高速、单电源、轨到轨运算放大器
MicroAmplifier™ 系列

查询样品: OPA4350-DIE

特性

- 轨到轨输入
- 轨至轨输出
- 宽带宽
- 高转换率
- 低噪声
- 低总谐波失真 **(THD) +** 噪声
- 单位增益稳定

应用范围

- 手机功率放大器 **(PA)** 控制环路
- 驱动模数 **(A/D)** 转换器
- 视频处理
- 数据采集
- 过程控制
- 音频处理
- 通信
- 有源滤波器
- 测试设备

说明

OPA4350 轨到轨 CMOS 运算放大器针对低压、单电源运行进行了优化。 轨到轨输入/输出、低噪声、和高速运行使得此器件非常适合于驱动采样模数 (A/D) 转换器。 它也适合于手机功率放大器 (PA) 控制环路和视频处理（75Ω 驱动能力）以及音频和通用应用。

OPA4350 运行在一个低至 2.5V 的单电源上，输入共模电压范围介于接地电压以下 300mV 至正电源以上 300mV 之间。

ORDERING INFORMATION(1)

PRODUCT	PACKAGE DESIGNATOR	PACKAGE	ORDERABLE PART NUMBER	PACKAGE QUANTITY
OPA4350	TD	Bare Die In Waffle Pack(2)	OPA4350TDC1	130
			OPA4350TDC2	10

(1) For the most current package and ordering information, see the Package Option Addendum at the end of this document, or see the TI web site at www.ti.com.

(2) Processing is per the Texas Instruments commercial production baseline and is in compliance with the Texas Instruments Quality Control System in effect at the time of manufacture. Electrical screening consists of DC parametric and functional testing at room temperature only. Unless otherwise specified by Texas Instruments AC performance and performance over temperature is not warranted. Visual Inspection is performed in accordance with MIL-STD-883 Test Method 2010 Condition B at 75X minimum.

This integrated circuit can be damaged by ESD. Texas Instruments recommends that all integrated circuits be handled with appropriate precautions. Failure to observe proper handling and installation procedures can cause damage.

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

BARE DIE INFORMATION

DIE THICKNESS	BACKSIDE FINISH	BACKSIDE POTENTIAL	BOND PAD METALLIZATION COMPOSITION	BOND PAD THICKNESS
10.5 mils.	Silicon with backgrind	Floating	Ti/AlSiCu/TiN	800 nm

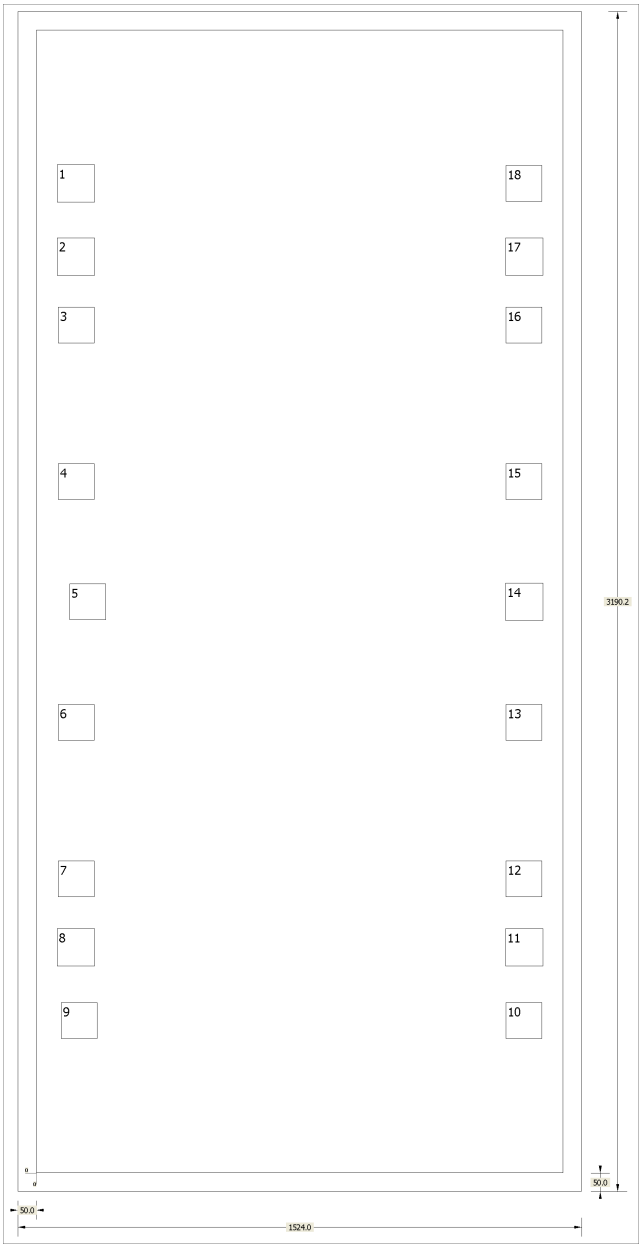

Table 1. Bond Pad Coordinates in Microns(1)

DESCRIPTION	PAD NUMBER	X MIN	Y MIN	X MAX	Y MAX
Out A	1	5	2550.35	107	2652.35
N/C	2	5	2352.5	107	2454.5
-In A	3	7.65	2168.95	105.65	2266.95
+In A	4	7.65	1746.1	105.65	1844.1
V+	5	38.9	1420.7	136.9	1518.7
+In B	6	7.65	1095.3	105.65	1193.3
-In B	7	7.65	672.45	105.65	770.45
N/C	8	5	484.9	107	586.9
Out B	9	15.85	289.45	113.85	387.45
Out C	10	1218.35	289.45	1316.35	387.45
N/C	11	1217	484.9	1319	586.9
-In C	12	1218.35	672.45	1316.35	770.45
+In C	13	1218.35	1095.3	1316.35	1193.3
V-	14	1217	1418.7	1319	1520.7
+In D	15	1218.35	1746.1	1316.35	1844.1
-In D	16	1218.35	2168.95	1316.35	2266.95
N/C	17	1217	2352.5	1319	2454.5
Out D	18	1218.35	2551.95	1316.35	2649.95

(1) Substrate floating

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
OPA4350TDC1	ACTIVE			0	130	RoHS & Green	Call TI	N / A for Pkg Type			Samples
OPA4350TDC2	ACTIVE			0	10	RoHS & Green	Call TI	N / A for Pkg Type			Samples

(1) The marketing status values are defined as follows:
ACTIVE: Product device recommended for new designs.
LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.
NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.
PREVIEW: Device has been announced but is not in production. Samples may or may not be available.
OBSOLETE: TI has discontinued the production of the device.

(2) **RoHS:** TI defines "RoHS" to mean semiconductor products that are compliant with the current EU RoHS requirements for all 10 RoHS substances, including the requirement that RoHS substance do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, "RoHS" products are suitable for use in specified lead-free processes. TI may reference these types of products as "Pb-Free".
RoHS Exempt: TI defines "RoHS Exempt" to mean products that contain lead but are compliant with EU RoHS pursuant to a specific EU RoHS exemption.
Green: TI defines "Green" to mean the content of Chlorine (Cl) and Bromine (Br) based flame retardants meet JS709B low halogen requirements of <=1000ppm threshold. Antimony trioxide based flame retardants must also meet the <=1000ppm threshold requirement.

(3) MSL, Peak Temp. - The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

(4) There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.

(5) Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.

(6) Lead finish/Ball material - Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

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