

SOIC封装的双通道高速运算放大器通用评估板

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
- 符合RoHS标准

概述

ADI公司的高速通用评估板(EB-O8R-2Z)旨在帮助客户快速完成新双通道运算放大器电路的原型设计, 缩短设计时间。该评估板适用于几乎所有ADI公司的双通道运算放大器, 支持各种配置和应用。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。

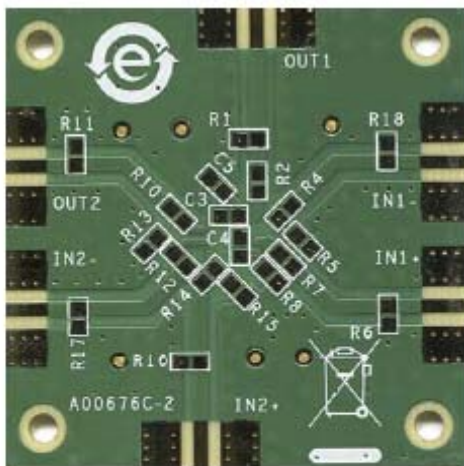
该评估板是2层印刷电路板(PCB), 输入端和输出端支持SMA连接器, 可高效连接至测试设备。接地层、器件放置和电源旁路经过精心布局, 可以将寄生电感和电容降至最低。除旁路电解电容(C1、C2)为3528尺寸外, 评估板器件主要采用SMT 0805外形尺寸。

电源旁路方式有两种。第一种是将分流电容(C3、C4)与电解电容(C1、C2)并联并从各电源连接到地。这种电源旁路技术可抑制电源线路上无用宽带噪声。其实现方法是在C5位置放置0 Ω电阻, 在C1、C2、C3和C4位置放置分流电容。

第二种电源旁路方式是在供电轨之间连接一个电容。该方法使用的器件较少, 并可改善较高频率下的电源抑制比(PSRR)。其实现方法是在C3位置放置0 Ω电阻, 在C4位置放置旁路电容, 而省略C5。最佳旁路方式视电路而定, 因此必须由设计师进行评估。

