**Panasonic** 

# Bluetooth Multi Mode: PAN1326B/1316B Series



### Easy-to-Use Format, Improved Power Efficiency

Introducing the NEW PAN1326B/1316B Series Bluetooth RF Modules from Panasonic, featuring both Bluetooth Low Energy and Bluetooth connectivity, based on Texas Instruments' NEW CC2564B controller, in an easy-to-use RF Module format with Bluetooth, FCC, IC and CE  $\,$ certifications. A ROM update from Texas Instruments to the already popular CC2564 IC has allowed Panasonic to improve its top selling PAN1326/1316 Series. The NEW PAN1326B/1316B Series Modules has increased system and power efficiency resulting from reduced initialization script size, start-up time and decreased system memory requirements; supports ten simultaneous BLE connections -- increased from six -- and integrated SBC encoding and decoding for A2DP implementations, eliminating the requirement for an external CODEC.

Panasonic's tiny footprint technology offers a module of only  $85.5 \ \text{mm2}$  including antenna. The modules are designed to accommodate PCBs pad pitch of 1.3mm and as little as two layers for easy implementation and manufacture.

The Bluetooth Low Energy (BLE) standard is designed to reduce power consumption by establishing very fast connections (few ms) and transferring small amounts of data. Using these techniques, energy consumption is reduced to a tenth of a Classic Bluetooth device. Bluetooth Smart Ready devices can communicate with both Bluetooth Classic and Bluetooth Low **Energy** devices. Smart Ready devices take advantage of the data rate of **Bluetooth Classic** (3Mb/s) and ultra fast connection time of Bluetooth Low Energy (3mS).

### **Model List**

RESET PARAMETERS Items per page

Found 2 matches. Display 1 - 2 matches.

Part No.	Data Sheet	SMD	Size	Used Ics	Rx Sensitivity (dBm)	Tx Power (max.)	Operating Temp.	Current Consum.	Frequency Range	Date Rate (max. air)	Parts Inventory
			FILTER	FILTER	FILTER	FILTER	FILTER	FILTER	FILTER	FILTER	
ENW89823A3KF		SMD	9.0 x 9.5 x 1.8	CC2560B	-93 dBm	+10 dBm	-40 to +85 °C	135μA (sleep) / 40mA (Tx,EDR)	2.4 GHz	3 MBit/s (gross)	
ENW89823C3KF		SMD	9.0 x 9.5 x 1.8	CC2560B	-93 dBm	+10 dBm	-40 to +85 °C	135μA (sleep) / 40mA (Tx,EDR)	2.4 GHz	3 MBit/s (gross)	

### **Related Information**

Brochure

**Datasheet** 

Design Guide

**CAD Files** 

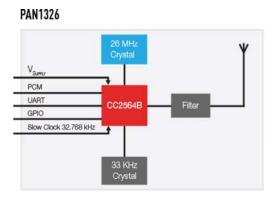
FAQ's

**Land Grid Array Application Note** 

RoHS and REACH

## **Block Diagram**

# PAN1316 26 MHz Crystal V Survey PCM UART GPIO Slow Clock 32.768 kHz



### **Technical Characteristics**

Parameter	Value	Condition
Receiver Sensitivity	-93 dBm typ.	GFSK, Typical, Dirty TX On
Output Power	10 dBm typ.	VDD_In = VBAT
Power Supply	1.7 to 4.8 V	Battery or DC/DC
Ultra-Low Power Scan	135 μΑ	1.28s Interval
GFSK DH1/DH5	33 mA	Full Throughput
Operating Temperature	-40 to +85°C	

# **Features & Applications**

#### Features:

- Bluetooth Version 4.0 EDR
- Operating Temperature Range: -40 to +85°C
- High Sensitivity: -93dbm
- VCC Supply: 1.7 to 4.8 V
- Based on TI's CC2564B
- Integrates with TI's Ultra Low-Power MSP430 Microprocessor
- Very Fast Algorithm for Both ACL and eSCO
- Supports Extended Range Tx Power with 10dBm (Typ.)

### Applications:

- · Heart Rate Monitors
- Blood Glucose Meters
- Industrial Sensors
- Entertainment Devices
- Mobile Accessories
- Toys

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