

Preliminary DATA SHEET

GSM1824: 1805 to 1880MHz High Linearity 24dBm Power Amplifier

Product overview

GSM1824 is a two-stage HBT small cell power amplifier for indoor cellular base stations. It works at 1805~1880 MHz (band 3). This PA can deliver 24dBm output power with ACPR below -48dBc and power gain higher than 28dB

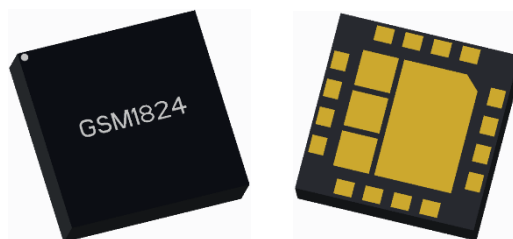


Figure 1. 16 Pad 5 x 5 mm Laminate Package

Key Features

- 1805MHz – 1880MHz
- Extend Coverage to Band 3 uplink band 1710-1785MHz, Band 2 1930-1990MHz, Band 39 1880-1920MHz, and Band 34 2010-2025MHz
- 28dB Gain
- 16% PAE at 24dBm output power
- Below -48dBc ACPR at 24dBm output power
- Input/output internally matched to 50Ohm
- Integrated temperature compensation circuits
- Compact and low-cost 5mm x 5mm LGA package (MSL3, 260°C per JEDEC J-STD-020)
- ESD Level: HBM 1000V; CDM 1000V
- ROHS compatible

Applications

- FDD and TDD 2G/3G/4G LTE/5G NR systems
- 3GPP LTE band 2,3,34,39, and 5G NR n2 n3 for base-station application
- Driver amplifier for micro-base and macro-base stations
- Active antenna array and massive MIMO
- Customer Premises Equipment (CPE)
- Automotive Compensator

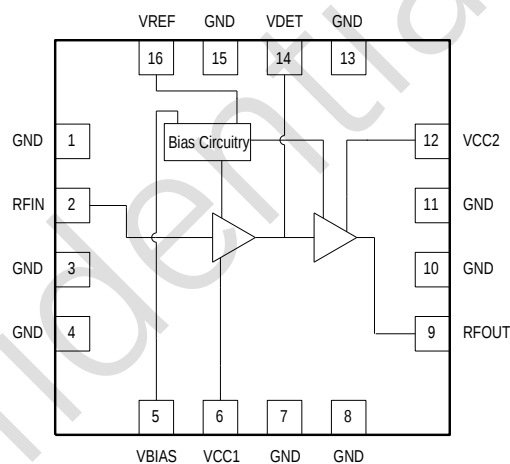


Figure 2. GSM1824 Function Block Diagram

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GSM0624	617-652	n71
GSM0724	728-821	Bands n12, n20
GSM0824	869-894	Band 5, n5
GSM0924	925-960	Band 8, n8
GSM1824	1805-1880	Band 2,3, 34,39, n2, n3
GSM2124	2110-2170	Band 1,n1
GSM2424	2300-2400	Band 40, n40
GSM2624	2496-2690	Band 41, n41
GSM3524	3300-3600	Band 42,48, n78
GSM3724	3600-3800	Band 43, 48, n78
GSM4024	3700-3980	n77, C Band
GSM5024	4600-5000	n79

Ordering Information

Part No.	Description
GSM1824	1805-1880MHz 24dBm linear PA, 7' Reel with 1500pcs