图3显示的是评估板原理图。图4和图6显示的是评估板装配图。图5显示的是PCB器件侧布局图, 而图7显示的是PCB电路侧布局图。

评估板的器件侧和电路侧图片

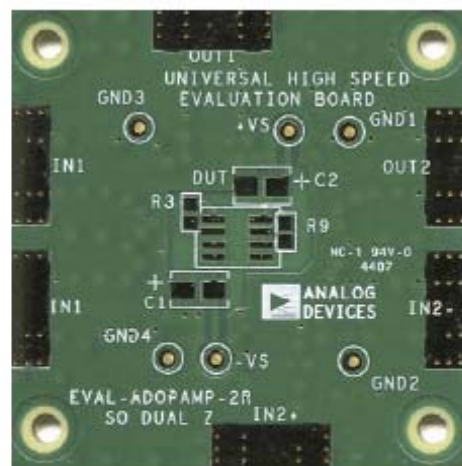


NOTES

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

06982-001

图1. EB-O8R-2Z评估板器件侧



NOTES

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06982-001

图2. EB-O8R-2Z评估板电路侧

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修订历史

2010年4月—修订版0：初始版

评估板原理图和PCB布局图

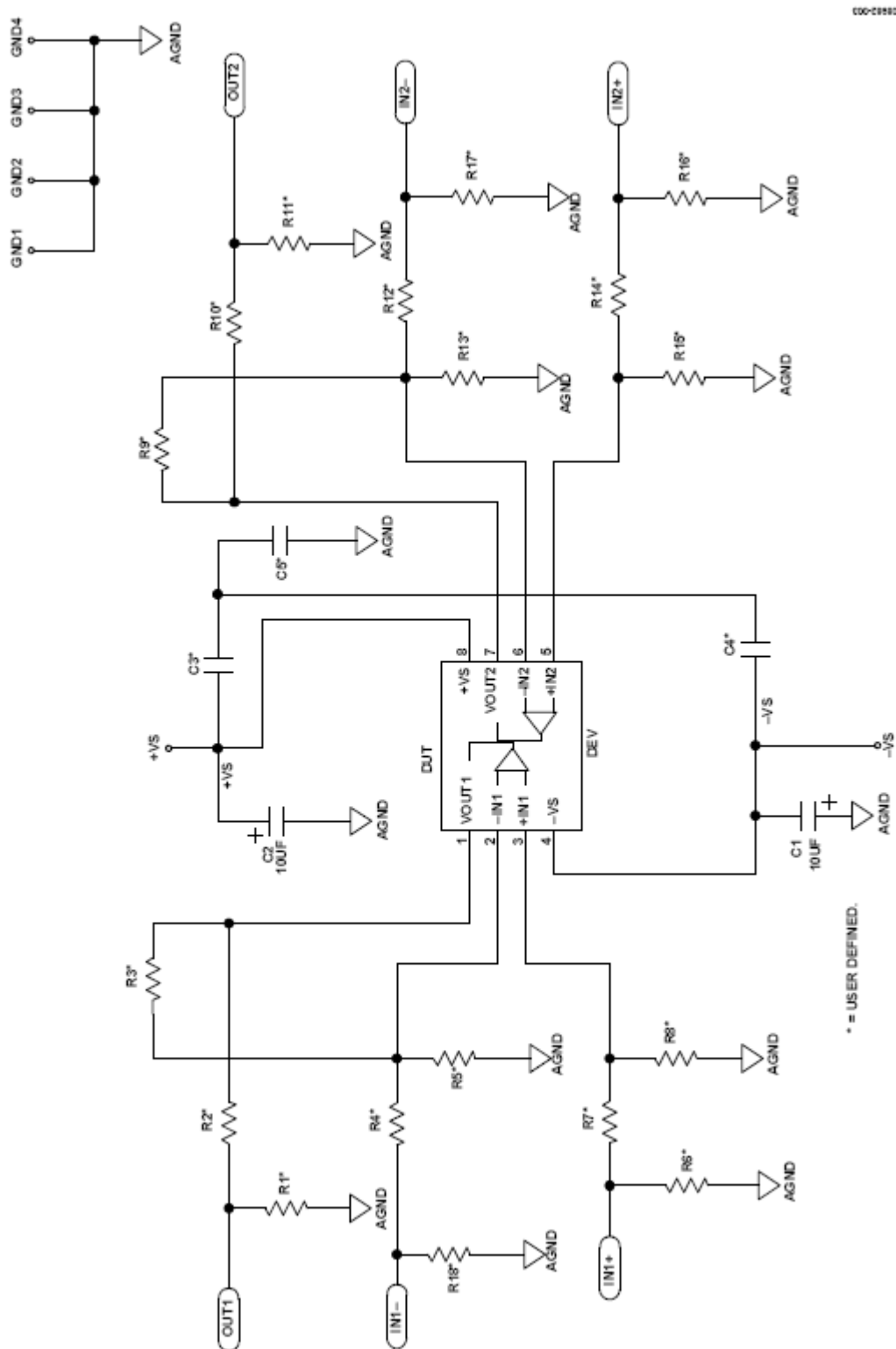


图3. EB-O8R-2Z通用评估板原理图

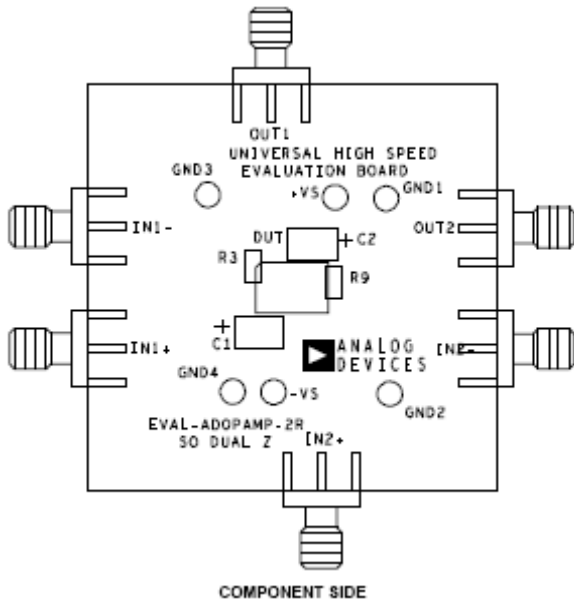


图4. 评估板器件侧装配图

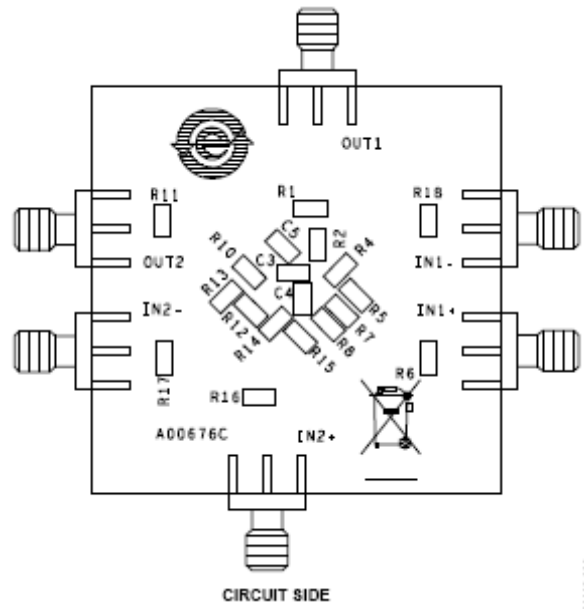


图6. 评估板电路侧装配图

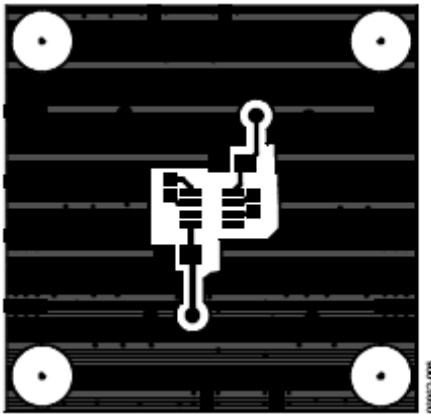


图5. 评估板器件侧布局图

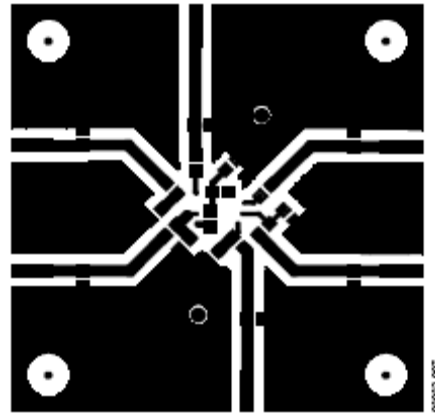


图7. 评估板电路侧布局图

订购信息

物料清单

表1.

数量	索引标识符	描述	封装
6	+VS, -VS, GND1, GND2, GND3, GND4	测试点	TP
2	C1, C2	10 μ F 电容	C3528
3	C3, C4, C5	用户自定义电容	C0805
1	DUT	器件	SOIC-8
6	IN1+, IN1-, IN2+, IN2-, OUT1, OUT2	SMA/SMT	SMA/SMT
18	R1 to R18	用户自定义电阻	R0805

注释

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**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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