

PAN1740 Beacon

Introducing Panasonic's Bluetooth Low Energy Beacon based on one of the world's most energy efficient modules, Panasonic's PAN1740. The ultra-low power consumption of less than 5mA in Tx mode enables the PAN1740 Beacon to run on a single coin cell battery for years. This compact beacon is just 26 x 24mm and includes an antenna, ARM CORTEX M0, 256kB flash and CR2032 coin cell battery holder. The PAN1740 Beacon is pre-configured (using flash memory) for out-of-the-box evaluation and use. Simply apply power by inserting a CR2032 battery and see the beacon using the *Locate Beacon* App from the Google Play Store. The integrated flash memory is available for custom applications.

Beacons continuously transmit a universal unique user ID (UUID) number to devices such as smartphones, tablets, and personal computers. An app then uses that UUID to execute a course of action such as ranging and indoor positioning, providing shoppers with personalized sales pitches, special promotions and coupons at specific store locations and presenting the user with additional information on points of interest. This asymmetrical scheme, where the beacon transmits only its UUID, and the app carries 99% of the processing load, allows beacons to be highly efficient and run for years on a coin cell.

The PAN1740 Beacon may be purchased individually or in production quantities. The PAN1740 Beacon Kit enables designers to create custom applications and beacon specific parameters (UUID, Major/Minor ID). Each PAN1740 Beacon Kit consists of five PAN1740 Beacon ETUs, Dialog Pro Motherboard, Beacon Adapter Board and Adaptor Cable. The PAN1740 Beacon ETU is a standard beacon with an 18 pin female connector compatible with the Beacon Kit's adaptor cable.

Features:

- Based on BT Smart System-on-Chip PAN1740
- ARM CORTEX M0 with 256Kb Memory
- 26x24mm with Antenna
- FCC/IC/CE Certified
- Battery Holder for CR2032 Coin Cell
- Reference Design for Standard Housing Available
- Approximate Battery Life 18 Months, at 700ms Advertising Interval
- SDK / Application Notes Available

Applications:

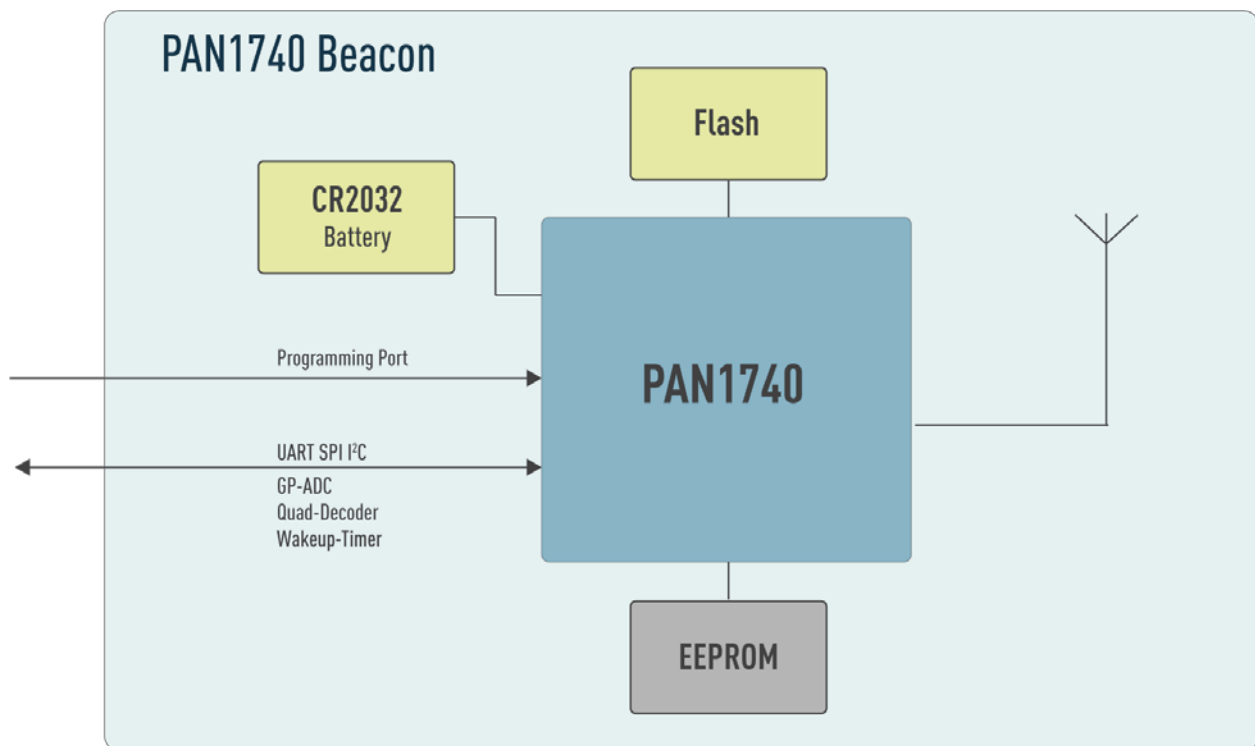
- Bluetooth Low Energy Tags
- Identification
- Indoor Positioning

- Ranging
- Product Information
- Retail Advertising
- Find me Applications

Part Number Information:

Part Number	Description	Series Number
ENW-89849A1KF	Beacon (No Connector)	PAN1740 Beacon
ENW-89849AZKF	Beacon (With Connector)	PAN1740 Beacon ETU
ENW-89849AYKF	Beacon Evaluation Kit	PAN1740 Beacon EMK
ENW-89846A1KF	Module	PAN1740

Block Diagram:



Technical Characteristics:

Parameter	Value	Condition/Note
Receiver Sensitivity	-93 dBm	1% Per
Output Power	0 dBm	Maximum Setting
Power Supply	2.35 to 3.3 V	Single Operation Voltage
Transmit Mode	4.9 mA	GFSK
Receive Mode	4.9 mA	GFSK
Operating Temp Range	-40C / +85C	Industrial Range
Size	26x24 mm	