



Heat Metering

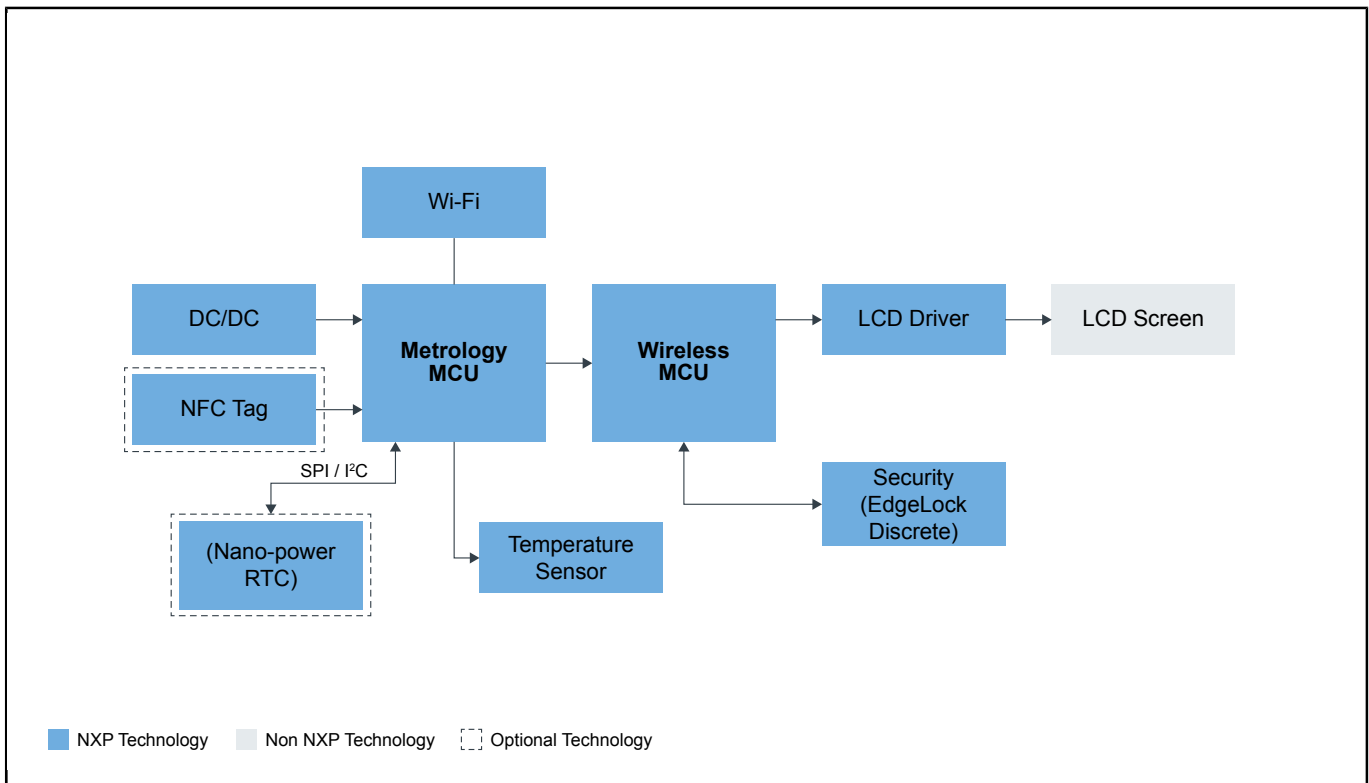
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Modern buildings do a smart regulation of their energy consumption: whether is electricity, ventilation, or heat.

Basically, a heat meter consists of a metrology MCU to measure the inflow and outflow temperatures and volumetric flow of fluid through the pipe. A thermostat regulates the temperature of a system, room or building. Modern systems also compute calculations, are programmable, learn from the habits of users and react to their surroundings.

Our robust EdgeVerse [edge computing](#) portfolio provides MCU, sensor, wireless connectivity, interface solutions, and anti-tamper products for your heat metering applications.

Heat meter Block Diagram



Recommended Products for Heat meter	
MCU	<ul style="list-style-type: none"> • LPC5500 Arm Cortex-M33: LPC5500 Series: Arm® Cortex®-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology • K5x Measurement: Kinetis® K5x Measurement Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Core • KM1x: 50 MHz, Mainstream Precision Metrology Microcontrollers based on Arm® Cortex®-M0+ • i.MX-RT1020: i.MX RT1020: Crossover MCU with Arm® Cortex®-M7
Wireless Connectivity MCU	<ul style="list-style-type: none"> • QN9090-30: QN9090/30: Bluetooth Low-Energy MCU with Arm®Cortex®-M4 CPU, Energy Efficiency, Analog and Digital Peripherals and NFC Tag Option • KW41Z: Kinetis® KW41Z-2.4 GHz Dual Mode: Bluetooth® Low Energy and 802.15.4 Wireless Radio Microcontroller (MCU) based on Arm® Cortex®-M0+ Core • JN5189_88_T: JN5189/88 (T): High-Performance and Ultra-Low-Power MCUs for Zigbee® and Thread with Built-In NFC Option
LCD Driver	<ul style="list-style-type: none"> • PCF85133U: Universal LCD Driver for Low Multiplex Rates
DC-DC Solutions	<ul style="list-style-type: none"> • Integrated Switching Regulators: Integrated Switching Regulators
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> • SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility
NFC Tag	<ul style="list-style-type: none"> • NTAG_I2C: NTAG I²C Plus 2K: NFC Forum Type 2 Tag with I²C Interface
Temperature Sensor	<ul style="list-style-type: none"> • P3T1035xUK: I3C, I²C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor • P3T2030xUK: I3C, I²C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor • P3T1084UK: I3C/I²C-Bus ±0.4 °C Accurate Digital Temperature Sensor • P3T1085UK: I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor • P3T1755DP: I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor • P3T1750DP: I3C/I²C-Bus, ±1 °C Accuracy, Digital Temperature Sensor • LM75B: Digital Temperature Sensor and Thermal Watchdog • PCT2075: I²C-Bus Fm+, 1 Degree C Accuracy, Digital Temperature Sensor and Thermal Watchdog
Wi-Fi	<ul style="list-style-type: none"> • 88W8977: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution
RTC	<ul style="list-style-type: none"> • PCF2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal
RTC	<ul style="list-style-type: none"> • PCF85053A: Bootable CPU RTC with Two I²C Buses, 128 Byte SRAM and Alarm Function • PCF2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal

View our complete solution for [Heat Metering](#).

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