

## Preliminary DATA SHEET

# GSM1824C: 1805 to 1880MHz High Linearity 24dBm Power Amplifier

### Product overview

GSM1824C 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 30dB

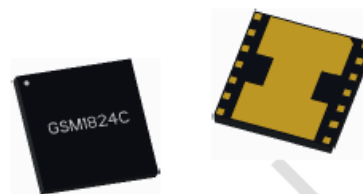


Figure 1. 14 Pad 7 x 7 mm Laminate Package

### 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
- 30dB Gain
- 16% PAE at 24dBm output power
- Below -50dBc ACPR at 24dBm output power
- Input/output internally matched to 50Ω
- 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

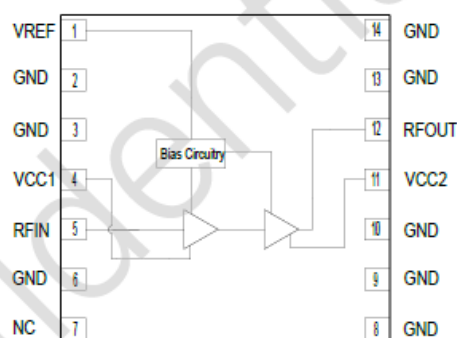


Figure 2. GSM1824C Function Block Diagram

### 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

Table 1. Pin-to-Pin Compatible PA Family

Part Num	Frequency (MHz)	3GPP Band
GSM1824C	1805-1880	Band 2,3, 34,39, n2, n3
GSM2124C	2110-2170	Band 1,n1
GSM2424C	2300-2400	Band 40, n40

### Ordering Information

Part No.	Description
GSM1824C	1805-1880MHz 24dBm linear PA, 7" Reel with 1500pcs