

Preliminary DATA SHEET

GSM1320: 1180 to 1390MHz High Linearity 20dBm Wideband Power Amplifier

Product overview

GSM1320 is a two-stage HBT power amplifier for indoor/outdoor cellular base stations. It covers frequency from 1180MHz to 1390MHz. This PA can deliver +20dBm 4G LTE linear output power with ACPR below -50dBc and -48dBc for 100MHz IBW 5G NR application with power gain higher than 28 dB

Key Features

- 1180MHz – 1390MHz
- 28dB Gain
- I_{cq} 250mA
- < -50dBc ACPR at +20dBm linear output power
- Support 200MHz 5G NR IBW
- Input/output internally matched to 50Ohm
- Integrated temperature compensation circuits
- Compact and low-cost 3mm x 3mm LGA package (MSL3, 260°C per JEDEC J-STD-020)
- ESD Level: HBM 1000V; CDM 1000V
- ROHS compatible

Applications

- TDD/FDD 4G LTE and 5G NR systems
- Power amplifier for micro-base stations
- Active antenna array and massive MIMO
- Distributed Antenna System (DAS)
- Customer Premises Equipment (CPE)

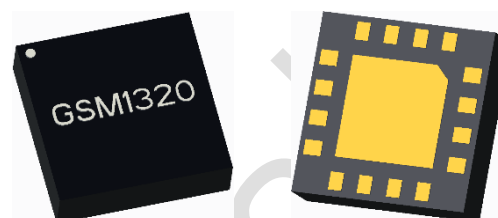


Figure 1. 16 Pad 3 x3 mm Laminate Package

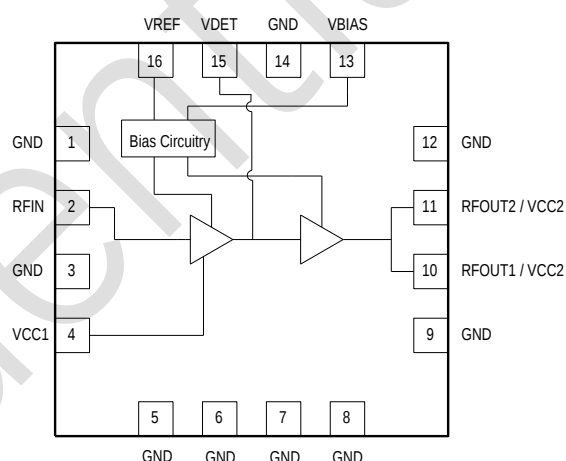


Figure 2. GSM1320 Function Block Diagram

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GSM0520	500-700	
GSM1320	1180-1390	
GSM1520	1450-1660	
GSM2620	2496-2960	
GSM3520	3300-3600	

Ordering Information

Part No.	Description
GSM1320	1180-1390MHz 20dBm linear PA, 7' Reel with 1500pcs