



# Overview

### Features and Benefits

- 27.5 GHz to 31 GHz frequency range
- Low power dissipation (<12 mW per channel)</li>
- 4 beam/16 channel beamforming IC
- · Configurable for transmit or receive operation
- Programmable time delay and step attenuator for beam steering
- Internal memory for storing beam positions
- User programmable sequencer for quick and efficient beam state selection
  - Update, reset, & mute beam commands issued via pins or SPI
  - Supports beam hopping and raster scanning
- Integrated ADC for:
- Temperature sensor
- General analog inputs
- Programmable bias modes
- 16 chip parallel addressability over 4-wire SPI interface
- Easy to use BGA package

# Product Categories

#### **RF and Microwave** Beamformers

## Markets and **Technologies**

Aerospace and Defense (4)

### Please contact ADI at Beamformer Group.

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# Product Lifecycle 🗸 Recommended for New Designs

This product has been released to the market. The data sheet contains all final specifications and operating conditions. For new designs, ADI recommends utilization of these products.

# Documentation & Resources

View All (7)	HIGH DOSE RATE RADIATION REPORTS	
High Dose Rate Radiation Reports (1)	ADAR3001 High Dose Rate Radiation Report	2/28/2022
Webcasts (1)		
Product Selection Guide (1)	WEBCASTS	0.00007
Solutions Bulletins & Brochures (1)	Multidimensional Simulations of Beamformers and other RF Integrated Circuits in Keysight SystemVue	6/7/2023
Videos (1)	PRODUCT SELECTION GUIDE	
Technical Articles (2) RF, Microwave, and Millimeter Wave Product Selection Guide		7/13/2018 PDF
	SOLUTIONS BULLETINS & BROCHURES	
	Beamforming Brochure - Providing High Speed Data Where You Need It and When You Need It	10/1/2021 PDF
	VIDEOS	
	Space-based SATCOM Signal Chain	9/13/2022
	TECHNICAL ARTICLES	
	Overcoming Common Planar Phased Array Circuit Design Challenges	6/15/2023
	A Quantitative Analysis of the Power Advantage of Hybrid Beamforming for Multibeam Phased Array Receivers	12/1/2021

# Design Resources

ADI has always placed the highest emphasis on delivering products that meet the maximum levels of quality and reliability. We achieve this by incorporating quality and reliability checks in every scope of product and process design, and in the manufacturing process as well. "Zero defects" for shipped products is always our goal. View our quality and reliability program and certifications for more information.

Part Number	Material Declaration	Reliability Data	Pin/Package Drawing	CAD Symbols, Footprints & 3D M	lodels
ADAR3001ABCZ	Material Declaration	Reliability Data 📝	CHIP SCALE BGA 🜙	Ultra Librarian	2

ADAR3001ABCZ	Material Declaration	Reliability Data	CHIP SCALE BGA 👃	Ultra Librarian SamacSys	
ADAR3001ABCZ-RL	Material Declaration	Reliability Data 📝	CHIP SCALE BGA 👃	Ultra Librarian SamacSys	2
Wafer Fabrication Data					
Support & C ADAR3001 Discussi RE: ADAR3001 14 week(s) ago in RF and Microwa RE: Evalboard ADAR3000 / AD	ave				
	All	DORT »		Ask your question »	
Sample & B	Buy				
Select a Country A myAnalog account is require You must Log in/Register befor 					
ADAR3001ABCZ					
Description 27.5 GHz to 31 GHz, 4-Beam Life Cycle	n and 4-Element, Ka-Band Beamfor	mer			
Production					

Package CHIP SCALE BGA Packing Qty Tray,170

Qty | Price (USD)

View in Cart

500u List Price

**1Ku List Price** 

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View More  $\sim$ 

**View Inventory** 

ADAR3001ABCZ-RL

Description 27.5 GHz to 31 GHz, 4-Beam and 4-Element, Ka-Band Beamformer				
Life Cycle Production				
Package CHIP SCALE BGA	Packing Oty Reel,1000	Otyl Price (USD)    View in Cart 1Ku List Price 500u List Price   • - -		
View More $\sim$				
View Inventory				

### Ordering FAQs

See our Ordering FAQs for answers to questions about online orders, payment options and more.

### **Buy Now Pricing**

(\*\*) Displayed Buy Now Price and Price Range is based on small quantity orders.

### List Pricing

(\*) The 1Ku list pricing shown is for BUDGETARY USE ONLY, shown in United States dollars (FOB USA per unit for the stated volume), and is subject to change. International prices may differ due to local duties, taxes, fees and exchange rates. For volume-specific price or delivery quotes, please contact your local Analog Devices, Inc. authorized distributor. Pricing displayed for Evaluation Boards and Kits is based on 1-piece pricing.

### Lead Times

Please see the latest communication from our CCO regarding lead times.

### Sampling

Selecting the Sample button above will redirect to the third-party ADI Sample Site. The part selected will carry over to your cart on this site once logged in. Please create a new account there if you have never used the site before. Contact SampleSupport@analog.com with any questions regarding this Sample Site.

#### Price Table Help

SOCIAL	QUICK LINKS		LANGUAGES	MYANALOG
	About ADI ADI Signals+ Analog Dialogue Careers Contact us	Investor Relations News Room Quality & Reliability Sales & Distribution Incubators	English 简体中文 日本語	Interested in the latest news and articles about ADI products, design tools, training and events? Go to myAnalog