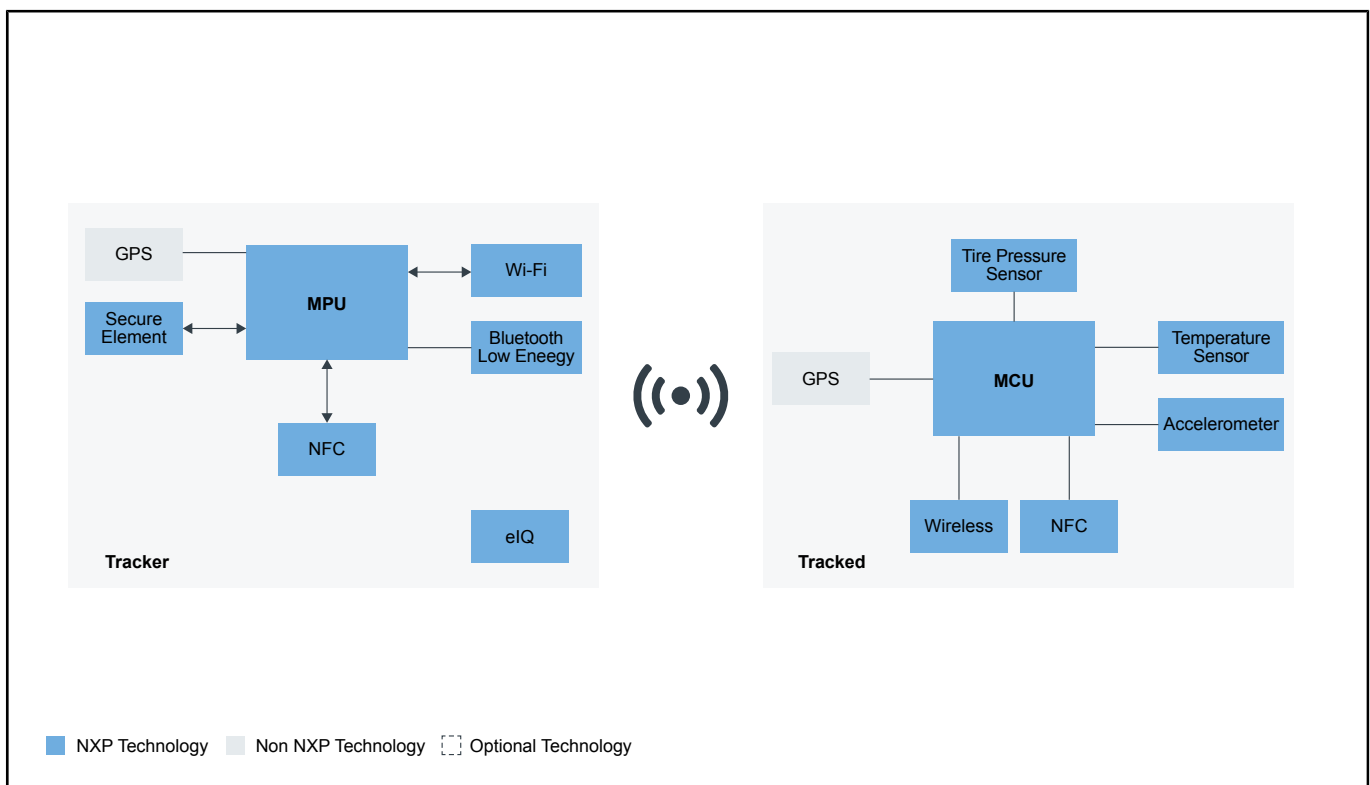# Fleet Management

Last Updated: Nov 12, 2021

Fleet management systems are complex systems in charge of several activities such as: vehicle telematics (tracking and diagnostics), driver, speed and fuel management, route optimization, cargo tracking, preventive maintenance, among others. The introduction of Artificial Intelligence and Machine Learning (ML) ensures that mechanics, drivers and logistic managers make better decisions.

NXP's processors with real-time networking, sensors, NFC and RFID tracking applications, secure element and ML development platforms such as eIQ, make the right ecosystem to create an efficient fleet management system.

Fleet Management Block Diagram

Recommended Products for Fleet Management	
MPU	• Layerscape® 1043A and 1023A Processors • Layerscape® 1028A Applications Processor • i.MX 8M Family - Arm® Cortex®-A53, Cortex-M4, Audio, Voice, Video
NFC	• PN7150: High-Performance NFC Controller with Integrated Firmware for Smart Devices
Security (EdgeLock Discrete)	• EdgeLock® SE050: Plug & Trust Secure Element Family – Enhanced IoT security with maximum flexibility
Bluetooth Low Energy	• K32W061/41: High Performance, Secure and Ultra-Low-Power MCU for Zigbee®,Thread™, and Bluetooth® LE 5.0 with Built-in NFC Option
Wi-Fi	• IW416: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution • 88MW32X 802.11n Wi-Fi® Microcontroller SoC
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eIQ	• eIQ ML Development Environment: eIQ® ML Software Development Environment
MCU	• K32-L3: NXP's Energy Efficient Cortex-M4 MCU with Cortex-M0+ and Advanced Security
TPMS	• Tire Pressure Monitoring Systems (TPMS): Tire Pressure Monitoring Systems (TPMS)
Temperature	• PCT2075: I^2C-Bus Fm+, 1 Degree C Accuracy, Digital Temperature Sensor And Thermal Watchdog
Accelerometer	• FXOS8700CQ: Digital Motion Sensor - 3D Accelerometer (±2g/±4g/±8g) + 3D Magnetometer

View our complete solution for Fleet Management.

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