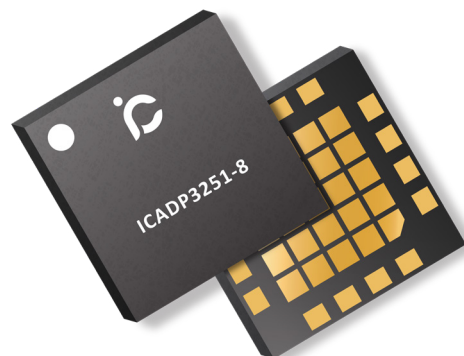




3.2– 5.1 GHz 8 W LINEAR POWER AMPLIFIER

ICADP3251-8 is a linear power amplifier designed for drone applications in the frequency range of 3200 MHz to 5100 MHz. This power amplifier is realized in GaAs technology, is fully matched at its input and output, and is overmolded in a compact 16-pin 5 × 5 mm² LGA package. It is pin-to-pin compatible with other iCana 8W power amplifiers.

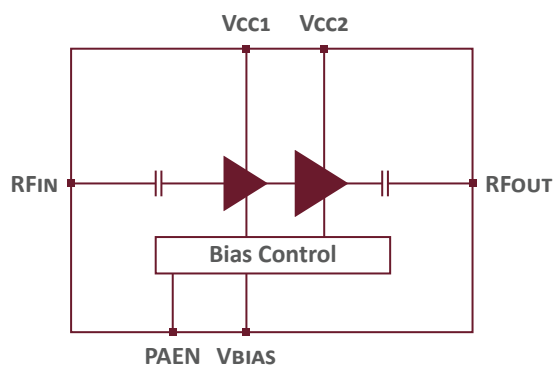
This amplifier is optimized for high-reliability drone communications to provide maximum output power at target EVM levels while still providing excellent efficiency.



16 Pad 5 × 5 mm² LGA Package

Key Features

- Wide operational frequency range: 3200 – 5100 MHz
- High output power: Pout > 33 dBm @ -16dB EVM (WiFi MCS2 HT20)
- Gain: 34 dB
- Resistant to high VSWR output mismatch: 10:1
- Pin-to-pin compatible PA family
- 50 Ω matched input and output
- Compact package size: 5.0 × 5.0 × 1.1 mm³



Functional Block Diagram

Typical Applications

- High reliability drone communications
- Ground stations

Ordering Guide

Part Name	Description
ICADP3251-8	3.2 – 5.1 GHz 8 W Linear Power Amplifier
ICADP3251-8-EVB	ICADP3251-8 Evaluation Board

8 W PA Product Family

Product Name	Description
ICASP3338-8F	3.3 – 3.8 GHz
ICADP1625-8	1.6 – 2.5 GHz
ICADP3251-8	3.2 – 5.1 GHz
ICADP4251-8	4.2 – 5.1 GHz