SEMTECH

WIRELESS & SENSING PRODUCTS

Features

- Dual modem overlay PLC+RF+LoRa®
- Dual modem PLC for path A, RF for path B
- Multi-band and multi-standard RF and PLC
- Integrated hardware AES encryption & decryption engine
- Internal processor for network layer
  - 6LowPan
  - IEC 61334-4-32
  - Bridging and routing data packets between two modems
- Internal processor for upper layers applications such as Echonet-Lite
- Integrated secure flash memory
- Software architecture, future proof.
- Firmware upgradable Over The Air (OTA) or Over The Wire (OTW)
- Industrial temperature range

Applications

- Automated meter reading
- Revenue protection kiosk
- Home and building automation
- Industrial monitoring and control
- HAN/LAN gateway

Description

The EV8600 is a hybrid sub-GHz RF + narrowband PLC single-chip transceiver SoC with both modems capable of simultaneous or independent operation. The PLC block of EV8600 comprises a multi-band (including CENELEC, FCC and ARIB bands), multi-standard modem covering the following standards:

- ITU-T G.9903 (G3-PLC)
- ITU-T G.9904 (PRIME)
- IEEE P1901.2
- IEC 61334 (S-FSK)

On the RF side, the EV8600 covers bands from 137MHz to 1020MHz and features LoRa®, which provides ultra-long spread spectrum communications and high interference immunity. The radio modem covers the following standards:

- LoRa®
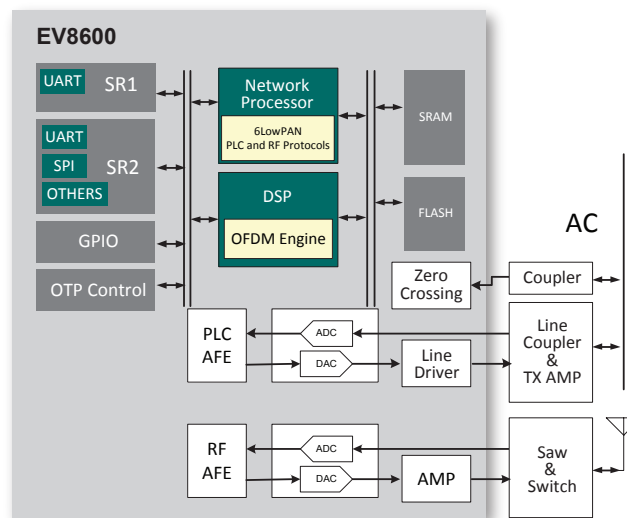- 802.15.4g (WiSUN)
- Wireless MBUS

Block Diagram

Figure A: EV8600 Block Diagram

EV8600
Final Datasheet   **Rev 1.2**
May 3, 2016

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Proprietary & Confidential

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