

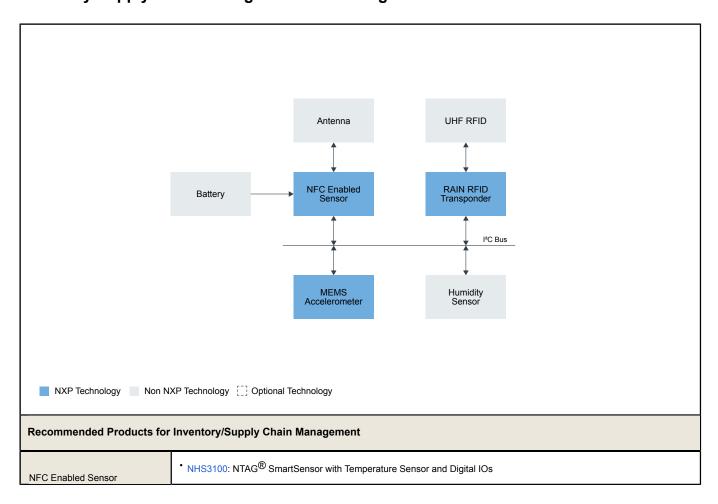
Inventory and Supply Chain Management

Last Updated: Feb 26, 2025

Whether for logistics, shipments, inventory control, security or regulatory compliance, NXP's RFID, edge processing and connectivity products can enable quick, accurate tracking of assets, providing greater visibility, deterring theft, increasing productivity, lowering organizational costs and giving greater control of the overall supply chain process.

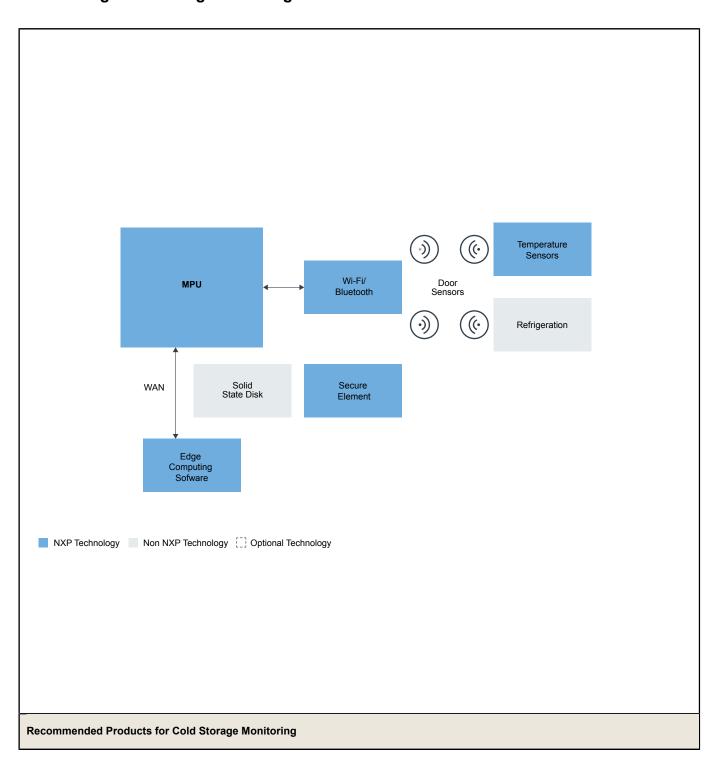
NXP's different RFID families such as UCODE, ICODE and NTAG and our Layerscape and i.MX powerful processing and connectivity options offer a great fit to supply chain optimization efforts.

Inventory/Supply Chain Management Block Diagram



	* SL3S5005N0FUD: UCODE® DNA City
RAIN RFID Transponder	* SL3S5005N0FUD: UCODE [®] DNA City
MEMS Accelerometer	• FXLS8967AF: ±2g/±4g/±8g/±16g, Low Power 12-bit Digital Accelerometer • FXLS8971CF: ±2g/±4g/±8g/±16g, Low Power 12-Bit Digital Accelerometer

Cold Storage Monitoring Block Diagram



MPU	* LS1012A: Layerscape [®] 1012A Low Power Processor * LS1046A: Layerscape [®] 1046A and 1026A Processors * LS2088A: Layerscape [®] 2088A and 2048A Processors * i.MX8M: i.MX 8M Family - Arm [®] Cortex [®] -A53, Cortex-M4, Audio, Voice, Video
Edge Computing Software	• elQ Al Development Environment: elQ [®] Al Software Development Environment
Secure Element	EDGELOCK-A5000: EdgeLock® A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy
Temperature Sensors	LM75B: Digital Temperature Sensor and Thermal Watchdog P3T1035xUK: I3C, I²C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor
Wi-Fi Bluetooth	 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 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 88W9098: 2.4/5 GHz Dual-Band 2x2 Wi-Fi[®] 6 (802.11ax) + Bluetooth[®] 5.3 IW612: 2.4/5 GHz Dual-Band 1x1 Wi-Fi[®] 6 (802.11ax) + Bluetooth[®] 5.4 + 802.15.4 Tri-Radio Solution

View our complete solution for Inventory and Supply Chain Management.

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

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