BGA700L16 Low Noise Amplifier for IEEE 802.11a/b/g/n

THE BGA700L16 is a Wireless LAN dual band Low Noise Amplifier. The amplifier comprises a single stage amplifier for the 2.45 GHz band and a twostage amplifier to meet the requirements of the 4.9 to 5.95 GHz band. The complete circuitry, including a temperature stabilization block, fits on one die and needs no external matching elements.

One of the challenges of Wireless LAN application designers is to maximize network coverage and data throughput. The receiver system noise figure determines sensitivity, network coverage and data throughput.

The BGA700L16 uses a combination of Silicon Germanium Carbon epitaxy proprietary process and a low ohmic on chip ground contact from Infineon Technologies to deliver the word best-in class noise figure for wireless LAN systems.

The BGA700L16 ships as bare die or in a low profile Tiny Small Leadless Package code-named TSLP-16. The package dimensions are 2.3 x 2.3 x 0.39 mm³.

Product Brief



Applications

802.11a/b/g/n

Features

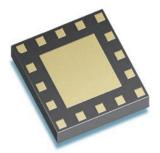
- Input/output 50 Ω matched internally
- SiGe:C process
- Shut down mode
- Temperature stabilization

Benefits

- Extended coverage
- Ultra-low noise figure
- Small form factor
- High level of integration
- Low cost

TSLP-16 Package

2.3 x 2.3 x 0.39 mm³



www.infineon.com/smallsignaldiscretes

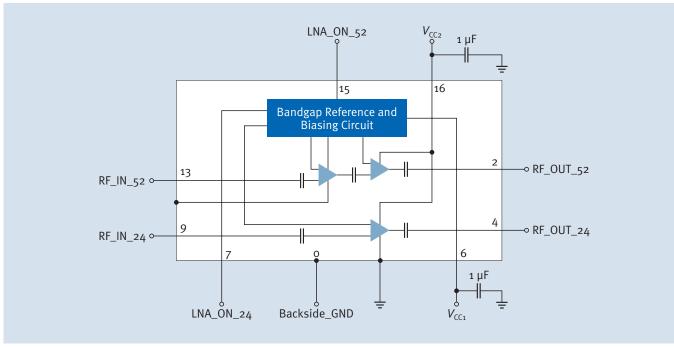
Small Signal Discretes



Never stop thinking

Product Brief

Application Circuit



Performance						
	Band [GHz]	Supply Voltage [V]	Supply Current [mA]	Gain [dB]	Noise Figure [dB]	Input P1dB [dB]
	2.4	2.4 - 3.3	11	15	0.9	-10
	5.6	2.4 - 3.3	17	21	1.3	-10



How to reach us: http://www.infineon.com

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Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

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