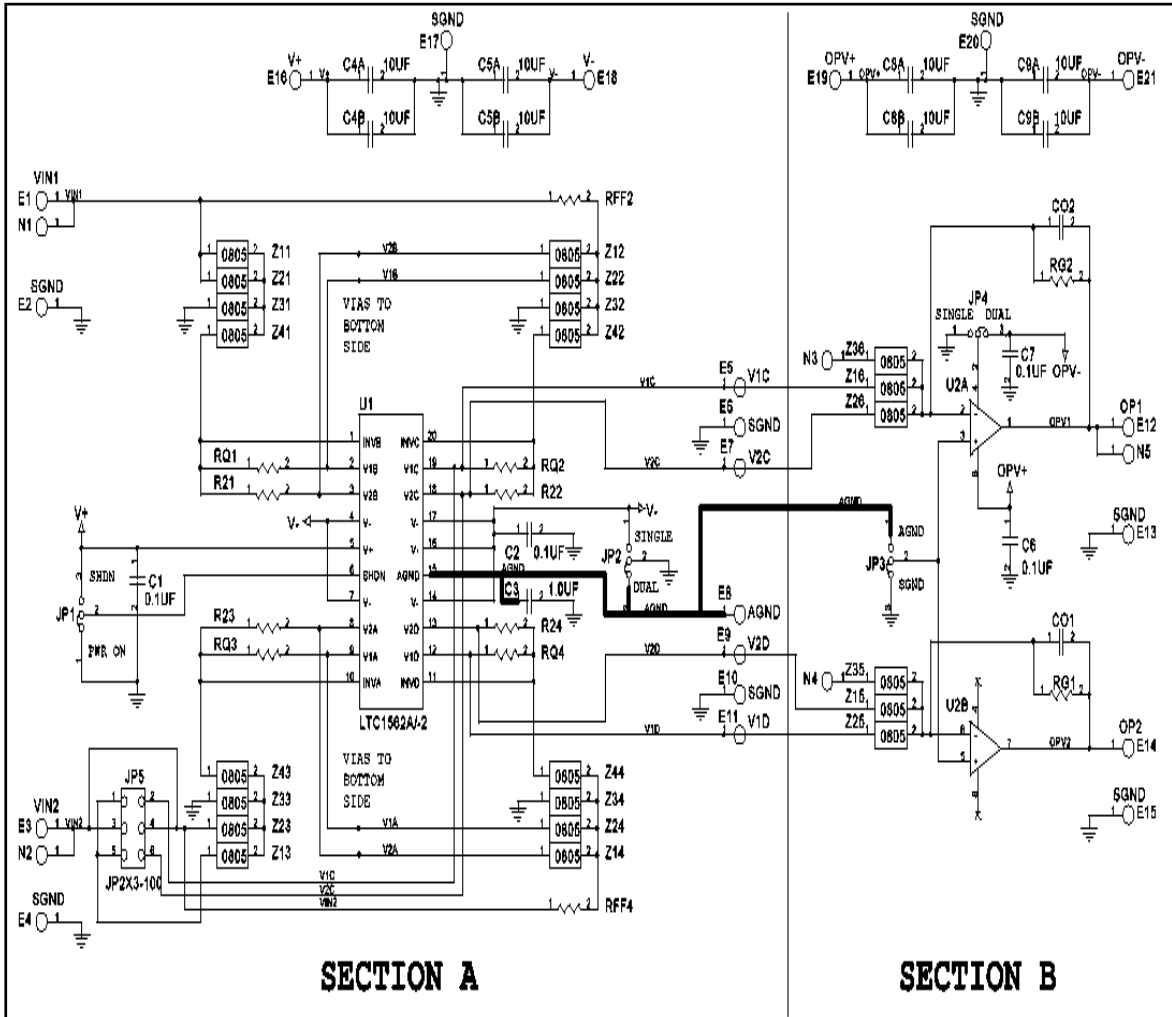
Single 8<sup>th</sup> order or dual 4<sup>th</sup> order low noise filters.

