

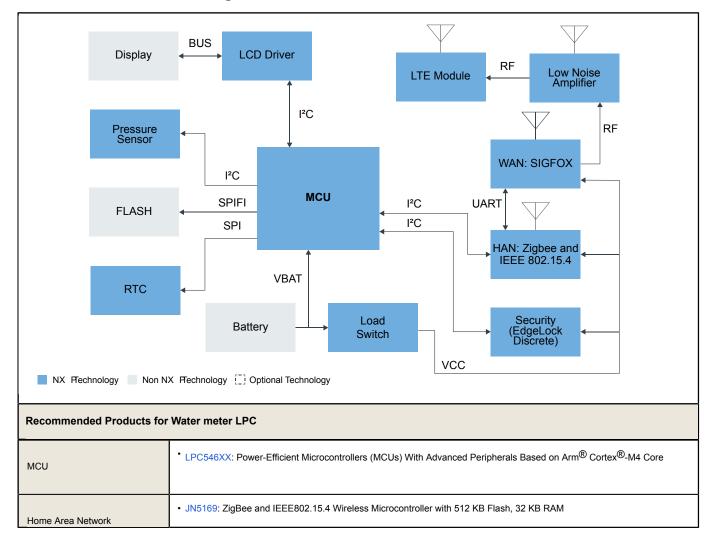
## **Water Meter**

Last Updated: Apr 18, 2024

NXP connectivity solutions for smart metering address the challenges smart cities face for reliable, secure communications for remote metering and home energy management. We enable remote metering with NAN technologies like IEEE 802.15.4 and Wireless MBUS. Additionally, NXP fosters smart energy management inside homes with HAN technologies like ZigBee.

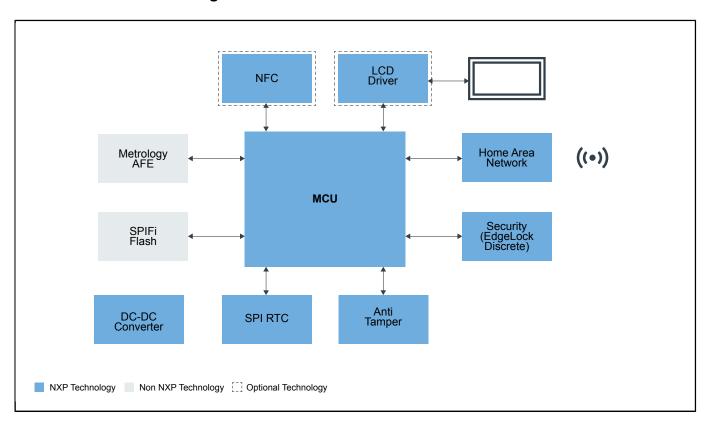
Flow meters help smart cities measure the volume of water at a specific time or over a long period. The measurement is then displayed on low-power segment LCDs, often driven by segment LCD drivers on an MCU. Advanced flow meters incorporate RF communication interfaces for connecting to one-way or two-way RF meter reading systems.

## Water meter LPC Block Diagram



	• K32W061_41: K32W061/41: High-Performance, Secure and Ultra-Low-Power MCU for Zigbee <sup>®</sup> ,Thread <sup>™</sup> , and Bluetooth <sup>®</sup> LE 5.0 with Built-In NFC Option
Wide Area Network	OL2385AHN: Low-Power Multi-Channel UHF RF Wireless Platform
Low noise amplifier	BGS8H2: SiGe:C Low-Noise Amplifier MMIC with Bypass Switch for LTE
Driver	PCF85133U: Universal LCD Driver for Low Multiplex Rates
Peripherals	PCF2123: SPI Real-Time Clock/Calendar     MPXx5050: Differential and Gauge Pressure Sensor (-50 to 50 kPa)     PCF2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal
Security (EdgeLock Discrete)	* SE050: EdgeLock <sup>®</sup> SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility
Peripherals	<ul> <li>Peripherals: Differential and Gauge Pressure Sensor (-50 to 50 kPa)</li> <li>Peripherals: SPI Real-Time Clock/Calendar</li> <li>Peripherals: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal</li> </ul>
RF Switch (LTE)	NX3P2902BUK: Logic-Controlled High-Side Power Switch     NX3L1G53: Low-Ohmic Single-Pole Double-Throw Analog Switch
RF Switch (LTE)	NX3P2902BUK: Logic-Controlled High-Side Power Switch     SA630D: Single-Pole Double-Throw (SPDT) Switch

## Water Meter KL Block Diagram



Recommended Products for Water Meter KL	
MCU	<ul> <li>KL8x: Kinetis<sup>®</sup> KL8x-72/96 MHz Secure Ultra-Low Power Microcontrollers (MCUs) based on Arm<sup>®</sup> Cortex<sup>®</sup>-M0+ Core</li> <li>KL3x: Kinetis<sup>®</sup> KL3x-48 MHz, Segment LCD Ultra-Low-Power Microcontrollers (MCUs) based on Arm<sup>®</sup> Cortex<sup>®</sup>-M0+ Core</li> </ul>
Security (EdgeLock Discrete)	SE050: EdgeLock <sup>®</sup> SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility
Wireless	JN5169: ZigBee and IEEE802.15.4 Wireless Microcontroller with 512 KB Flash, 32 KB RAM
Anti Tamper	FXLS8974CF: ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer
RTC	PCF2123: SPI Real-Time Clock/Calendar     PCF2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal
Driver	PCF85133U: Universal LCD Driver for Low Multiplex Rates
Power Management	PCA9410_9410A: 3.0 MHz, 500 MA, DC-to-DC Boost Converter
NFC	PN5190: NFC Frontend supporting challenging RF environment for payment, physical access control

View our complete solution for Water Meter.

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

## www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.