

New Product Introduction

PAN1026A Comprehensive, Embedded, *Bluetooth*® 4.2 Module

Easy Implementation Of Bluetooth Functionality Into Electronic Devices



Introducing Panasonic's Comprehensive, Embedded Dual Mode Bluetooth 4.2 RF Module, the **NEW PAN1026A Series!**

The **NEW Panasonic PAN1026A** is an advanced, highly integrated Dual Mode Bluetooth 4.2 RF Module that delivers high-speed operation with easy integration to current design. The **NEW PAN1026A Series** comes with an embedded Bluetooth SIG certified stack supporting Bluetooth Basic Rate SPP profile along with a comprehensive and extended BLE GATT profiles and services. The **NEW PAN1026A Series'** all-inclusive design, providing all needed clocks, EEPROM and integrated antenna, significantly reduces external component count and power consumption in applications requiring dual support for both Basic Rate along with BLE. The **NEW PAN1026A Series** is fully backward compatible to its predecessor the PAN1026. The **NEW PAN1026A** has additional features such as LE extended MTU, LE Secure connections and enhanced BLE GATT.

Prototyping and testing are accelerated by utilizing the EVAL_PAN1026A (Part Number: ENW89837AUKF), two PAN1026A USB Evaluation Sticks packed in a small case. The sticks have a USB to UART converter and allow access to the module pins. It is designed to be used with Easy SPP/BLE. Also available is the EVAL_PAN1026AEMK (Part Number: ENW89837AWKF). This Experimenter Kit is used to develop BT Low Energy applications with the PAN1026A.

General Features and Benefits

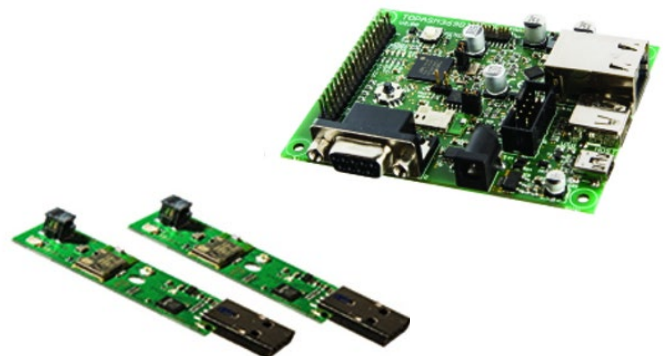
- Operating Temperature Range: -45°C to +85°C
- Operational Voltage: 2.7 V to 3.6 V
- Dimensions: 15.6 x 8.7 x 1.9 mm³ (Width x Length x Height)
- Interlaced Inquiry/Page Scan And Extended Inquiry Response
- Transmission (TX) Power Control
- Improved PER (Peak-Error-Rate) For BLE Traffic
- FCC, IC, And CE Approval Are Available
- RoHS And REACH Compliant

Bluetooth Features

- Bluetooth 4.2 SPP Basic Rate (BR) Profile and Low Energy (LE) Module
 - New - LE Secure Connections With ECDH
 - New - Extended MTU Size (160 bytes)
- Extended GATT Functionality
- Fast SPP Classic Connection/Disconnection Times
- Easy To Use SDK

Applications

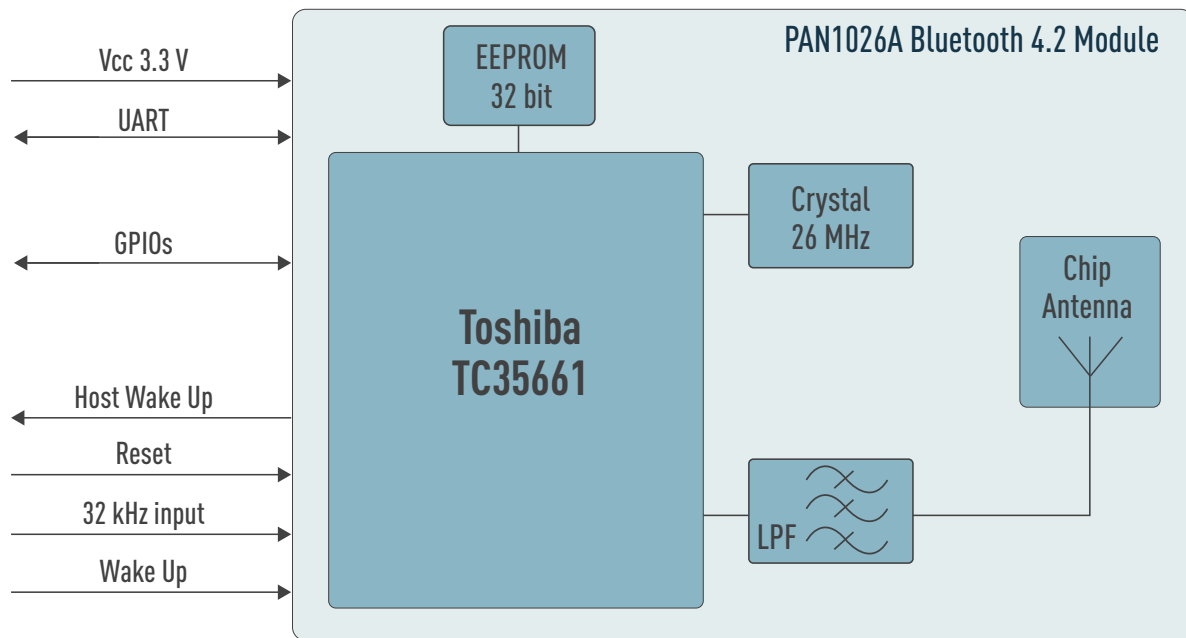
- Electronic Logging Devices
- Gaming
- Industrial



Part Number

Part Number	Description	Series Number
ENW-89837A5KF	Bluetooth 4.2 Basic Data Rate And Low Energy Module	PAN1026A
ENW89837AUKF	2 x USB-Sticks in a small Plastic case	PAN1026A USB Evaluation Kit
ENW89837AWKF	J-Link Lite Adaptor, USB- cable, PAN1026A Evaluation-Board	PAN1026A Experimenter Kit

Block Diagram



Technical Characteristics

Parameter	Value	Condition / Note
Receiver Sensitivity	-88dBm	
Output Power	4dBm	Maximum
Power Supply	2.7 V to 3.6 V	Single operation voltage
Operating Temperature	-40°C to +85°C	Industrial Range
Tx Power Consumption	46mA	Peak current