



# ARQSP3336-4

## PRODUCT SUMMARY



## 3.3 – 3.6 GHz 4 W HIGH-EFFICIENCY POWER AMPLIFIER

**ARQSP3336-4** is a high-efficiency DPD-friendly Power Amplifier fabricated for 5G NR FR1 bands n77 and n78 Wireless Infrastructure. This Power Amplifier is fully matched at input and output. It is realized in GaAs technology and overmolded in a compact 16-pin 5 × 5 mm<sup>2</sup> LGA package.

This amplifier is part of iCana's high-efficiency 4 W PA RF product line designed for Wireless Infrastructure supporting major 3GPP bands.

### Key Features

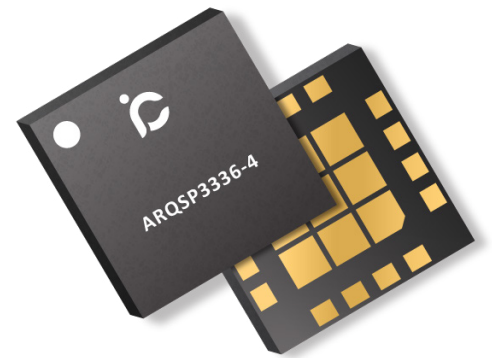
- Frequency range: 3300 – 3600 MHz
- 50 Ω matched input and output
- High efficiency: PAE = 21.2% @ P<sub>OUT</sub> = 28 dBm
- High linearity: ACLR < -49 dBc @ P<sub>OUT</sub> = 28 dBm with digital pre-distortion (5G signal, BW = 100 MHz)
- High output power: P<sub>SAT</sub> = 35.2 dBm
- High power gain: 38.1 dB
- Single supply voltage: V<sub>CC</sub> = 5.0 V
- Pin-to-pin compatible PA family for 3GPP 5G NR FR1
- Compact package size: 5.0 × 5.0 × 1.1 mm<sup>3</sup>

### Typical Applications

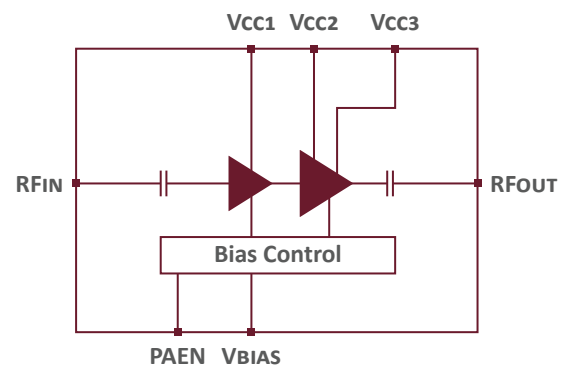
- 3GPP 5G NR FR1 bands n77 and n78
- 3GPP 4G LTE bands 42 and 52
- FDD and TDD systems
- Small cells for wireless communications infrastructure
- Repeaters / DAS
- General purpose wireless

### Ordering Guide

Part Name	Description
ARQSP3336-4	3.3 – 3.6 GHz 4 W High-Efficiency Power Amplifier
ARQSP3336-4-EVB	Evaluation Board for ARQSP3336-4



16 Pad 5 × 5 mm<sup>2</sup> LGA Package



Functional Block Diagram

### 5G NR FR1 4 W PA Product Line

Product Name	Frequency Range (GHz)	5G Bands
ARQSP1819-4	1.8 – 1.9	n3, n39
ARQSP2122-4	2.1 – 2.2	n1
ARQSP2324-4	2.3 – 2.4	n30, n40
ARQSP2527-4	2.5 – 2.7	n7, n38, n41
<b>ARQSP3336-4</b>	<b>3.3 – 3.6</b>	<b>n77, n78</b>
ARQSP3437-4	3.4 – 3.7	n48, n77, n78
ARQSP3742-4	3.7 – 4.2	n77
ARQSP4450-4	4.4 – 5.0	n79

REV 1.1

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