

Preliminary DATA SHEET

GDM5828: 5100 to 5925 MHz High Efficiency 28 dBm Power Amplifier

Product overview

GDM5828 is a three-stage HBT general purpose power amplifier working at 5100~5925 MHz with on-chip PA enable controller and temperature compensation circuits. This high-efficiency and DPD-friendly PA can deliver up to 28 dBm average output power and 36 dBm peak power using 20MHz LTE signal (8.5dB PAR @ 0.01 % CCDF). The product input and output are both internally matched to 50 Ohm.

Key Features

- 5100MHz – 5925 MHz
- 32dB Gain @ 5.5GHz
- 22 % PAE at 28 dBm output power @5.9GHz
- -30 dBc ACPR at 28 dBm output power
- Higher than 36dBm peak power
- Input/output internally matched to 50Ohm
- On-chip PA enable controller and temperature compensation circuits
- Compact and low-cost 5 mm x 5 mm LGA package (MSL3, 260 °C per JEDEC J-STD-020)
- ESD Level: HBM 1000 V; CDM 1000 V

Applications

- Wi-Fi Business Drone
- FDD and TDD wireless systems
- Active antenna array and massive MIMO
- Customer Premises Equipment (CPE)

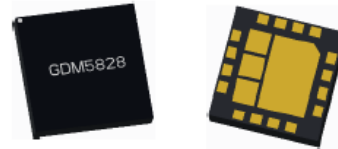


Figure 1. 16 Pad 5 x 5 mm Laminate Package

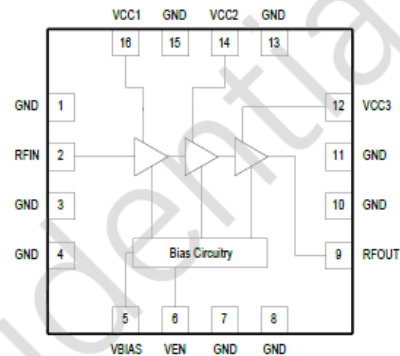


Figure 2. GDM5828 Function Block Diagram

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GDM0628	617-652	B71, n71
GDM0728	728-821	B20, n20
GDM0928	869-960	B5, B8, n5, n8
GDM1828	1805-1880	Band 3, n3
GDM2128	2110-2170	Band 1, n1
GDM2428	2300-2400	Band 40, n40
GDM2628	2496-2690	Band 41, n41
GDM3528	3300-3600	Band 42, n78
GDM3728	3400-3800	Band 42, n78
GDM4028	3700-4000	C-band
GDM5028	4600-5000	n79

Ordering Information

Part No.	Description
GDM5828	5100-5925 MHz High efficiency PA, 7' Reel with 1500 pcs