

双通道 250MSPS 反馈接收器 IC

查询样品: [ADS62PF49](#)

特性

- 最大输出采样速率: **250MSPS**
- 与 **ADS62P49** 引脚兼容
- 可变输出分辨率
 - 具有 **14 位** 输出的高分辨率猝发模式: 低 IF 时为 **73dB SNR**, **170MHz** 时为 **70.5dB SNR**
 - 具有 **9 位 250MSPS** 或 **11 位 125MSPS** 的低分辨率
- 双倍数据速率 (DDR) LVDS 输出
- 高达 **6dB** 的可编程增益支持 **SNR / SFDR** 平衡
- **90 dB** 串音
- **1.25W** 功耗
- **64 引脚 QFN 封装 (9 mm × 9 mm)**

应用

- 多载波、多模式蜂窝基础设施基站的反馈路径

说明

ADS62PF49 是一个采样速率高达 250MSPS 的双通道反馈接收器 IC 它在有限时间内实现高分辨率 14 位输出, 之后在最短 8 倍的时间内实现低分辨率模式。它与 ADS62P49 和 ADS62C17 双路 ADC 引脚兼容。

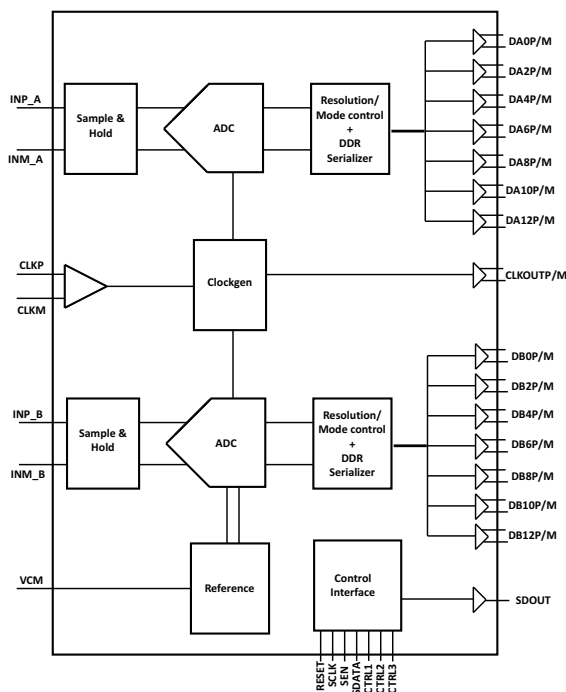
ADS62PF49 具有精细增益选项, 可在较低满量程输出范围内提高 SFDR 性能。它包括一个 DC 偏移校正环路, 可用来消除模数转换 (ADC) 偏移。

它包含内部参考, 并消除了传统参考引脚与相关去耦电容器。所有器件均适用于各种工业温度 (–40°C 至 85°C)。

表 1. 170MHz 输入时的

性能摘要		高分辨率模式下的性能
SFDR, dBc	0dB 增益	75
	6dB 增益	82
SINAD, dBFS	0dB 增益	69.8
	6dB 增益	66.5

ADS62PF49 方框图



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package Pins	Package qty Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
ADS62PF49IRGCR	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAUAG	Level-3-260C-168 HR	-40 to 85	AZ62PF49
ADS62PF49IRGCR.A	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAUAG	Level-3-260C-168 HR	-40 to 85	AZ62PF49
ADS62PF49IRGCT	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAUAG	Level-3-260C-168 HR	-40 to 85	AZ62PF49
ADS62PF49IRGCT.A	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAUAG	Level-3-260C-168 HR	-40 to 85	AZ62PF49

⁽¹⁾ **Status:** For more details on status, see our [product life cycle](#).

⁽²⁾ **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

⁽³⁾ **RoHS values:** Yes, No, RoHS Exempt. See the [TI RoHS Statement](#) for additional information and value definition.

⁽⁴⁾ **Lead finish/Ball material:** Parts 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.

