

# Bluetooth Basic Data Rate and Low Energy 4.2 HCI Module PAN1326C

**Panasonic**



## [ OUTLINES ]

Panasonic's new PAN1326C Host Controlled Interface (HCI) Bluetooth RF module brings Texas Instrument's seventh generation Bluetooth core integrated circuit, the CC2564, to an easy to use module format. PAN1326C is Bluetooth 4.2 compliant and offers best-in-class RF performance with about twice the range of other Bluetooth low-energy solutions. Using Panasonic's tiny footprint technology the module only is 85.5mm<sup>2</sup>. The module is designed to accommodate PCBs pad pitch of 1.3mm and as little as two layers for easy implementation and manufacturing. This module has been designed to be 100% pin compatible with previous generation of Texas Instruments based Bluetooth HCI modules .

## [ FEATURES ]

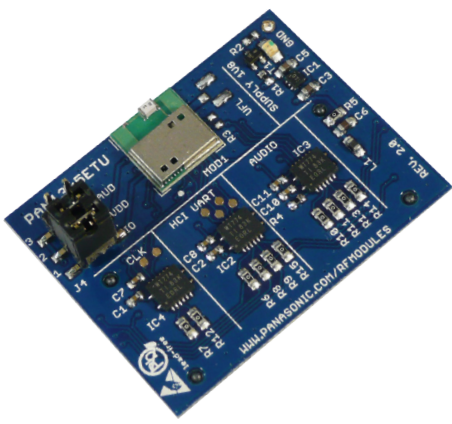
### General

- Bluetooth 4.2 compliant up to the HCI Layer
- Best-in-class Bluetooth RF performance (Tx, Rx sensitivity, blocking)
- Fully Qualified Bluetooth, FCC and IC listed, CE compliant
- Dimensions: 9.0 mm x 9.5 mm x 1.8 mm (width x length x height)
- Operating Temperature Range: -40°C to +85°C
- Supply Voltage Range: 1.8 - 4.8 V
- Based on TI's CC2564C

### Interfaces

- UART
- GPIO
- PCM

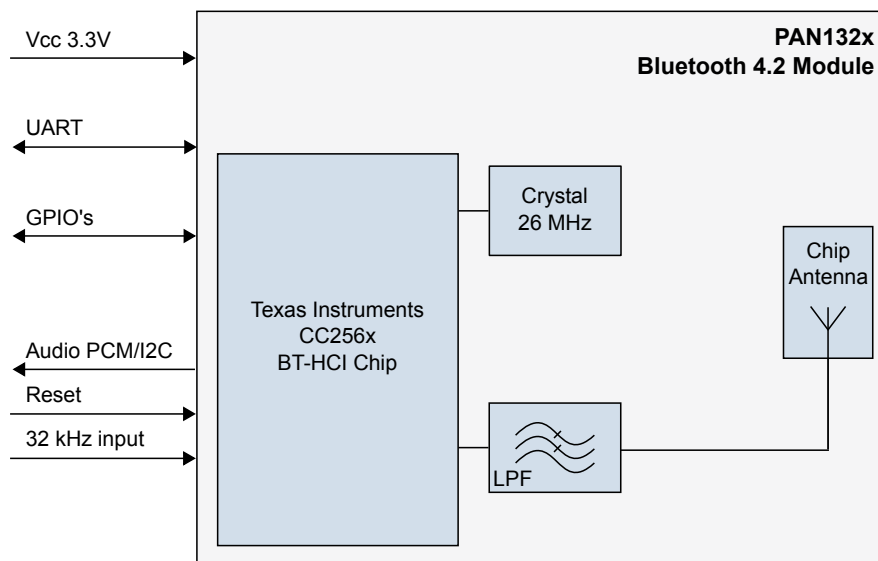
**MODULES**  
Panasonic Industrial Devices Europe GmbH  
**WIRELESS**



## BLUETOOTH

- Up to seven active devices, Scatternet: Up to three Piconets simultaneously, one as Master and two as Slaves
- Up to two Synchronous Connection Oriented (SCO) Links on the same Piconet
- Support for All Voice Air-Coding Provide an Assisted Mode for HFP 1.6 Wideband Speech (WBS) Profile or A2DP Profile to Reduce Host Processing and Power (Multiple Bluetooth Profiles, Multiple Sniff Instances)
- Built-In Coexistence and Prioritization Handling for BR, EDR, and Low Energy
- Capabilities of Link Layer Topology Scatternet, concurrently as Peripheral and Central, support up to 10 devices
- Integration of BT 4.2 secure connecting feature implementing ECDH technology

## BLOCK DIAGRAM



## TECHNICAL CHARACTERISTICS

Parameter	Value	Condition / Note
Receiver Sensitivity	- 93 dBm	
Output Power	10 dBm	Maximum setting
Power Supply	1.7V - 4.8V	Single operation voltage
Transmit Mode	40mA	ACL, DH1
Receive Mode	20mA	ACL, DH1
Operating Temperature Range	-40°C / +85°C	Industrial Range