

4 路低功耗结型场效应晶体管 (JFET) 输入运算放大器

 查询样品: [LF444-DIE](#)

特性

- LM148 的 1/4 电源
- 低输入偏置电流
- 高增益带宽
- 高转换率
- 低噪声 针对低功率的电压
- 低输入噪声电流
- 高输入阻抗
- 高增益

说明

LF444-DIE 4 通道低功率运算放大器提供与工业标准 LM148 一样的交流 (AC) 特性，而同时又大大提升了 LM148 的直流 (DC) 特性。此放大器具有与 LM148 一样的带宽、转换率以及增益，而汲取的电源电流仅为 LM148 的四分之一。除了良好匹配的高压 JFET，LF444 的输入器件将 LM148 的输入偏置和偏移电流减少了 10000 倍。LF444 还有一个针对低功率放大器的极低等效输入噪声电压。

ORDERING INFORMATION⁽¹⁾

PRODUCT	PACKAGE DESIGNATOR	PACKAGE	ORDERABLE PART NUMBER	PACKAGE QUANTITY
LF444	TD	Bare die in waffle pack ⁽²⁾	LF444TDA1	100
			LF444TDA2	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.



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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	Al (0.5%) Cu	1700 nm

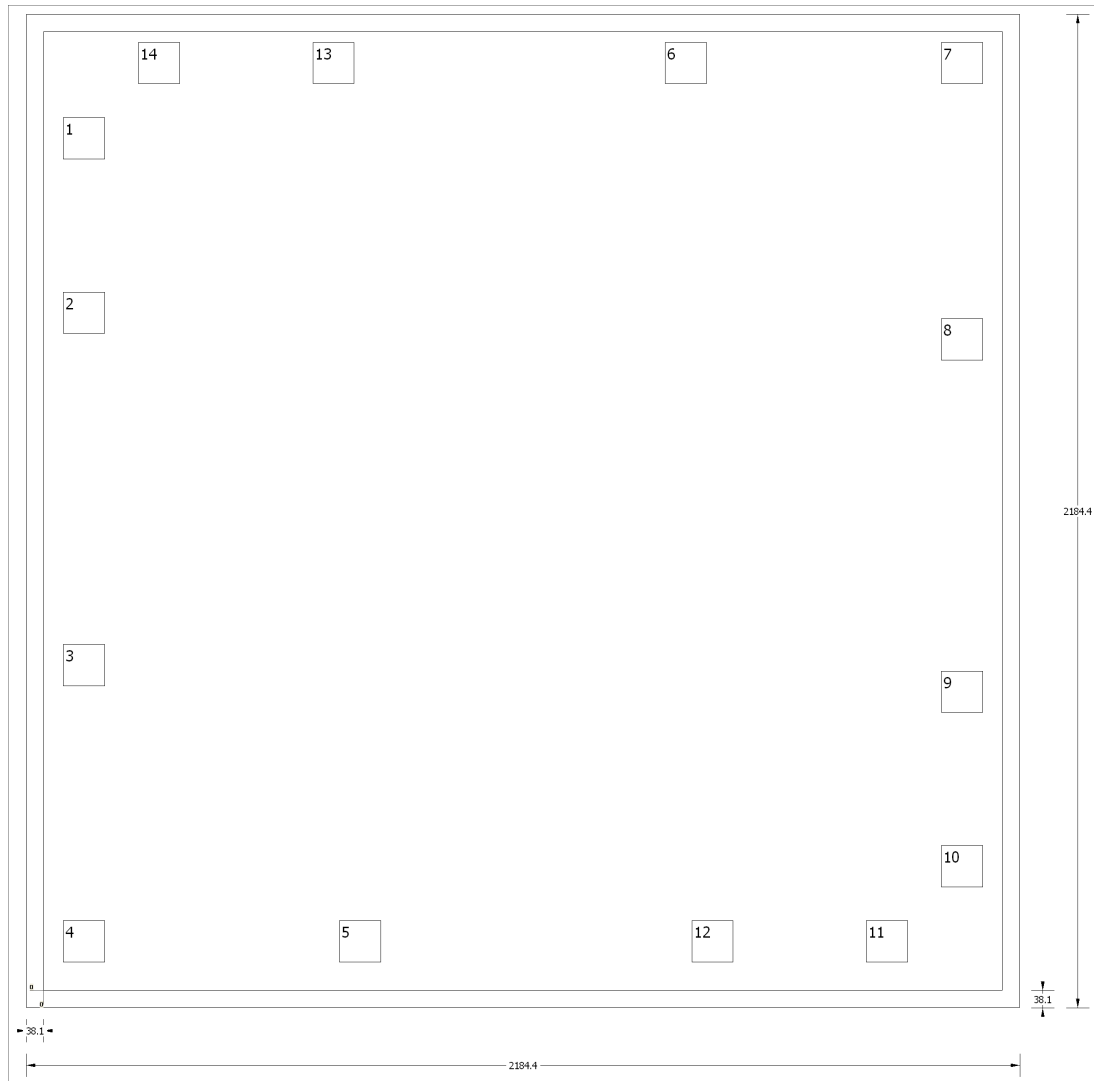


Table 1. Bond Pad Coordinates in Microns

DESCRIPTION	PAD NUMBER	X MIN	Y MIN	X MAX	Y MAX
OUT1	1	-1010.92	773.43	-919.48	864.87
IN1-	2	-1010.92	389.89	-919.48	481.33
IN1+	3	-1010.92	-384.81	-919.48	-293.37
V+	4	-1010.92	-991.87	-919.48	-900.43
IN2+	5	-403.86	-991.87	-312.42	-900.43
IN4+	6	312.42	938.53	403.86	1029.97
V-	7	919.48	938.53	1010.92	1029.97
IN3+	8	919.48	331.47	1010.92	422.91
IN3-	9	919.48	-443.23	1010.92	-351.79
OUT3	10	919.48	-826.77	1010.92	-735.33
OUT2	11	754.38	-991.87	845.82	-900.43
IN2-	12	370.84	-991.87	462.28	-900.43
IN4-	13	-462.28	938.53	-370.84	1029.97
OUT4	14	-845.82	938.53	-754.38	1029.97

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
LF444TDA1	ACTIVE			0	100	TBD	Call TI	N / A for Pkg Type	0 to 0		Samples
LF444TDA2	ACTIVE			0	10	TBD	Call TI	N / A for Pkg Type	0 to 0		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.

OBSELETE: TI has discontinued the production of the device.

(2) Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check <http://www.ti.com/productcontent> for the latest availability information and additional product content details.

TBD: The Pb-Free/Green conversion plan has not been defined.

Pb-Free (RoHS): TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.

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Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

(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.

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