⁽⁵⁾ **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

⁽⁶⁾ **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "-" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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GENERIC PACKAGE VIEW

RGC 64

VQFN - 1 mm max height

9 x 9, 0.5 mm pitch

PLASTIC QUAD FLATPACK - NO LEAD



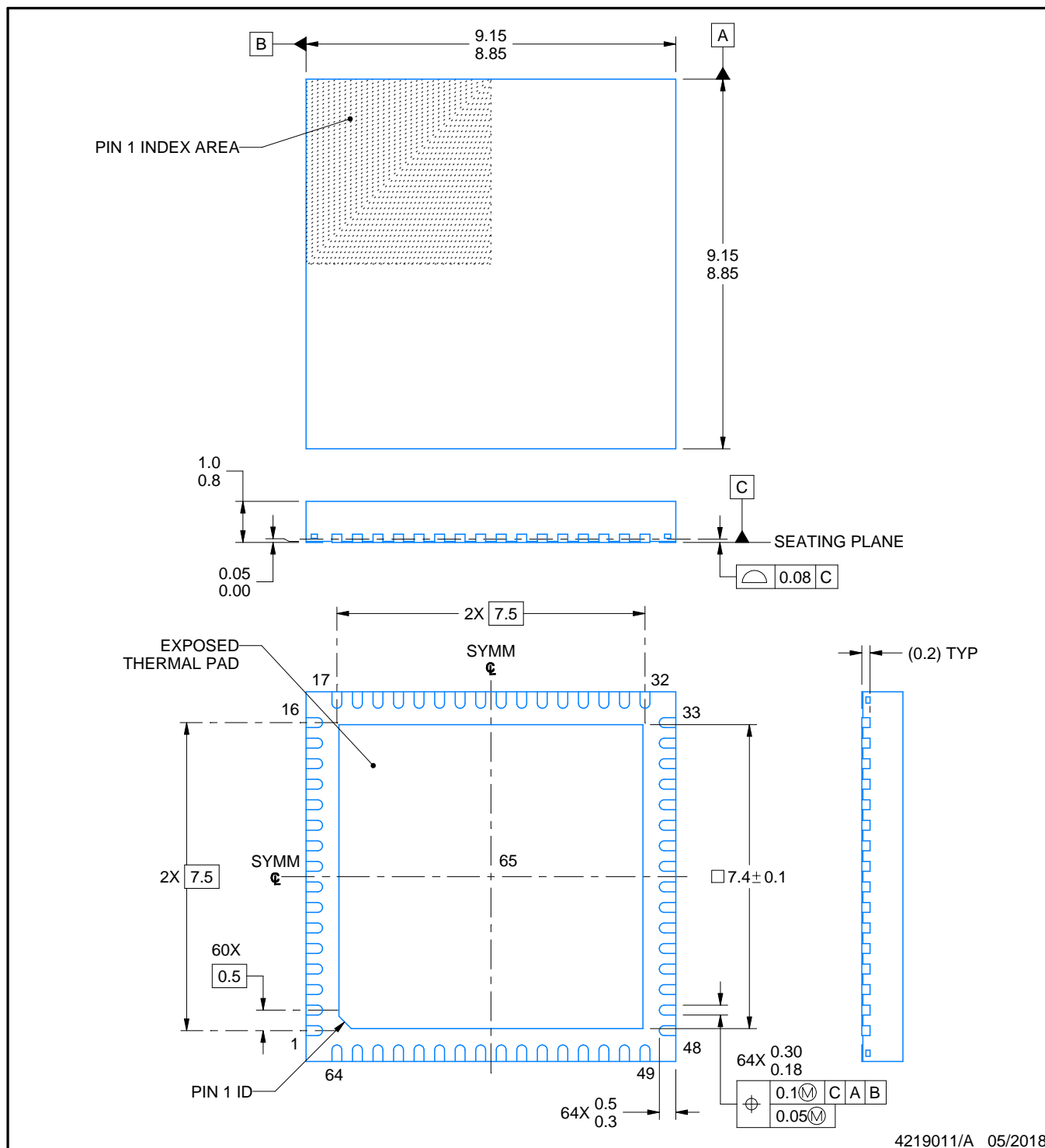
Images above are just a representation of the package family, actual package may vary.
Refer to the product data sheet for package details.

