

单通道高速运算放大器评估板 (8引脚、SOIC封装，带专用反馈引脚和裸露焊盘)

特性

可快速实现试验板试验/原型操作

用户自定义电路配置

支持边缘安装型 SMA 连接器

可轻松连接至测试设备和其它电路

概述

EB-08REDF-1Z旨在帮助用户评估单通道、高速运算放大器。EB-08REDF-1Z是裸板（即评估板上未焊接任何器件），用户可以快速完成各种运算放大器电路的原型设计，从而最大程度地降低风险，加快产品上市。EB-08REDF-1Z评估板支持ADI公司所

有采用8引脚SOIC封装并带专用反馈引脚和裸露焊盘的单通道高速运算放大器。

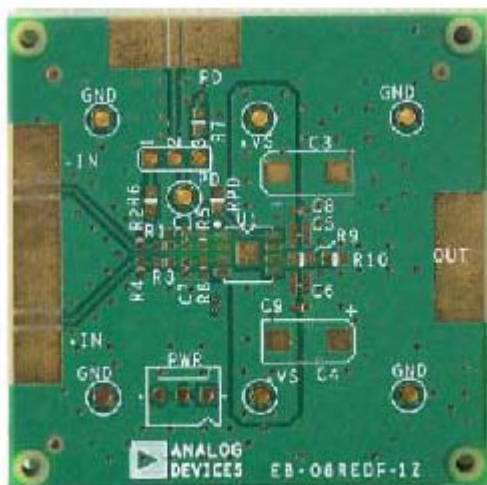
图1显示的是评估板的器件侧，而图2显示的是评估板的电路侧。图3显示的是评估板原理图。

该4层评估板的输入端和输出端支持边缘安装型SMA连接器，可高效快速连接至测试设备或其它电路。

评估板接地层、器件放置和电源旁路经过优化设计，可以最大程度地提高电路的灵活性和性能。评估板支持多种SMT元件尺寸：0402、0508、0603和7343。

图4和图6显示的是评估板装配图。图5和图7显示的是将评估板连接到运算放大器和支持电路的金属布局图。

评估板的器件侧和电路侧图片



NOTES
1. THE EVALUATION BOARD SILKSCREEN PART NUMBER LABELING ON YOUR BOARD MAY BE DIFFERENT FROM WHAT IS SHOWN HERE.

0.0710-001

图1. EB-08REDF-1Z 评估板器件侧



NOTES
1. THE EVALUATION BOARD SILKSCREEN PART NUMBER LABELING ON YOUR BOARD MAY BE DIFFERENT FROM WHAT IS SHOWN HERE.

