



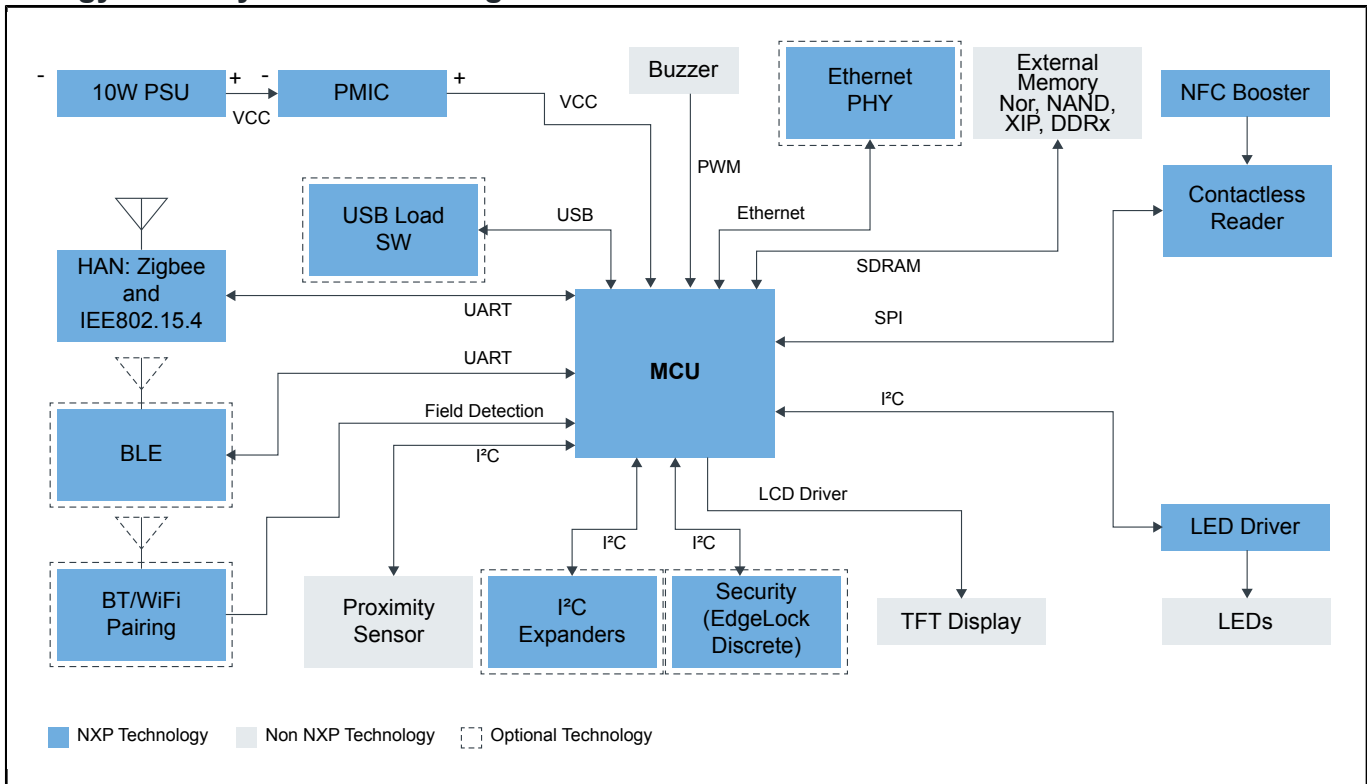
# Energy Gateway

Last Updated: Dec 30, 2021

To achieve better service and smarter, streamlined processes, energy providers require reliable, real-time access to data. NXP® products help data concentrators or energy gateways create the necessary infrastructure to gather data from different sensors and utility meters, upload it to the central utility server, and show it to the user. The energy gateway synchronizes time and date data of utility meters to the central utility server and enables secure data transfer of user authentication and encryption information.

Communication to sensors uses RF technology such as ZigBee, Sigfox, and Bluetooth Low Energy.