4224597/A



VQFN - 1 mm max height

PLASTIC QUAD FLATPACK - NO LEAD



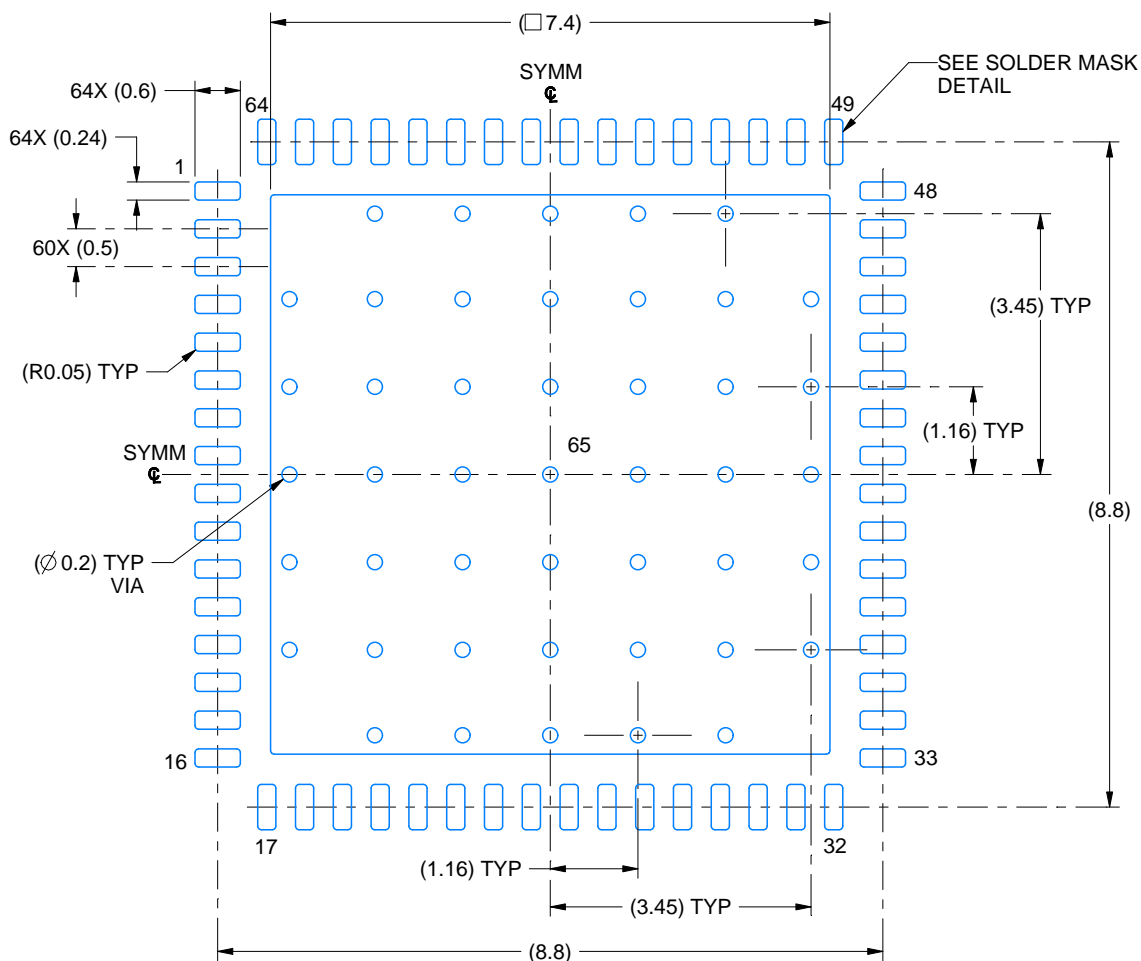
NOTES:

1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
2. This drawing is subject to change without notice.
3. The package thermal pad must be soldered to the printed circuit board for thermal and mechanical performance.

