

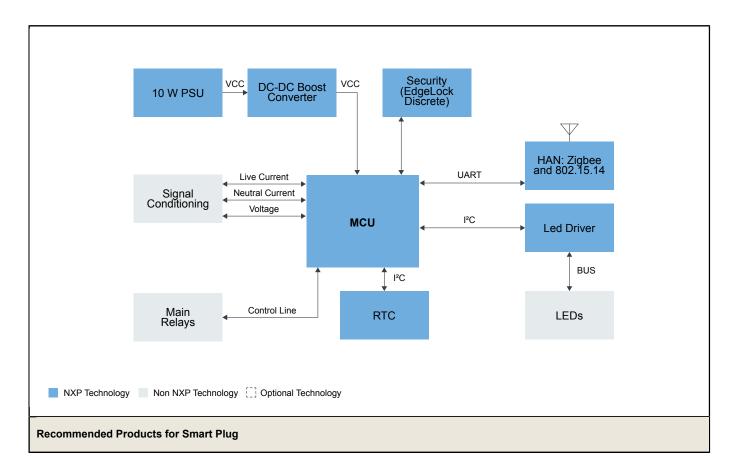
Smart Power Socket

Last Updated: Feb 26, 2025

Faced with limited resources and booming demand, the energy industry seeks greater efficiencies within complex energy management and distribution processes, all while providing a great consumer experience. To achieve better service and smarter, streamlined processes, energy providers require reliable, real-time access to data.

A smart plug controls the energy supply of devices connected to it. Using a ZigBee™ interface this device connects to a gateway where you can send commands to turn on/off or see the power consumption of the device connected to it.

Smart Plug Block Diagram



MCU	* KM1x: 50 MHz, Mainstream Precision Metrology Microcontrollers based on Arm [®] Cortex [®] -M0+
Power Management	TEA1721DT: HV Start-up Flyback Controller with Integrated MOSFET for 5 W Applications, F~Burst = 1270 Hz PCA9410_9410A: 3.0 MHz, 500 MA, DC-to-DC Boost Converter
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Wireless	JN5169: ZigBee and IEEE802.15.4 Wireless Microcontroller with 512 KB Flash, 32 KB RAM
Peripherals	PCA9955BTW: 16-Channel Fm+ I ² C-Bus 57 MA/20 V Constant-Current LED Driver PCA2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal for Automotive Applications
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Security (EdgeLock Discrete)	SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT Security with High Flexibility SE051: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets

View our complete solution for Smart Power Socket.

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