

NEW! PAN1323ETU *BLUETOOTH*® Development Module

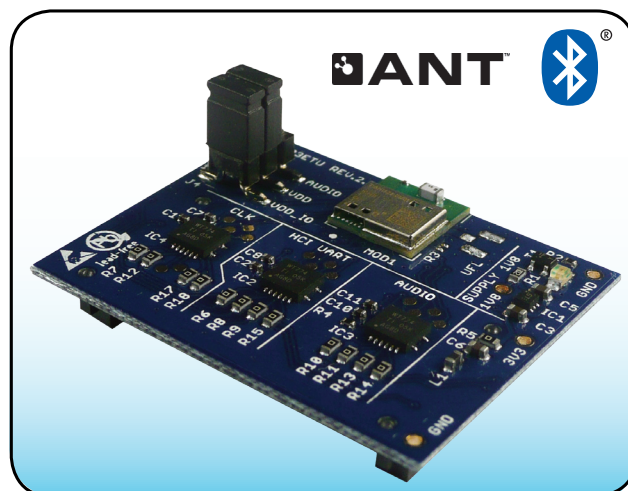
PAN1323ETU Triple Mode Simplifies the Development Environment

One development module, three standards: Bluetooth Classic, Bluetooth Low Energy and ANT™.

This unique triple mode ETU – that's ETU for "Easy-To-Use" – module plugs directly into Panasonic development kits, Texas Instruments MSP430 and Stellaris experimenter boards with the added benefit of header connectors that simplify prototype wiring and field trials.

The **PAN1323ETU** is the development environment for the PAN13xx family*. This family is based upon Texas Instrument's CC256x integrated circuits and uses a host controlled interface (HCI), a cost effective and flexible means to implement a Bluetooth network. HCI reduces BOM cost by eliminating redundant processing capacity and giving designers the flexibility to work with a controller of their choosing, as the Bluetooth stack resides and executes on the application's host processor.

Bluetooth Low Energy and ANT are ultra-low power network standards. The foundations of Bluetooth Low Energy power consumption are short messages and establishing very fast connections (few ms). Using these techniques, energy consumption is reduced to a tenth of a Classic Bluetooth network. ANT is a wireless sensor network protocol operating in the 2.4 GHz spectrum, designed for ease of use, efficiency and scalability, ANT supports peer-to-peer, star, tree and fixed mesh topologies.



Product Performance:

- The PAN1323ETU is the development tool for Panasonic's entire PAN13xx product line.*
- A single development module for three standards: Bluetooth Classic, Bluetooth Low Energy and ANT.
 - Bluetooth version 4.0
 - ANT is a wireless sensor network protocol designed for ultra-low power applications
 - Bluetooth Low Energy average power consumption is about 1 uA.
- Cost effective and flexible HCI interface
- Easily integrates to Texas Instruments' MSP430 and Stellaris ARM7 controllers
- Extraordinary range with 10 dbm of Tx power

PAN1323ETU Triple Mode Compatibility:

Series	Antenna	Bluetooth	LE	ANT	Compatibility
PAN1323ETU	X	X	X	X	-
PAN1315		X			100%
PAN1316		X	X		
PAN1317		X		X	
PAN1325	X	X			100%
PAN1326	X	X	X		
PAN1327	X	X		X	

PAN1323ETU Part Numbers:

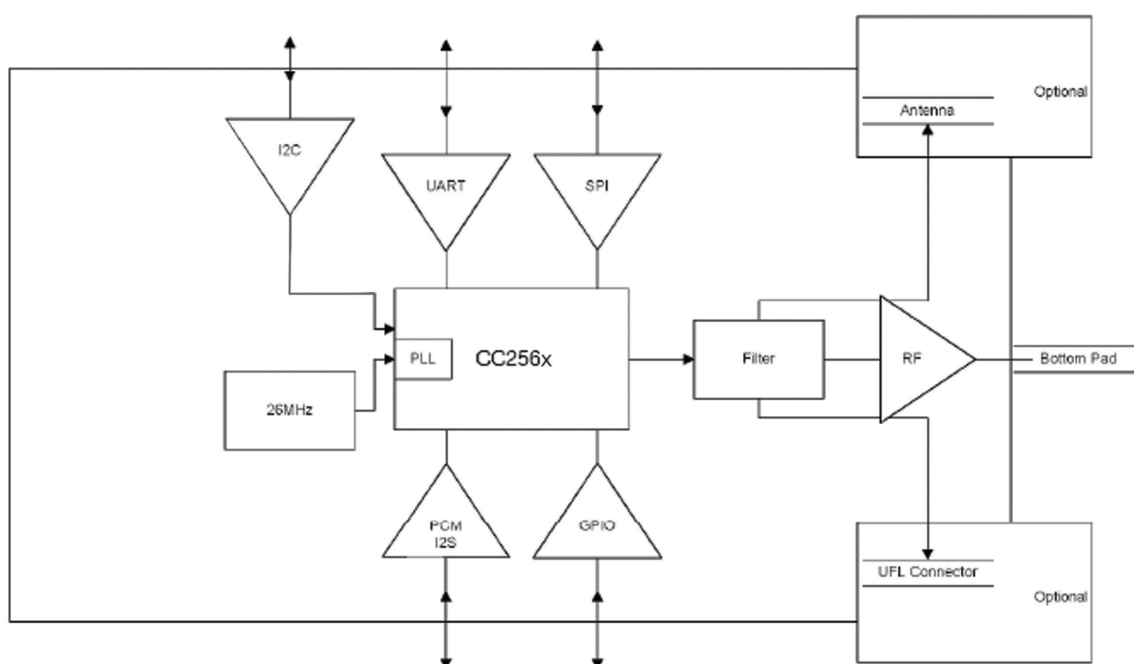
Part Numbers	Description
ENW-89825A2JF	PAN1323ETU, Evaluation Module

* References in this document are restricted to TI CC256x based modules and do not include the PAN1321

Applications:

- Sports and Fitness
 - Heart Rate Monitor
 - Blood Pressure Sensor
 - Blood Glucose Meter
 - Thermometer
- Assisted Living
 - Flood Alarm
 - Heating Control
 - Automatic Key Control
 - Thermometer
- Industrial Sensors
- Toys
- Entertainment Devices
- Mobile Accessories
- All Bluetooth Wireless Applications

Block Diagram PAN1323ETU:



Technical Specifications for PAN1323ETU:

Parameter	Value	Condition / Notes
Receiver Sensitivity (BER=10 ⁻³)	-93 dBm	GFSK, Typical, Dirty TX On
Output Power	10 dBm	VDD_In = VBAT
Power Supply	1.7 - 4.8 V	Battery or DC/DC
Ultra Low Power Scan	135 uA	1.28s Interval
GFSK DH1\DH5	33 mA	Full Throughput
Operating Temperature Range	-20°C to + 70°C	-40°C to + 85°C Optional