



### CC256x-PAN13xx Bluetooth® Kits Summary

## 1 PAN1323EMK – Bluetooth Evaluation Kit for MSP430BT5190 - This kit is an upgrade to PAN1315EMK (no longer available)

The PAN1323 Evaluation Module Kit (kit) is a highly versatile, advanced TI Bluetooth<sup>®</sup> development tool. The kit, when coupled with 2 MSP430F5438A Experimenter boards, enables early software and hardware prototyping capabilities for wireless embedded applications.

The PAN1323EMK user guide is located on our wiki – click here

Users may download the *Bluetooth* software named MSP430+CC2560 Software Development Kit (SDK) which includes Mindtree's Ethermind *Bluetooth* stack, serial port profile (SPP) and embedded sample applications running on Free RTOS. <u>Click here</u> for Software Download. One of the sample applications uses the accelerometer on the Experimenter board to remotely control a PC based game. The SDK also includes sample applications for transmitting temperature readings between *Bluetooth* devices and displaying RF link quality parameters on the Experimenter board LCD. The combination of sample applications in source format and the peripheral rich Experimenter board makes this platform a versatile tool for extensive prototyping and easy development of applications that want to use *Bluetooth* connectivity.

This kit is an upgraded version of the PAN1315EMK. The PAN1323 ETUs will be used for evaluation of different software configurations as they become available. Possible combinations are *Bluetooth* classis, *Bluetooth* + ANT+ (separate kit available), and in the future *Bluetooth* + BLE. The PAN1323 that comes with the kit is for evaluation only. For production, customers will need to use the Panasonic PAN1315, PAN1325, PAN1317 or PAN1327 modules.

For more details please visit our wiki http://processors.wiki.ti.com/index.php/CC2560\_Bluetooth\_for\_MSP430

# 2 EZ430-RF256x – All in One *Bluetooth* Evaluation Kit - This kit is an upgrade to EZ430-RF2560 (no longer available)

The EZ430-RF256x User Guide can be found on our wiki – click here

The eZ430-RF256x is a complete TI *Bluetooth*® evaluation and demonstration tool for the MSP430 and TI's *Bluetooth* that includes all the necessary hardware and software in a convenient USB stick. The tool includes a USB-powered emulator to program and debug your application and two *Bluetooth* target boards featuring the highly integrated MSP430BT5190 ultra-low-power MCU & Panasonic PAN1323 module. The required embedded software comes pre-flashed on the MSP430 device for ease of use out of the box. The tool also comes with a sample PC game that you can play using the target board as a remote controller. Users may download the eZ430-RF256x Software Development Kit (SDK) to develop and instantly demonstrate *Bluetooth* applications using the included battery expansion board and AAA batteries. <u>Click here for Software Download</u>. The eZ430-RF256x SDK includes MindTree's Ethermind *Bluetooth* stack, Serial Port Profile (SPP) and embedded sample applications running on FreeRTOS.

The PAN1323 that comes with the kit is for evaluation only. For production, customers will need to use the Panasonic PAN1315, PAN1325, PAN1317 or PAN1327 modules.

For more information please see the EZ430-RF256x Wiki http://www.ti.com/ez430-rf2560wiki

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#### **3 CC2567-PAN1327ANT-BTKIT – ANT +** *Bluetooth* **Health** and **Fitness Aggregator Kit**

The CC2567-PAN1327ANT-BTKIT User guide is located on our wiki - click here

TI is offering the first wireless, single-chip solution with dual-mode ANT and *Bluetooth* connectivity - the <u>CC2567</u> device. This solution wirelessly connects 13 million ANT-based devices to the more than 3 billion *Bluetooth* endpoint devices used by people every day, creating new market opportunities for companies building ANT products and *Bluetooth* products alike. TI dual mode solution requires 80 percent less board area than a design with two single-mode solutions (one ANT+, one *Bluetooth*) and increases the wireless transmission range up to two times the distance of a single-mode ANT+ solution.

The ANT plus *Bluetooth* health and fitness aggregator kit is the first of its kind and offers several features such as:

- Panasonic's PAN1323ETU module this is for evaluation only and customers will use <u>PAN1327</u> or PAN1317 module for production
- Validated and certified *Bluetooth* and ANT+ technology with complete documentation for faster development time and lower manufacturing costs. <u>Click here for software download</u>.
- Support for *Bluetooth* power saving modes and ANT's ultra low power modes to improve battery life and power efficiency
- Pre-integration with TI's MSP430BT5190 for faster time to market.

For more details please visit our wiki: http://processors.wiki.ti.com/index.php/CC2567\_Bluetooth\_%2B\_ANT\_for\_MSP430

For more information on Texas Instruments Wireless Connectivity, please visit <a href="http://www.ti.com/wirelessconnectivity">http://www.ti.com/wirelessconnectivity</a>

For further support you can also use our forums - www.ti.com/wiconforum

#### 4 Certifications

For details on the specifications and any associated certifications of the Panasonic modules mentioned in this document, please see Panasonic web site and full specification.

- PAN1323ETU page <u>click here</u>
- PAN1323ETU full specification <u>click here</u>

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#### EVALUATION BOARD/KIT/MODULE (EVK) WARNINGS, RESTRICTIONS AND DISCLAIMER

For FCC-Approved Units

#### TEXAS INSTRUMENTS (TI) PROVIDES THE ENCLOSED EVKS SUBJECT TO THE FOLLOWING TERMS:

NOTE: The term "EVK" includes electrical equipment commonly called Evaluation Kits, Evaluation Boards and Evaluation Modules (EVMs)

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1. You assume all responsibility and liability for proper and safe handling of the EVK. Further, you are responsible to assure that any interfaces (electronic and/or mechanical) between the EVK and any human body are designed with suitable isolation and means to safely limit accessible leakage currents to minimize the risk of electrical shock hazard. You agree to employ reasonable safeguards to ensure that your use of the EVK will not result in any property damage, injury or death, even if the EVK should fail to perform as described or expected.

2. If you design and/or produce end products or subassemblies for incorporation into end products, then you acknowledge, represent and agree that you have unique knowledge concerning the Federal, State and local regulatory requirements (including but not limited to Food and Drug Administration regulations, if applicable) which relate to your products and which relate to your use (and/or that of your employees, affiliates, contractors or designees) of the EVK for evaluation, testing and other purposes. Notwithstanding any design support or recommendations that TI may provide, you are solely responsible for your end product or subassembly, and for providing "fail-safe" mechanisms and/or other safety measures as may be necessary or appropriate in any potentially hazardous applications, in light of the possibility of failure of semiconductor components.

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**Limited Warranty.** Should the evaluation board/kit not meet the specifications indicated in the User's Guide, the board/kit may be returned within 30 days from the date of delivery for a full refund. THE FOREGOING WARRANTY IS THE EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

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