Heat Meter

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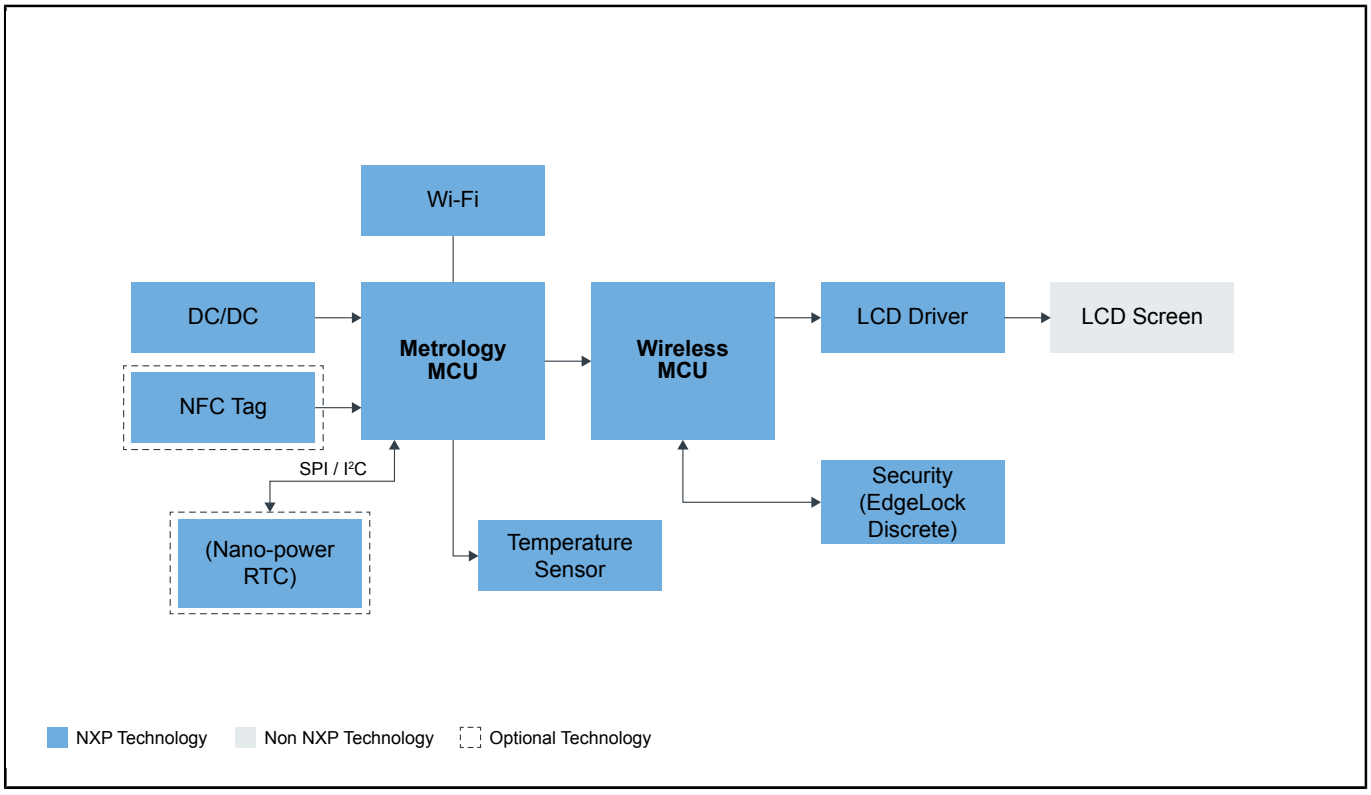
Modern buildings do a smart regulation of their energy consumption: whether is electricity, ventilation, or heat.

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	• 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	• 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	• PCF85133U: Universal LCD Driver for Low Multiplex Rates
DC-DC Solutions	• Integrated Switching Regulators: Integrated Switching Regulators
Security (EdgeLock Discrete)	• SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT Security with High Flexibility
NFC Tag	• NTAG_I2C: NTAG I²C Plus 2K: NFC Forum Type 2 Tag with I²C Interface
Temperature Sensor	• 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	• 88W8977: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution
RTC	• PCF2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal
RTC	• 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 Meter.

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

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