## Energy Gateway i.MX Block Diagram

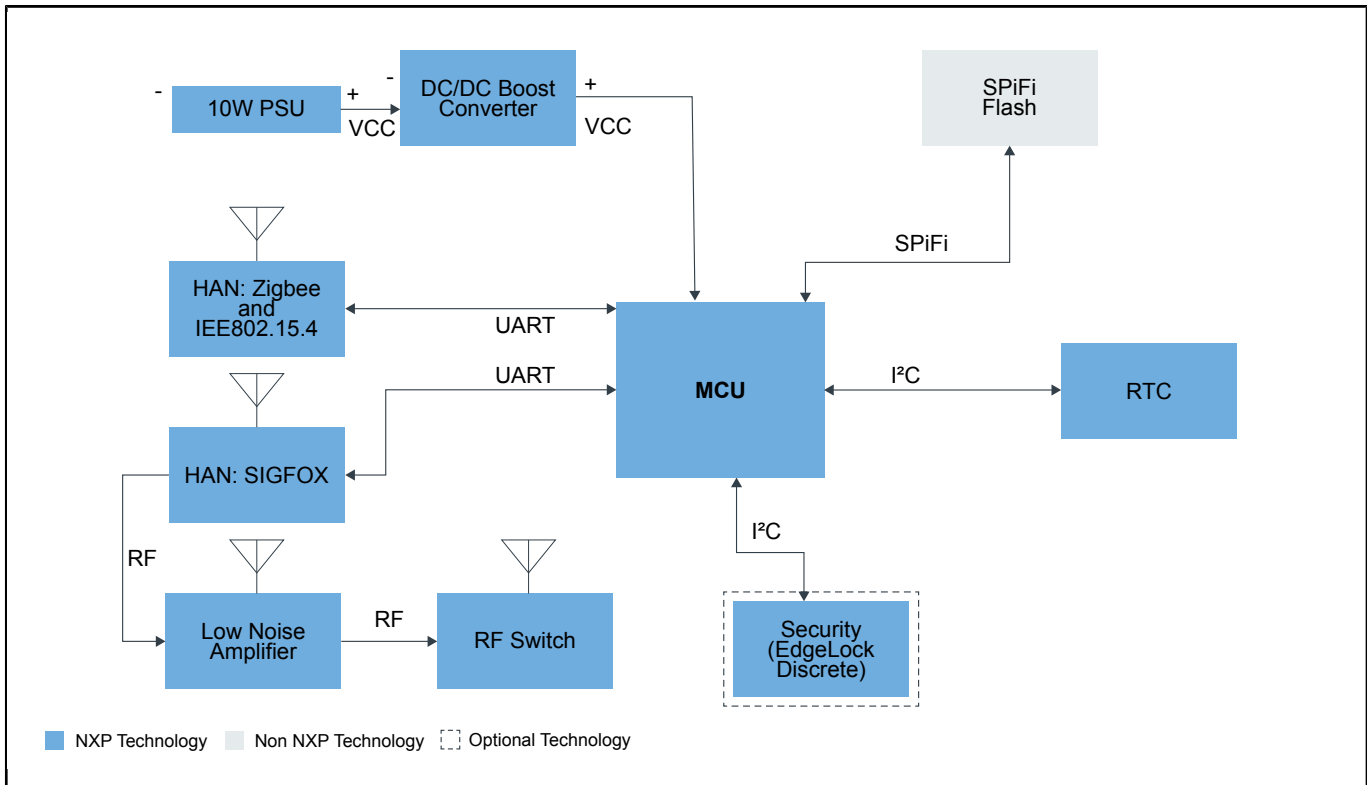


### Recommended Products for Energy Gateway i.MX

MCU	<ul style="list-style-type: none"> <li>• <a href="#">i.MX6UL</a>: i.MX 6UltraLite Processor - Low-Power, Secure, Arm® Cortex®-A7 Core</li> <li>• <a href="#">i.MX6S</a>: i.MX 6Solo Processors – Single-Core, Multimedia, 3D Graphics, Arm® Cortex®-A9 Core</li> </ul>
Power Management	<ul style="list-style-type: none"> <li>• <a href="#">TEA1721DT</a>: HV Start-up Flyback Controller with Integrated MOSFET for 5 W Applications, F~Burst = 1270 Hz</li> <li>• <a href="#">PF3001</a>: 10-Channel Configurable PMIC for i.MX6 and i.MX7 Application Processors</li> </ul>
Wireless	<ul style="list-style-type: none"> <li>• <a href="#">JN5169</a>: ZigBee and IEEE802.15.4 Wireless Microcontroller with 512 KB Flash, 32 KB RAM</li> <li>• <a href="#">NTAG213F, NTAG216F</a>: NFC Forum Type 2 Tag Compliant IC with 144/888 B User Memory and Field Detection</li> <li>• <a href="#">QN908x</a>: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution</li> <li>• <a href="#">IW416</a>: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution</li> <li>• <a href="#">88W8977</a>: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution</li> </ul>

Drivers	<ul style="list-style-type: none"> <li>• <a href="#">NX5P3290UK</a>: USB PD and Type-C Current-Limited Power Switch</li> <li>• <a href="#">PCA9626</a>: 24-Bit Fm+ I<sup>2</sup>C-Bus 100 MA 40 V LED Driver</li> <li>• <a href="#">PCAL6408A</a>: Low-Voltage Translating, 8-Bit I<sup>2</sup>C-Bus/SMBus I/O Expander</li> </ul>
NFC	<ul style="list-style-type: none"> <li>• <a href="#">PCA9410_9410A</a>: 3.0 MHz, 500 MA, DC-to-DC Boost Converter</li> <li>• <a href="#">PN5190</a>: NFC Frontend supporting challenging RF environment for payment, physical access control</li> </ul>
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Transceiver	<ul style="list-style-type: none"> <li>• <a href="#">TJA1101/TJA1101B</a>: Robust, Low Power 100BASE-T1 PHY Transceiver</li> </ul>
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> <li>• <a href="#">EdgeLock<sup>®</sup> SE050</a>: Plug &amp; Trust Secure Element Family – Enhanced IoT security with high flexibility</li> </ul>

