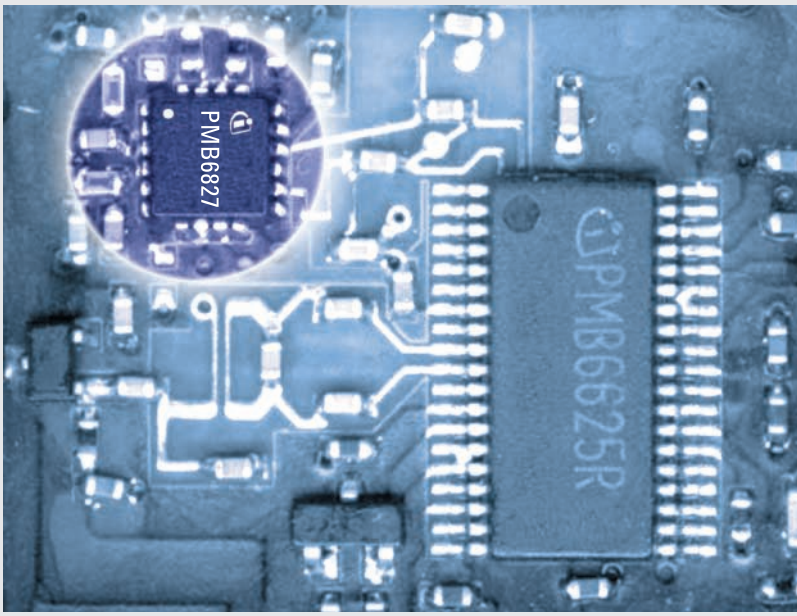
A Power Boost for BlueMoon™!

The PMB6827 is the power amplifier for the Infineon BlueMoon™ system solution.
It increases power output to +20 dBm and targets all Bluetooth™ applications requiring longer range.
Infineon Technologies is the leading semiconductor company to provide a complete Bluetooth™ Class 1 system solution.



BlueMoon™

Applications

- All Bluetooth™ Class 1 applications requiring a very long range
- LAN Access Points
- Printers
- PC cards
- Laptops
- Cordless Phones

Features

- High efficiency bipolar power amplifier
- Digital power control interface with 2-bit parallel bus
- Single supply voltage 2.7 V - 5.2 V
- Low power standby mode
- Integrated supply voltage regulator
- Integrated power ramping function
- Balanced inputs & outputs
- Integrated temperature compensation circuit
- Integrated control circuitry for antenna switch
- Small VQFN-20 package 3.5 mm x 3.5 mm
- Wide temperature range -40°C to +85°C

Type	Sales Code	Package
Bluetooth Power Amplifier	PMB6827	VQFN-20

Note: The Bluetooth trademarks are owned by their proprietor and used by Infineon Technologies under license.

www.infineon.com/bluetooth

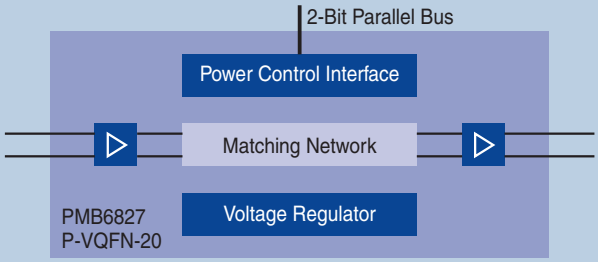
BlueMoon™

PMB6827

Infineon technologies

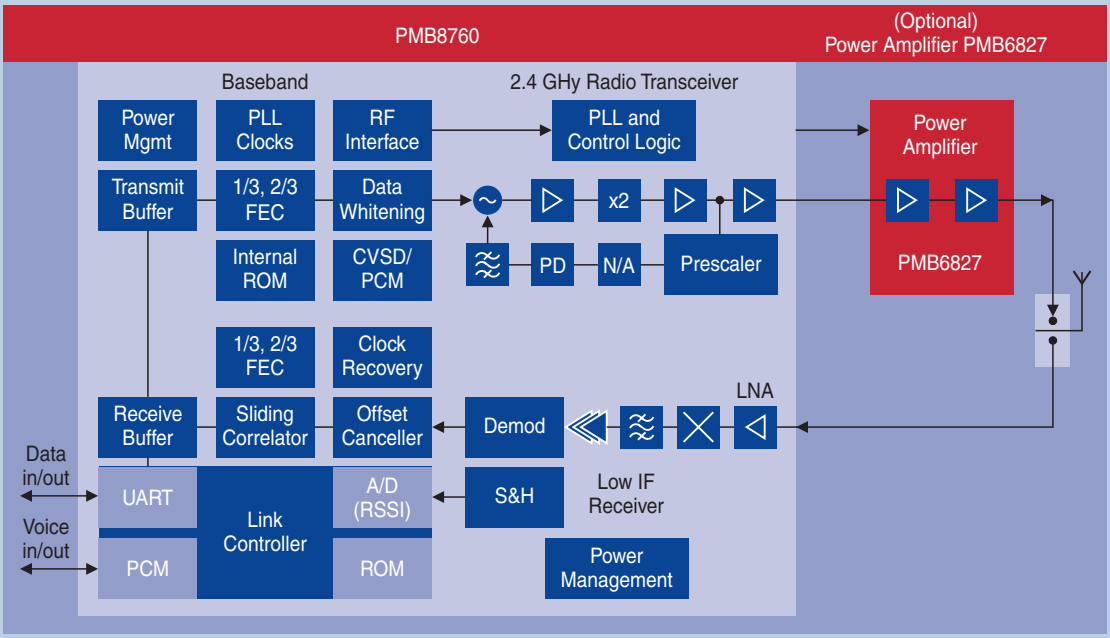
Never stop thinking.

Block Diagram



This Bluetooth™ power amplifier is a low voltage, high efficiency bipolar power amplifier. The device provides a typical RF output power of 21 dBm with high efficiency. Low distortion, high isolation and easy bypassing are achieved by the use of a completely symmetric architecture. The PMB6827 also features internal interstage matching and integrated power down to reduce board space and costs. The required transmitted RF power step is selected by using the logic 2-bit parallel bus. There are no additional tolerances (temperature dependence) of external analog control voltages due to the digital interface. The internal supply voltage regulation allows using an unstabilized supply voltage ($V_{CC} \leq 5.2$ V) and is reflected in a high output power stability.

Bluetooth™ Class I Design from one Single Source



Fully working Bluetooth™ design for Class I solutions. Infineon is the world leading Bluetooth™ IC supplier who is able to ship an own developed Class I design. Due to the highly sophisticated RF performance, transmission distances over more than 400 m can be achieved.
This solution is optimized for few external components and smallest size.
Infineon's BlueMoon™ family baseband controller (PMB6752, PMB6754) or Single Chip (PMB8760) benefit from easy system integration since the corresponding output pins could be connected directly to the digital inputs on the PMB6827.

How to reach us:
http://www.infineon.com

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Infineon Technologies AG,
St.-Martin-Strasse 53,
81541 München

Attention please!

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Infineon Technologies is an approved CECC manufacturer.

Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office in Germany or our Infineon Technologies Representatives worldwide.

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Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

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