0.0710-001

图2. EB-08REDF-1Z 评估板电路侧

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修订历史

2010年3月—修订版0至修订版A

EB-O8RE-1Z改为EB-O8REDF-1Z.....	通篇
增加“同相配置”部分.....	5
增加“订购信息”部分.....	6

2010年2月—修订版0：初始版

评估板原理图、装配图和布局图

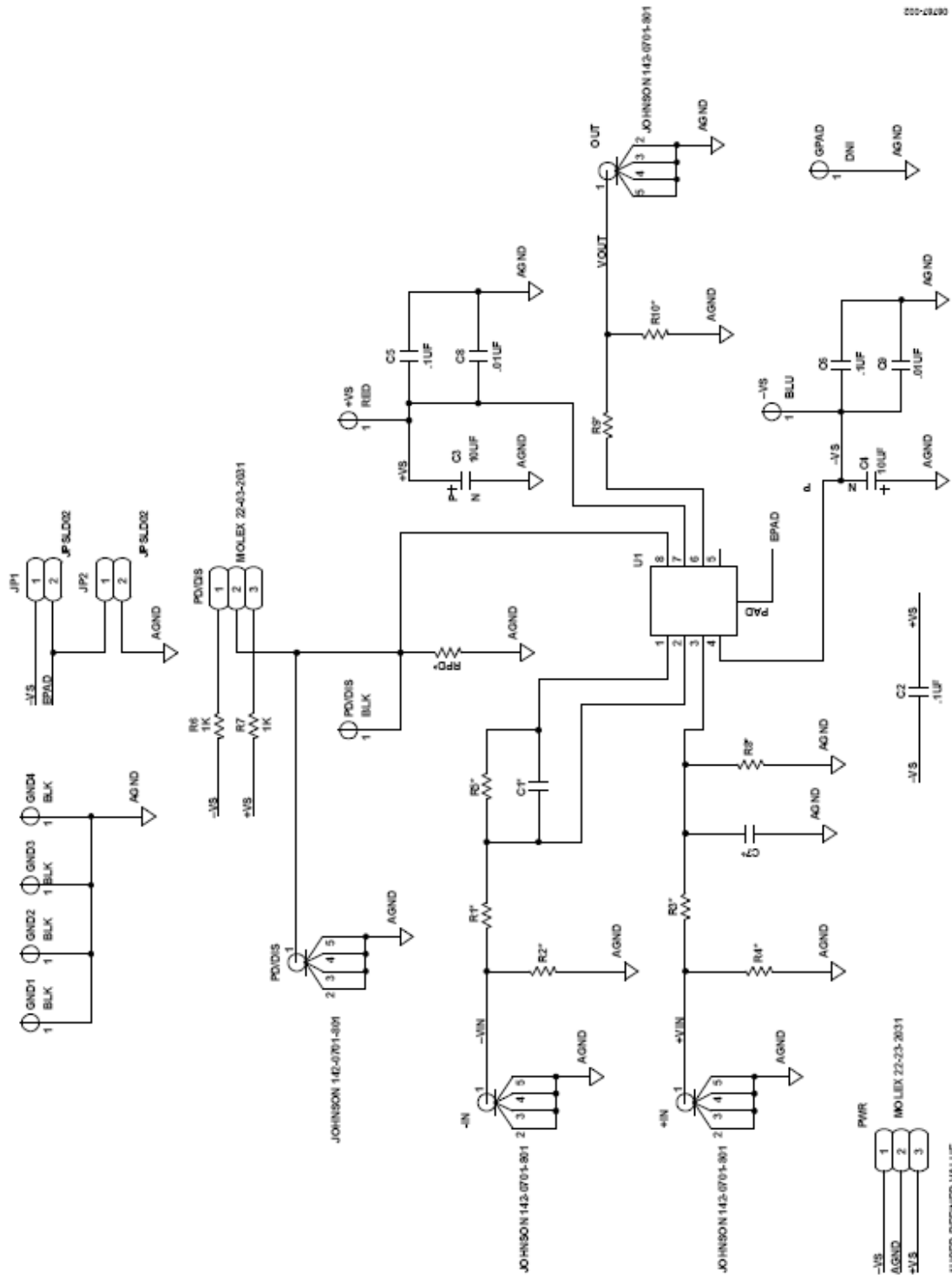


图3. EB-08REDF-1Z 通用评估板原理图

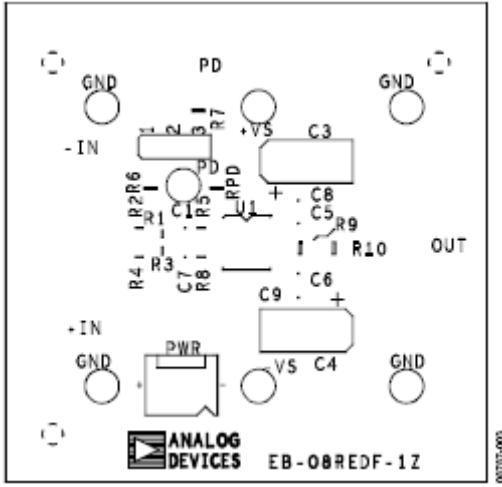


图4. 评估板器件侧装配图

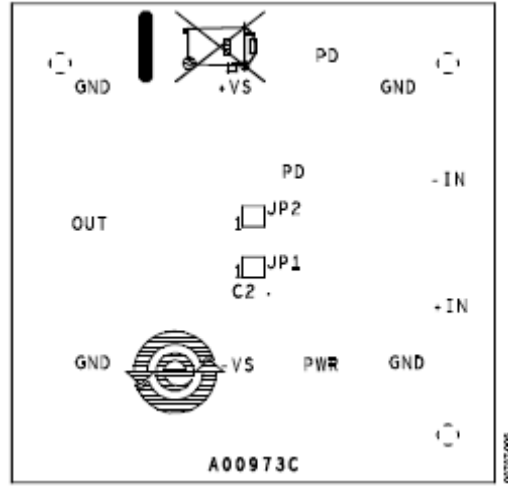


图6. 评估板电路侧装配图

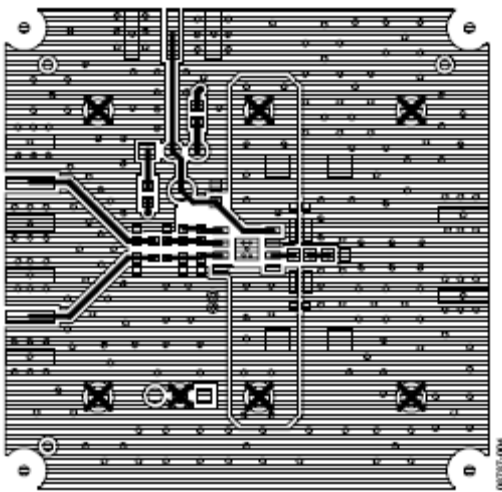


图5. 评估板器件侧布局图

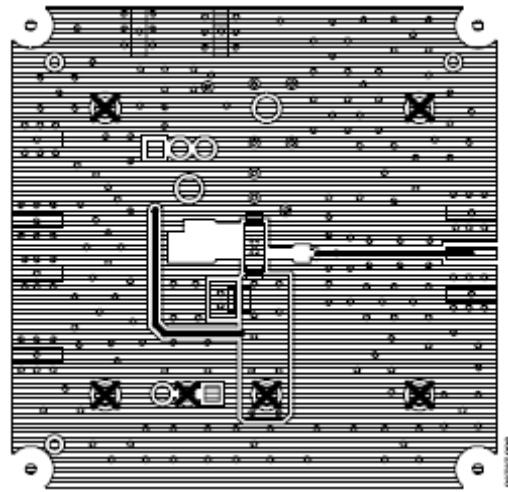


图7. 评估板电路侧布局图

同相配置

在同相配置中使用本评估板时，如果增益大于1，则建议通过以下两种方式放置增益电阻。第一种方法是将增益电阻放在R1位置，并R2位置使用0 Ω 短接至地。第二种方法是将增益电阻放在R1的第一个焊盘与地之间，而不使用第二个电阻（参见图8）。

