

Preliminary DATA SHEET

GSM1820: 1710 to 2170MHz High Linearity 20dBm Broadband Power Amplifier

Product overview

GSM1820 is a two-stage HBT small cell power amplifier for indoor cellular base stations. It covers low band from 1710MHz to 2170MHz. This PA can deliver 20dBm 4G LTE linear output power with ACPR below -50dBc application and power gain higher than 32 dB

Key Features

- 1710MHz – 2170MHz
- 32dB Gain
- 13% PAE at 20dBm output power
- Below -50dBc ACPR at 20dBm linear output power
- Support 60MHz 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)

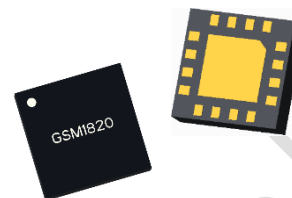


Figure 1. 16 Pad 3 x3 mm Laminate Package

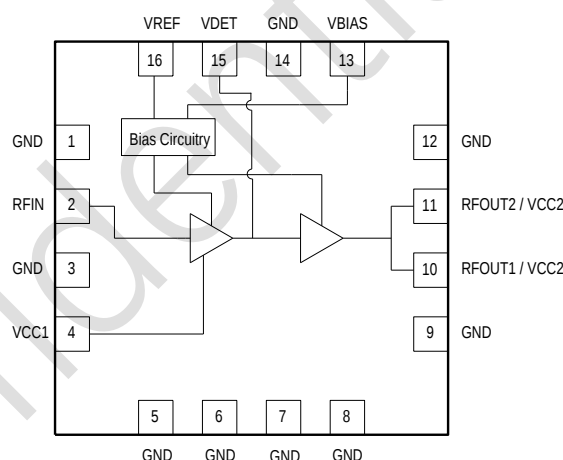


Figure 2. GSM1820 Function Block Diagram

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GSM0520	500-700	
GSM1320	1180--1390	
GSM1520	1450-1660	
GSM1820	1710-2170	
GSM2620	2300-2700	
GSM3520	3300-3600	

Ordering Information

Part No.	Description
GSM1820	1710-2170MHz 20dBm linear PA, 7' Reel with 1500pcs