

Preliminary DATA SHEET

GCM1828: 1805 to 2170MHz High Linearity 28dBm Power Amplifier

Product overview

GCM1828 is a two-stage HBT small cell power amplifier for indoor cellular base stations. It works at 1805~2170 MHz (band1,2,3, n1,2,3). This PA can deliver 28dBm output power with ACPR below -48dBc and power gain higher than 28dB



Figure 1. 14pin 7 x 7 mm Laminate Package

Key Features

- 1805MHz – 2170MHz, extend to 1710-1785MHz also can be applied.
- 28dB Gain
- 15% PAE at 28dBm output power
- Below -48dBc ACPR at 28dBm linear output power
- Input/output internally matched to 50Ohm
- Integrated temperature compensation circuits
- Compact and low-cost 7mm x 7mm LGA package (MSL3, 260°C per JEDEC J-STD-020)
- ESD Level: HBM 1000V; CDM 1000V
- ROHS compatible

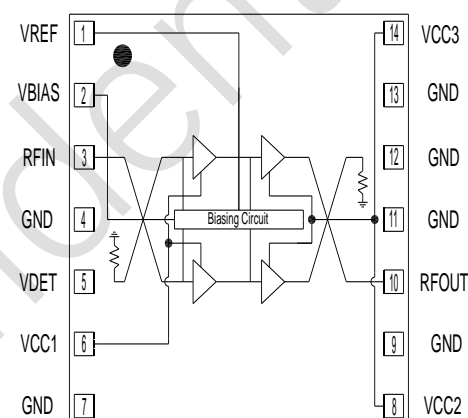


Figure 2. GCM1828 Function Block Diagram

Applications

- FDD and TDD 2G/3G/4G LTE/5G NR systems
- 3GPP band 1,2,3, n1,2,3 for base-station application
- Driver amplifier for micro-base and macro-base stations
- Active antenna array and massive MIMO
- Customer Premises Equipment (CPE)

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GCM1828	1805-2170	Band 1,2,3, n1,2,3
GCM2627	2300-2690	Band 40,41, n40,41
GCM3527	3300-3600	n78

Ordering Information

Part No.	Description
GCM1828	1805-2170MHz 28dBm linear PA, 7' Reel with 1500pcs