



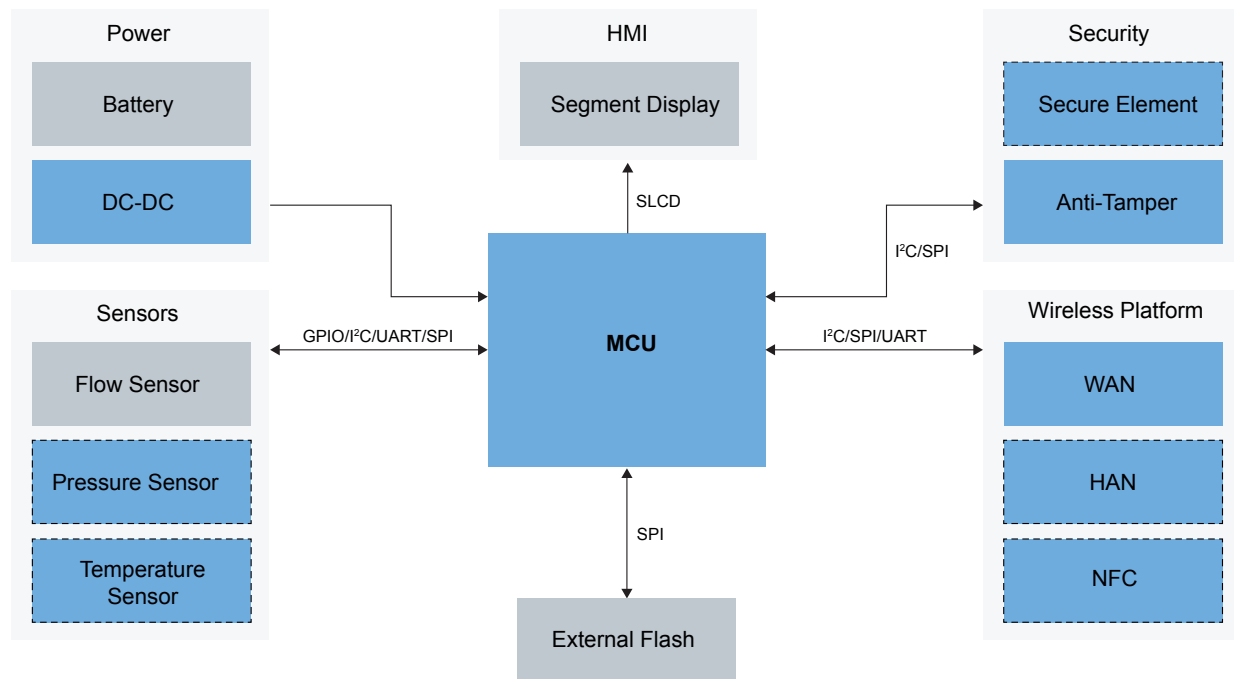
# Flow Metering (Water, Gas, Heat)

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Flow meters precisely measure the flow rate or thermal energy consumption of liquids and gases, with enhanced accuracy and connectivity. Smart flow meters contain increased digital capabilities to enable real-time data and analytics for enhanced monitoring, remote access, and process automation. It must optimize energy consumption to extend the battery life for longer than ten years.

Flow meters play a crucial role in optimizing efficiency, enhancing safety, and ensuring compliance across diverse industries from home and buildings, to processing plants and healthcare applications. NXP's advanced technologies enable the development of flow metering solutions with accurate sensing, secure communication, anti-temper mechanisms and long battery life. NXP metering solutions enable faster development time with less complexity and reduced cost.

**Flow meter (water,gas,heat) Block Diagram**



■ NXP technology ■ 3rd party components □ Optional technology

#### Recommended Products for Flow meter (water,gas,heat)

DC-DC	<ul style="list-style-type: none"> <li>• <a href="#">PCA9420-PCA9421</a>: PMIC for Low Power Applications</li> </ul>
Pressure sensor	<ul style="list-style-type: none"> <li>• <a href="#">MPXx5010</a>: Differential and Gauge, Integrated Pressure Sensor (0 to 10 kPa)</li> </ul>
Temperature Sensor	<ul style="list-style-type: none"> <li>• <a href="#">P3T2030xUK</a>: I3C, I<sup>2</sup>C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">P3T1035xUK</a>: I3C, I<sup>2</sup>C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor</li> </ul>
MCU	<ul style="list-style-type: none"> <li>• <a href="#">MCX-L14X-L25X</a>: MCX L14x and L25x Ultra-Low-Power MCUs with Dedicated Sense Domain and Adaptive Dynamic Voltage Control</li> </ul>

Secure Element	<ul style="list-style-type: none"> <li>• <a href="#">SE052F</a>: EdgeLock® SE052F: Secure Element with FIPS 140-3 Level 3 Certification</li> <li>• <a href="#">SE051</a>: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets</li> </ul>
Anti-tamper	<ul style="list-style-type: none"> <li>• <a href="#">NMH1000</a>: NMH1000 Ultra-Low Power and Low-Voltage Magnetic Switch</li> <li>• <a href="#">FXLS8974CF</a>: ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer</li> </ul>
WAN	<ul style="list-style-type: none"> <li>• <a href="#">UBX100</a>: UBX100 Sub-GHz Wireless M-Bus Solution</li> </ul>
HAN	<ul style="list-style-type: none"> <li>• <a href="#">IW612</a>: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 6 (802.11ax) + Bluetooth® 5.4 + 802.15.4 Tri-Radio Solution</li> <li>• <a href="#">IW610</a>: 2.4/5GHz Dual-Band 1x1 Wi-Fi® 6 + Bluetooth Low Energy 5.4 + 802.15.4 Tri-Radio Solution</li> </ul>
NFC	<ul style="list-style-type: none"> <li>• <a href="#">NTAG5-LINK</a>: NTAG® 5 Link: NFC Forum-Compliant I²C Bridge for IoT on Demand</li> </ul>

View our complete solution for [Flow Metering \(Water, Gas, Heat\)](#).

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

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