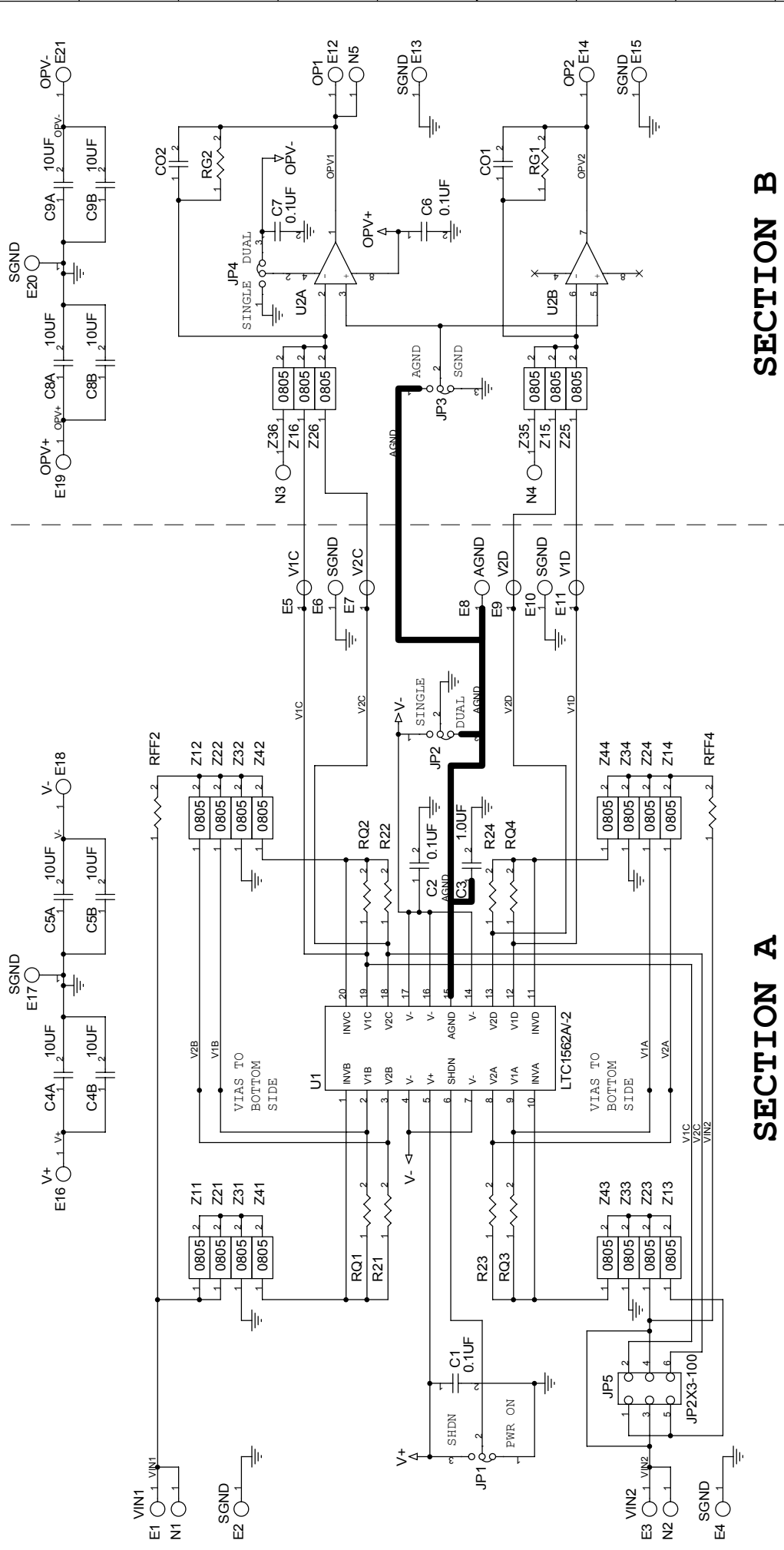
Frequency range 10kHz to 300kHz.

