

## DESCRIPTION

DC104 is a surface mount printed circuit board for the evaluation of Linear Technology's LTC1068 product family in a 28-lead SSOP package. The LTC1068 product family consists of four monolithic clock-tunable filter building blocks. Demo Board 104 is available in four assembled versions:

Assembly 104-A features the low noise LTC1068CG (clock-to-center frequency ratio = 100), assembly 104-B features the low noise LTC1068-200CG (clock-to-center frequency ratio = 200), assembly 104-C features the high frequency LTC1068-25CG (clock-to-center frequency ratio = 25) and assembly 104-D features the low power LTC1068-50CG (clock-to-center frequency ratio = 50).

All DC104 boards are assembled with input, output and power supply test terminals, a 28-lead SSOP filter device (LTC1068CG Series), a dual op amp in an SO-8 for input or output buffers and decoupling capacitors for the filter and op amps. The filter and dual op amps share the power supply inputs to the board. Jumpers JPA to JPD on the board configure the filter's second order circuit modes, jumper JP1 configures the filter for dual or single supply operation and jumpers JP2 (A-D) to JP3 (A-D) configure the op amp buffers as inverting or non-inverting. Surface mount pads are available on the board for 1206 size surface mount resistors. The printed circuit layout of

DC104 is arranged so that most of the resistor connections for one 8th order filter or two 4th order filters are available on the board. A resistor makes a connection between two filter nodes on the board and for most filter designs, no wiring is required.

# DC104B Schematic (See Datasheet)



BUFFERS CONFIGURATION	U2A				U2B					
	R62	JP2A	JP2B	JP2C	JP2D	R61	JP3A	JP3B	JP3C	JP3D
ASSEMBLED AS NONINVERTING BUFFER DUAL SUPPLY	SHORT	OPEN	SHORT	OPEN	OPEN	SHORT	OPEN	SHORT	OPEN	OPEN
INVERTING BUFFER DUAL SUPPLY	RES	SHORT	OPEN	OPEN	SHORT	RES	SHORT	OPEN	OPEN	SHORT
NONINVERTING BUFFER SINGLE SUPPLY	SHORT	OPEN	SHORT	OPEN	OPEN	SHORT	OPEN	SHORT	OPEN	OPEN
FOR NONINVERTING BUFFER SINGLE SUPPLY	RES	SHORT	OPEN	SHORT	OPEN	RES	SHORT	OPEN	SHORT	OPEN

DEMO BOARD	U1	U2
DC104B-A	LTC1068CG	LT1211
DC104B-B	LTC1068-200CG	LT1211
DC104B-C	LTC1068-250CG	LT1213
DC104B-D	LTC1068-500CG	LT1468

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