

Description

The F1495 is a high linearity RF Amplifier designed to operate within the 3300MHz to 4200MHz frequency range. Using a single 5V power supply, the F1495 provides 40dB typical gain and 30dBm typical OP1dB with a low quiescent current consumption of 120mA.

The F1495 is packaged in a 3 × 3 mm, 16-pin SMT package, with matched 50Ω input and output impedances for ease of integration into the signal path.

Typical Applications

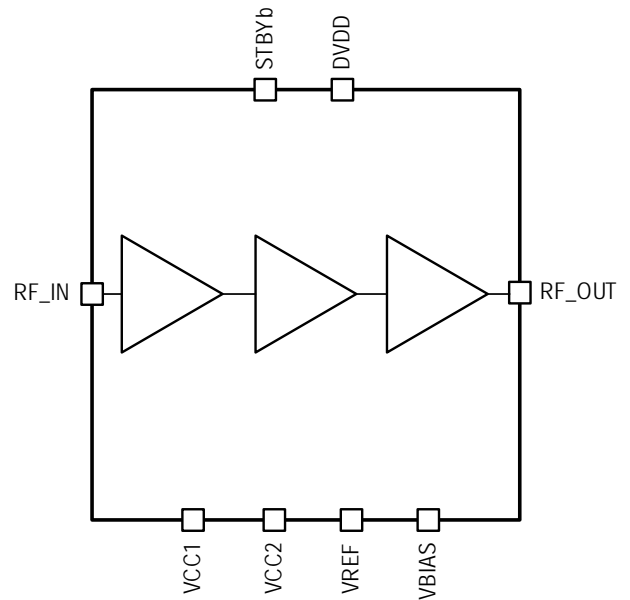
- 5G Sub-6GHz AAS/Massive MIMO
- FDD or TDD Systems
- General Purpose RF

Features

- Frequency Range: 3300MHz – 4200MHz
- 40dB typical
- +30dBm typical OP1dB
- 50Ω Single-ended Input and Output Impedances
- 5V power supply
- 120mA typical quiescent supply current
- 1.8V logic compatible Standby mode for power savings
- Operating temperature (T_{EPAD}) range: -40°C to +115°C
- 3 × 3 mm 16-SMT package

Block Diagram

Figure 1. Block Diagram



Ordering Information

Orderable Part Number	Package	MSL Rating	Shipping Packaging	Temperature
RA81F1495STGNM#BD0	3 × 3 mm 16-SMT	MSL 1	Tray	-40° to +115°C
RA81F1495STGNM#KD0	3 × 3 mm 16-SMT	MSL 1	Tape and Reel	-40° to +115°C
RTKA81F1495ST000RU	Evaluation Board			

Revision History

Revision Date	Description of Change
May 15, 2020	Initial release.

IMPORTANT NOTICE AND DISCLAIMER

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES (“RENESAS”) PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for developers skilled in the art designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only for development of an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising out of your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Rev.1.0 Mar 2020)

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit:
www.renesas.com/contact/

Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.