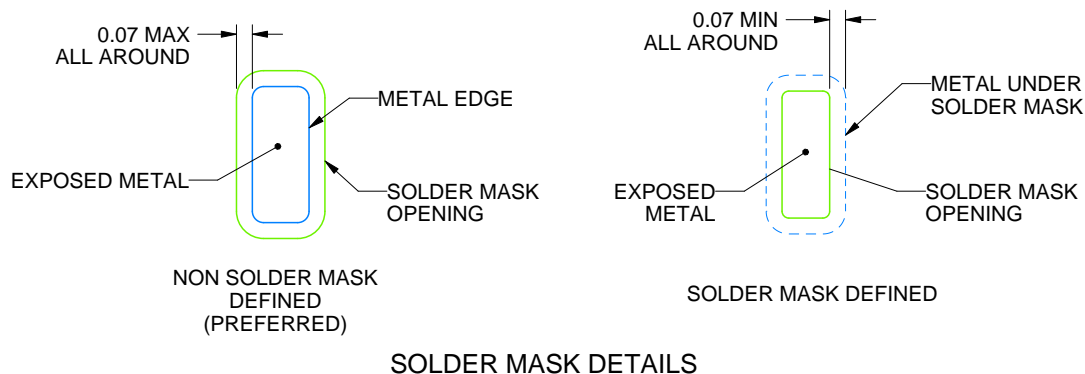
RG0064H

VQFN - 1 mm max height

PLASTIC QUAD FLATPACK - NO LEAD



LAND PATTERN EXAMPLE
EXPOSED METAL SHOWN
SCALE: 10X



4219011/A 05/2018

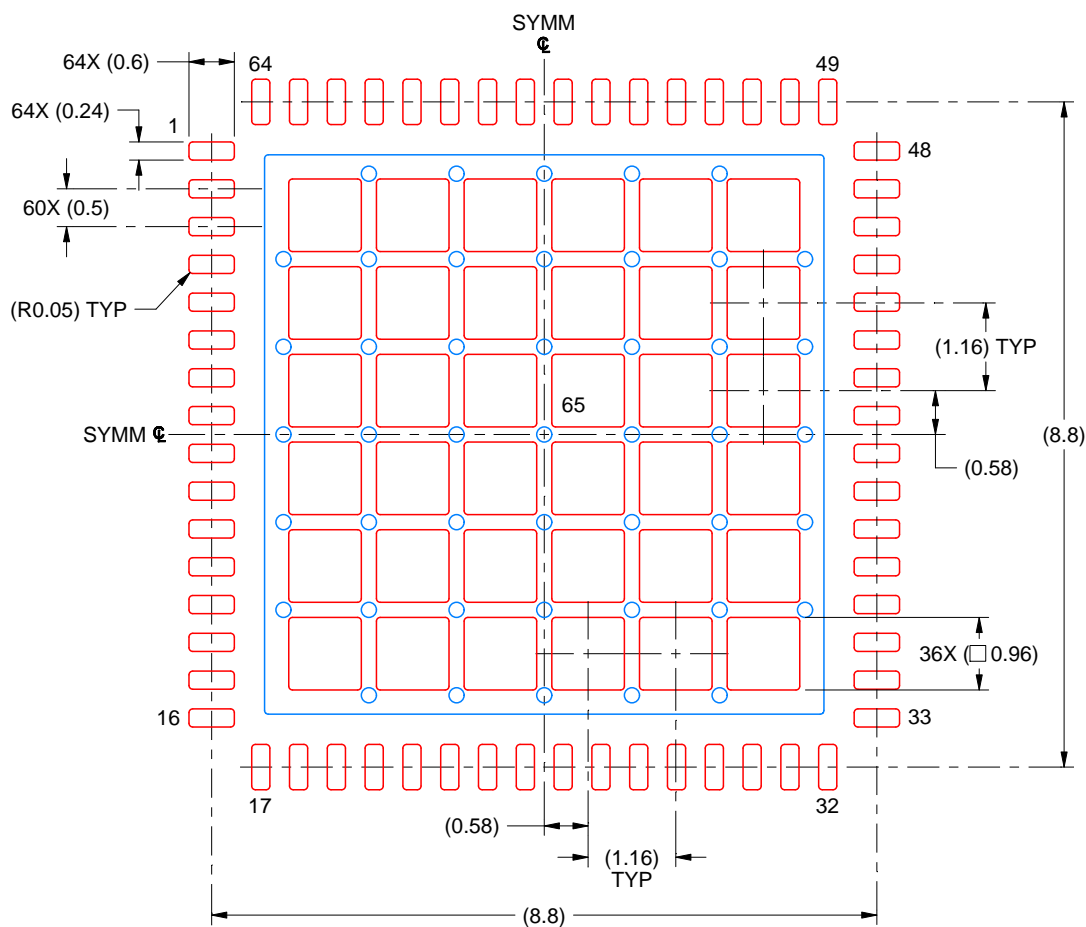
NOTES: (continued)

4. This package is designed to be soldered to a thermal pad on the board. For more information, see Texas Instruments literature number SLUA271 (www.ti.com/lit/slua271).
5. Vias are optional depending on application, refer to device data sheet. If any vias are implemented, refer to their locations shown on this view. It is recommended that vias under paste be filled, plugged or tented.

RGC0064H

VQFN - 1 mm max height

PLASTIC QUAD FLATPACK - NO LEAD



SOLDER PASTE EXAMPLE
BASED ON 0.125 MM THICK STENCIL
SCALE: 10X

EXPOSED PAD 65
61% PRINTED SOLDER COVERAGE BY AREA UNDER PACKAGE

4219011/A 05/2018

NOTES: (continued)

6. Laser cutting apertures with trapezoidal walls and rounded corners may offer better paste release. IPC-7525 may have alternate design recommendations.

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