

评估板用户指南

UG-082

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双通道高速运算放大器评估板 (16引脚、4 mm×4 mm LFCSP封装,带专用反馈引脚)

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 两个独立电路可增强灵活性

概述

EB-O16CP44-2Z旨在帮助用户评估双通道高速运算放大器。 EB-O16CP44-2Z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-O16CP44-2Z评估板支持ADI公司所 有采用16引脚、4 mm×4 mm引脚架构芯片级封装(LFCSP)并带专用反馈引脚的双通道高速运算放大器。

图1和图2分别显示的是评估板的器件侧和电路侧。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

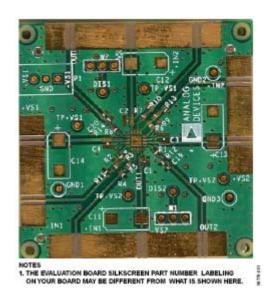


图 1. EB-O16CP44-2Z PCB 的器件侧

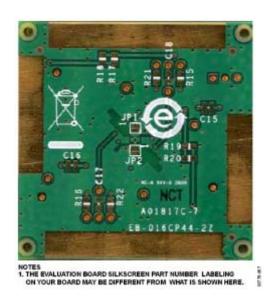


图 2. EB-O16CP44-2Z PCB 的电路侧

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修订历史

2010年5月一修订版0至修订版A

更改图1	1
增加图2; 重新按序编号	1
增加表1	5

2010年1月一修订版0: 初始版

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评估板原理图

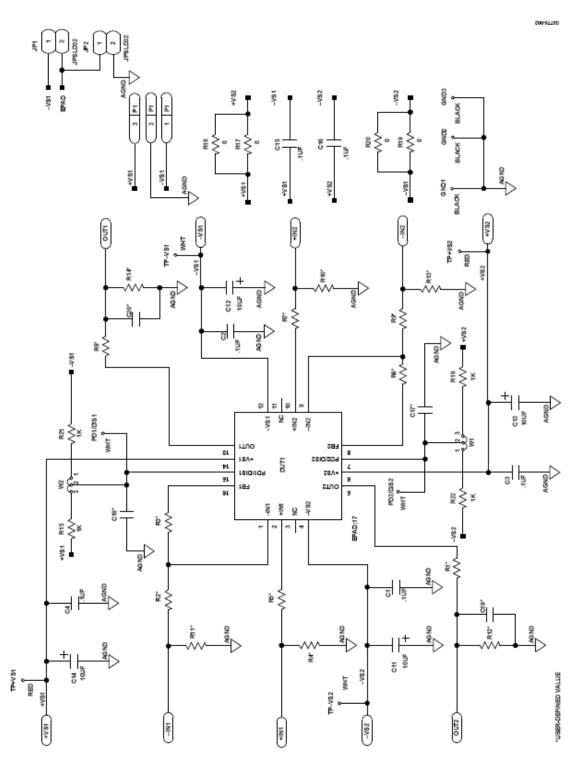


图 3. 通用评估板原理图

装配图和布局图

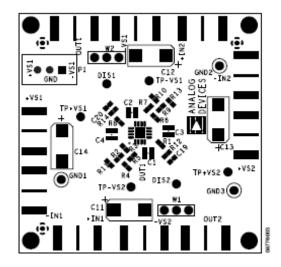


图 4. 评估板器件侧装配图

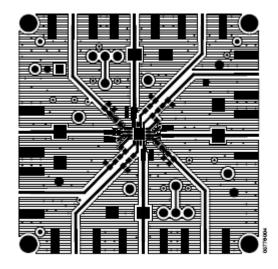


图 5. 评估板器件侧布局图

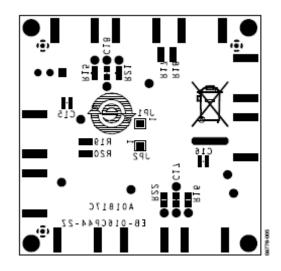


图 6. 评估板电路侧装配图

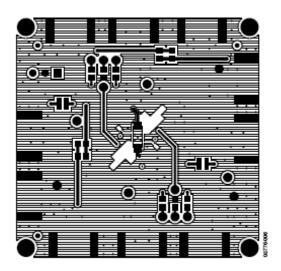


图 7. 评估板电路侧布局图

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订购信息

物料清单

表 1

数量	索引标识符	描述	封装
6	+IN1, +IN2, -IN1, -IN2, OUT1, OUT2	SMA/SMT	SMA/SMT
6	C1, C2, C3, C4, C15, C16	0.1 μF电容	C0508
2	C17, C18	用户自定义电容	C0603
2	C19, C20	用户自定义电容	C0402
4	C11, C12, C13, C14	10 μF电容	C6032
14	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14	用户自定义电阻	R0402
4	R17, R18, R19, R20	0 Ω,两个电源短接在一起	R0603
4	R15, R16, R21, R22	1 kΩ	R0603
9	PD1/DIS1, PD2/DIS2, GND1 to GND3, +VS1, -VS1, +VS2, -VS2	测试点	TP
1	P1	3位接头	Molex 22-23-2031
2	W1, W2	3引脚直插接头	Molex 22-03-2031
2	JP1, JP2	用户自定义跳线	焊接跳线
1	U1	放大器	SOIC

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注释

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注释



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