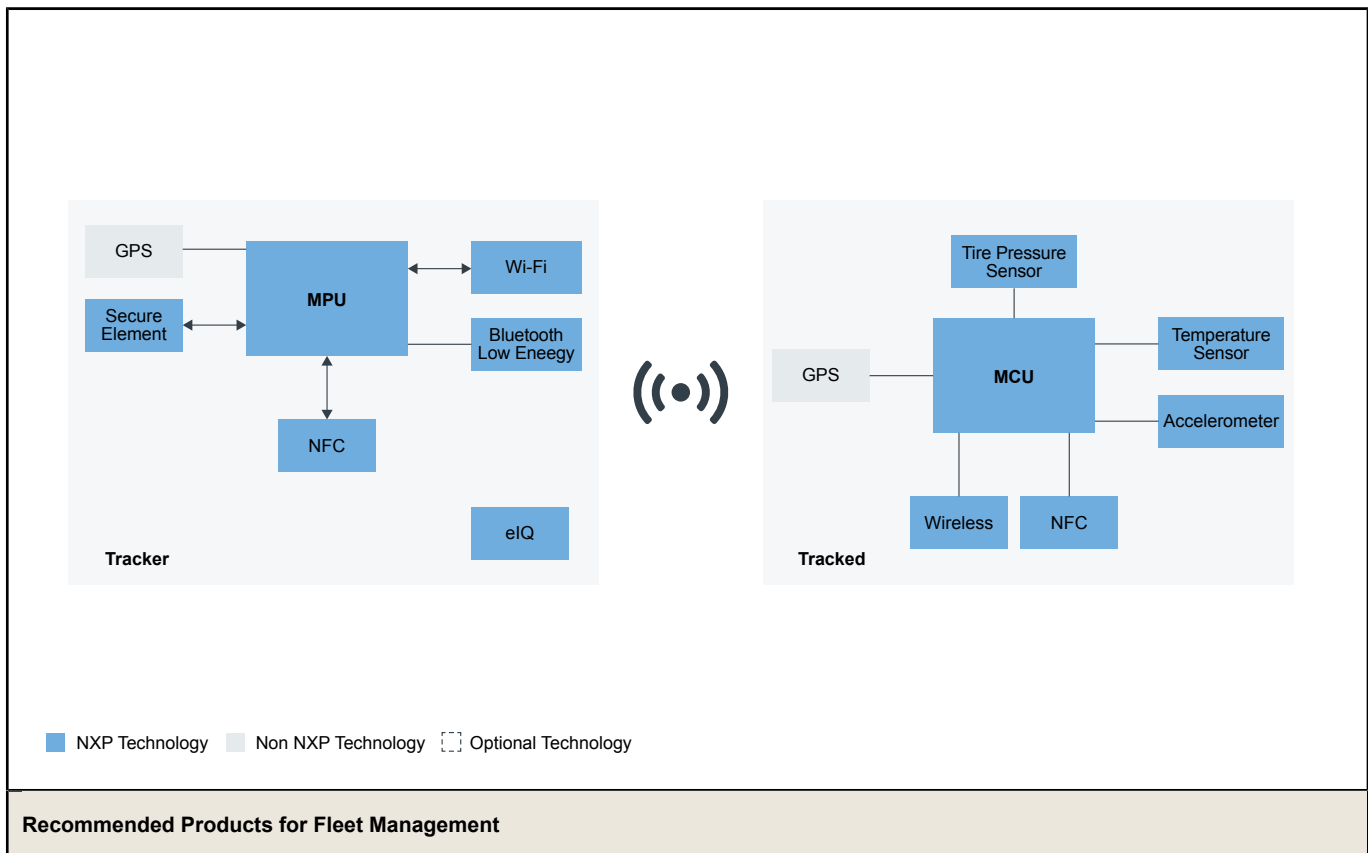# Fleet Management

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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	• LS1043A: Layerscape® 1043A and 1023A Processors • LS1028A: Layerscape® 1028A Applications Processor • i.MX8M: i.MX 8M Family - Arm® Cortex®-A53, Cortex-M4, Audio, Voice, Video
NFC	• PN7160: NFC Plug and Play Controller with Integrated Firmware and NCI Interface
Security (EdgeLock Discrete)	• SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT Security with High Flexibility
Bluetooth Low Energy	• K32W061_41: 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 • RW610: Wireless MCU with Integrated Radio: 1x1 Wi-Fi® 6 + Bluetooth® Low Energy 5.4 Radios • RW612: Wireless MCU with Integrated Tri-radio: 1x1 Wi-Fi® 6 + Bluetooth® Low Energy 5.4 / 802.15.4
Wi-Fi	• IW416: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution • RW610: Wireless MCU with Integrated Radio: 1x1 Wi-Fi® 6 + Bluetooth® Low Energy 5.4 Radios • RW612: Wireless MCU with Integrated Tri-radio: 1x1 Wi-Fi® 6 + Bluetooth® Low Energy 5.4 / 802.15.4
eIQ	• eIQ AI Development Environment: eIQ® AI 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	• P3T1035xUK: I3C, I²C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor • P3T2030xUK: I3C, I²C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor • PCT2075: I²C-Bus Fm+, 1 Degree C Accuracy, Digital Temperature Sensor and Thermal Watchdog
Accelerometer	• FXLS8974CF: ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer • FXLS8971CF: ±2g/±4g/±8g/±16g, Low Power 12-Bit Digital Accelerometer

View our complete solution for Fleet Management.

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