## Energy Gateway LPC Block Diagram

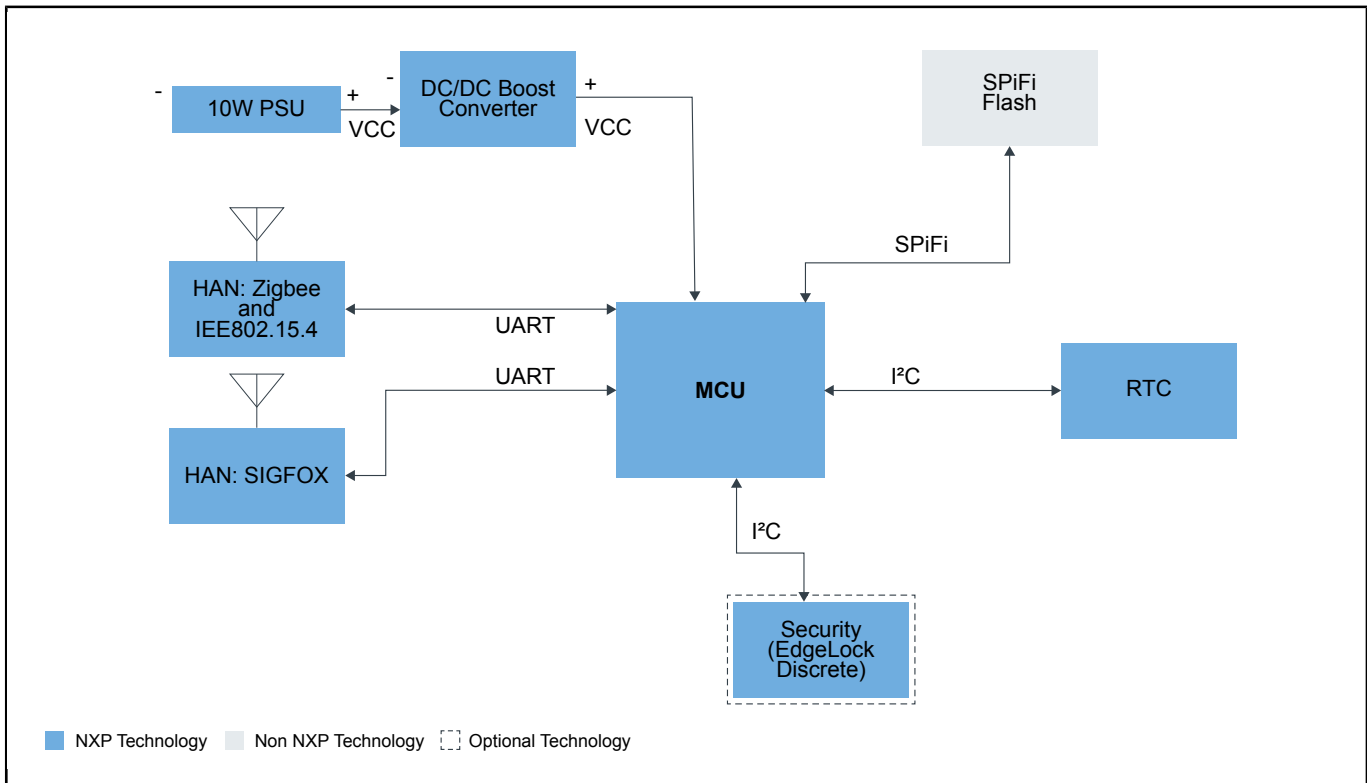


### Recommended Products for Energy Gateway LPC

MCU	<ul style="list-style-type: none"> <li>• <a href="#">LPC540XX</a>: Power-Efficient Microcontrollers (MCUs) with Advanced Peripherals Based on Arm® Cortex®-M4 Core</li> </ul>
Power Management	<ul style="list-style-type: none"> <li>• <a href="#">PCA9410_9410A</a>: 3.0 MHz, 500 MA, DC-to-DC Boost Converter</li> <li>• <a href="#">TEA1721DT</a>: HV Start-up Flyback Controller with Integrated MOSFET for 5 W Applications, F~Burst = 1270 Hz</li> </ul>
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RTC	<ul style="list-style-type: none"> <li>• <a href="#">PCF2129</a>: Accurate RTC with Battery Backup – Selectable I<sup>2</sup>C-Bus or SPI</li> </ul>

## Energy Gateway LPC Basic Block Diagram



### Recommended Products for Energy Gateway LPC Basic

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View our complete solution for [Energy Gateway](#).

**Note:** The information on this document is subject to change without notice.

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