Lowpass, Bandpass, Highpass, Notch, Allpass or Arbitrary response.



TOP SILKSCREEN  
LINEAR TECHNOLOGY  
LTC1562/-2 UNIVERSAL FILTER BOARD  
DC266A\*LTC1562/-2  
DATE: 04-27-99





**SECTION A**

**SECTION B**

- NOTES: UNLESS OTHERWISE SPECIFIED
- INSTALL SHUNTS AS SHOWN BELOW:
    - \* JP1 PIN 1 AND 2 (PWR ON)
    - \* JP2 PIN 2 AND 3 (DUAL)
    - \* JP3 PIN 2 AND 3 (SGND)
    - \* JP4 PIN 2 AND 3 (DUAL)
    - \* JP5 PIN 3 TO 4 AND PIN 5 TO 6.
  - Z41-Z44 ARE ZERO OHM RESISTORS.

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LTC1562A-2 UNIVERSAL FILTER BOARD		Document Number	DC266A-1* LTC1562-2
1630 MCCARTHY BLVD, MILPITAS, CA 95035 PH. (408) 964-8400 FAX (408) 434-0507		Size	B
		Date	Wednesday, January 29, 2003
		Sheet	1 of 1
		Rev	A

**LINEAR TECHNOLOGY CORP.**

<b>Item</b>	<b>Qty</b>	<b>Reference</b>	<b>Part Description</b>	<b>Manufacture / Part #</b>
				<b>NUMBER OF BOARDS =</b>
1	0	RQ1-RQ4, RG1, RG2, CO1, CO2, RFF2, RFF4, Z11-Z16, Z21-Z26 Z31-Z34, R21-R24	RES, 0805 <b>OPT</b>	
2	4	Z41-Z44	RES, 0 OHM, 0805, 5%	TAD CJ10-0R0JM
3	2	C1, C2	CAP, X7R, 0.1UF, 0805, 16V	AVX 0805YC104KAT2
4	0	C6, C7	<b>OPT</b>	
5	1	C3	CAP, X7R, 1.0UF 10V, 10%, 0805	AVX 0805ZC105KAT2
6	4	C4B, C4A, C5B, C5A	CAP, X5R, 10UF 16V, 10%, 1210	TAIYO YUDEN EMK325B106KN
7	0	C8B, C8A, C9B, C9A	<b>OPT</b>	
8	14	E1-11, E16-18	TESTPOINT, TURRET, .090"	MILL-MAX 2501-2
9	0	E12-15, E19-21	<b>OPT</b>	
10	2	JP1-2	HEADER, 3 PINS, 1 ROW, .1"cc	COMM CON 3801S-3G2
11	0	JP3-4	<b>OPT</b>	
12	1	JP5	HEADER, 6 PINS, 2 ROW, .1"cc	COMM CON 3201S-6G2
13	3	FOR JP1-2, JP5	SHUNT, .100	COMM CON CCIJ230-G
14	1	U1	IC, <b>LTC1562-2</b> , SSOP20G	LINEAR TECH. <b>LTC1562-2CG</b>
15	0	U2	IC, SO8 <b>OPT</b>	
			***	
		<b>NOTES: UNLESS OTHERWISE SPECIFIED</b>		
	1	OPT ARE UNSTUFFED COMPONENTS AND SHOULD BE FREE OF SOLDER AFTER ASSEMBLY.		
	2	BREAK BOARDS FROM A PANEL WHEN ASSEMBLY IS COMPLETE.		
	3	INSTALL SHUNTS AS SHOWN BELOW:		
		* JP1 PIN 1 AND 2 (PWR ON)		
		* JP2 PIN 2 AND 3 (DUAL)		
		* JP5 PIN 3 TO 4 AND PIN 5 TO 6.		