

Featured Products



Ideal for IoT

Wi-SUN Wireless Communication Modules

BP35C0 (Surface Mount Type)/BP35C2 (USB Dongle)

- ▶ Ideal for power management applications using smart meters
- ▶ Suitable for outdoor devices (i.e. chargers) as well as indoor equipment in stores and buildings using Sub - GHz
- ▶ Designed to fit small enclosures (BP35C0)
- ▶ Easily add onto HEMS gateways (BP35C2)

High Frequency Design
Unnecessary

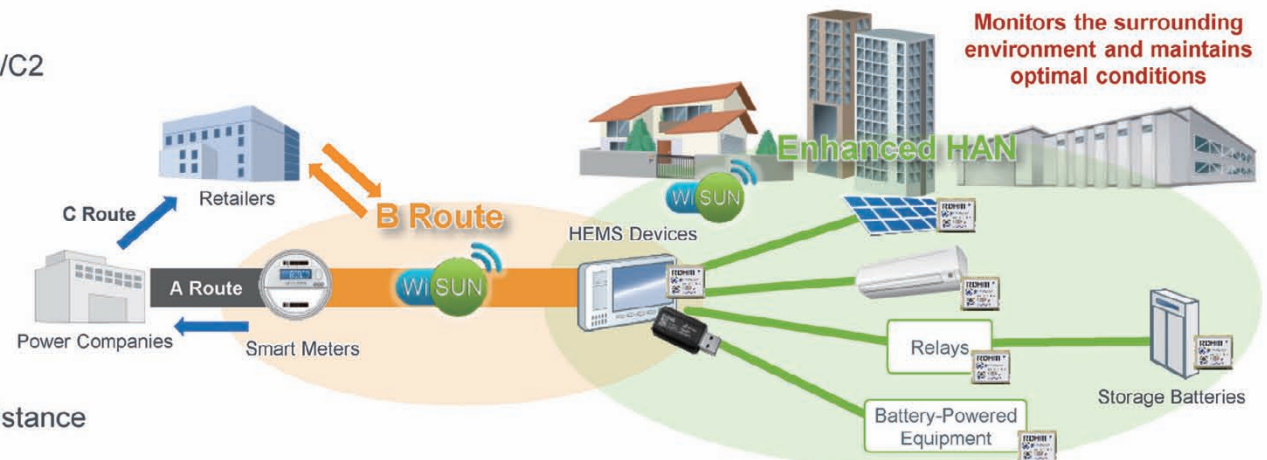
Radio Law
Certified

Driver Design
Unnecessary



Usage Examples

- Achieve B Route and HAN Communication using the BP35C0/C2
- Ideal for HEMS and sensor applications
- Optimized for 8 different HEMS devices (B Route smart meters, gateways, solar power generation, storage batteries, fuel cells, EVs/PHVs, AC, lighting, water heaters)
- Supports a variety of sensors (environmental: temperature, humidity, atmospheric pressure, brightness, motion, etc.)
- BP35C0/C2 enables use as hardware-based sleep/relay devices compatible with Enhanced HAN
- Sleep device ⇒ Power saving ⇒ Battery driven
- Relay device ⇒ Relay function ⇒ Improved communication distance



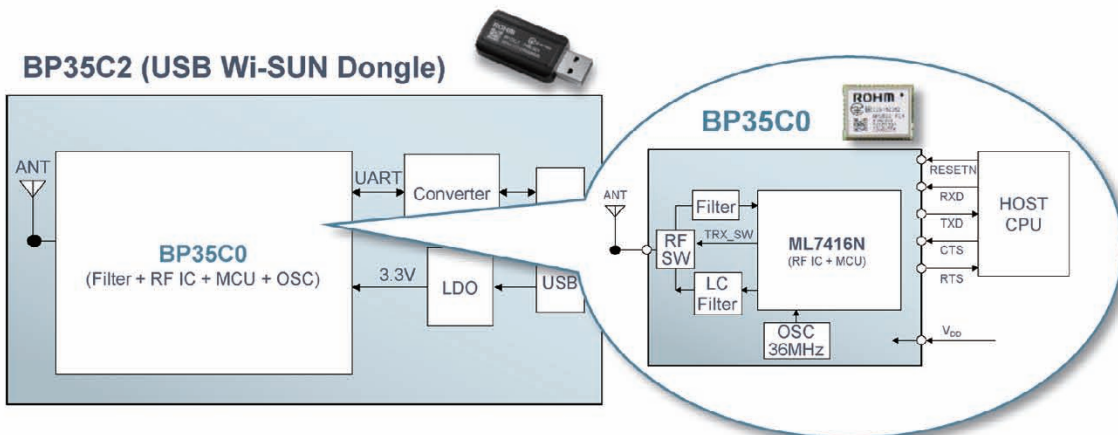
Block Diagram

Software Stack

Simplifies Wi-SUN communication

Specifications

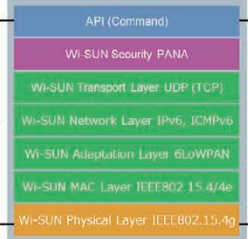
BP35C2 (USB Wi-SUN Dongle)



Application Layer

ECHONET Lite

UART



* Please contact ROHM regarding the software stack.
 * ROHM's specified low power wireless modules are wireless communication modules. When developing applications using these modules it is also necessary to develop application software. Many applications are supported by third parties, and sample code for demonstrating and evaluating our modules can be downloaded from our website. Also, please refer to our website for technical support.

Part No.	BP35C0	BP35C2
Compliant Specifications	ARIB ST-D-T 108/Wi-SUN (B Route, HAN)	
Antenna	—	Included
Connector	SMD (Surface Mount)	USB
RF	ML7416N (LAPIS Semiconductor)	
Host CPU I/F	UART	USB
Frequency	922.5 to 927.9MHz	
Modulation Method	Binary GFSK	
Datasheet	100kbps	
Transmission Power	20mW (13dBm)	
Reception Sensitivity	-103dBm (100kbps, BER<0.1%)	
Supply Voltage (V)	2.6 to 3.6	4.5 to 5.0 to 5.5
Operating Temp. (°C)	45mA (20mW transmission+ 25mA reception) 4µA [Sleep]	48mA (20mW transmission+ 30mA reception) 6mA [Sleep]
Operating Temp. (°C)	-30 to +85	-20 to +50
Size (mm)	15.0×19.0×3.0	21.4×49.7×8.5

Lineup

Part No.	Supply Voltage (V)	Operating Temp. (°C)	Host CPU I/F	Compatible Standards	Built-in System LSI	External Dimensions (mm)	Package
New BP35C2	5.0 (Single Power Supply)	-20 to +50	USB	Wi-SUN	ML7416N (LAPIS Semiconductor)	21.4×49.7×8.5	USB Dongle
New BP35C0	2.6 to 3.6 (Single Power Supply)	-30 to +85	UART	Wi-SUN	ML7416N (LAPIS Semiconductor)	15.0×19.0×3.0	SMD 1.27mm pitch, 28pin
BP35A1	2.7 to 3.6 (Single Power Supply)	-20 to +80	UART	Wi-SUN	ML7396B (LAPIS Semiconductor)	22.0×33.5×4.0	Connector Mounting Type, 0.5mm pitch, 20pin



Wi-SUN (Wireless Smart Utility Network)

- A 920MHz wireless communication standard that enables long distance communication with low power consumption.
- ROHM's products have not only acquired Wi-SUN certification, they have been registered as CTBU (Certified Test Bed Unit) as well, playing the role as reference units for Wi-SUN communication.

The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request. Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage. The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information. If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law.

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