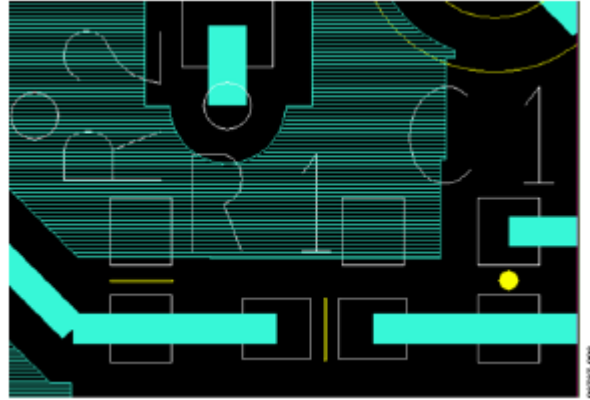


图8.增益大于1 时的同相配置

订购信息

物料清单

表 1

数量	索引标识符	描述	封装
3	+IN, -IN, OUT	SMA/SMT	SMA/SMT
2	C1, C7	用户自定义电容	C0402
2	C8, C9	0.01 μ F 电容	C0402
3	C2, C5, C6	0.1 μ F 电容	C0508
2	C3, C4	10 μ F 电容	C6032
6	R1, R2, R3, R4, R5, R8	用户自定义电阻	R0402
3	R9, R10, RPD	用户自定义电阻	R0603
2	R6, R7	1 k Ω	R0603
7	PD/DIS, GND1, GND2, GND3, GND4, +VS, -VS	测试点	TP
1	PWR	接头3 POS	Molex 22-23-2031
1	PD/DIS	3引脚直插接头	Molex 22-03-2031
2	JP1, JP2	用户自定义电容	焊接跳线
1	U1	放大器	8引脚SOIC

注释

注释

**ESD警告**

ESD（静电放电）敏感器件。带电器件和电路板可能会在没有察觉的情况下放电。尽管本产品具有专利或专有保护电路，但在遇到高能量ESD时，器件可能会损坏。因此，应当采取适当的ESD防范措施，以避免器件性能下降或功能丧失。

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