



# Industrial Control

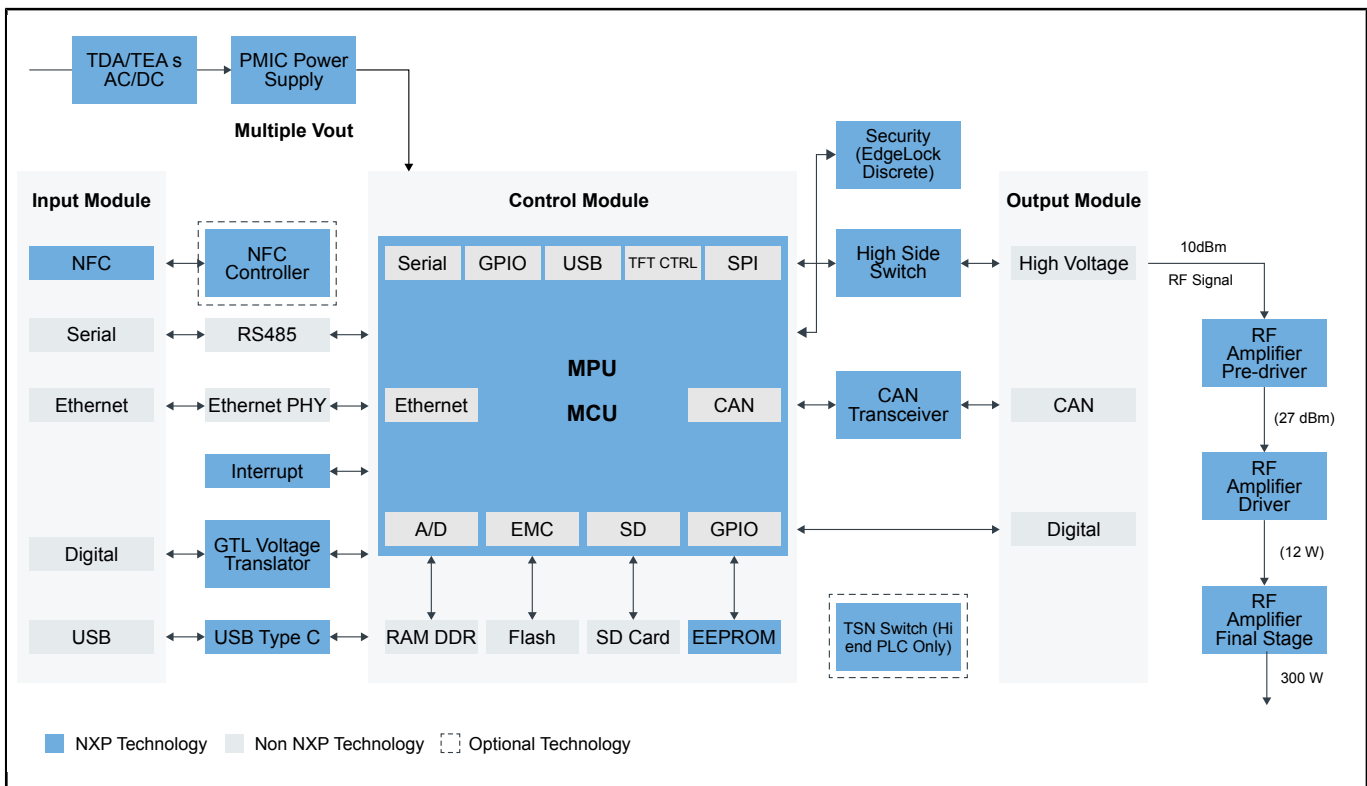
Last Updated: Dec 23, 2021

Industrial control is a key element in any factory automation process. It may vary from a simple panel-mounted controller to large interconnected and interactive distributed control systems.

PLCs are integral to industrial control; their primary function is to control individual machines or stations in real time making low deterministic latency a key factor. For industrial power applications, PLCs may control RF transistors instead of currently used vacuum tubes ensuring an accurate power control over a full dynamic range.

To make PLC programming smart and secure, NFC can replace DIP switches, service UARTs and other electromechanical elements.

## Industrial Control Block Diagram



### Recommended Products for Industrial Control

MPU	<ul style="list-style-type: none"> <li>• <a href="#">Layerscape® 1028A Applications Processor</a></li> <li>• <a href="#">Layerscape® 1021A Dual-Core Processor with LCD Controller</a></li> <li>• <a href="#">KE06: Kinetis® KE06-48 MHz, Mainstream with CAN Microcontrollers (MCUs) based on Arm® Cortex®-M0+ Core</a></li> <li>• <a href="#">i.MX RT1050 Crossover MCU with Arm® Cortex®-M7 Core</a></li> </ul>
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Power Management	<ul style="list-style-type: none"> <li>• <a href="#">FS5600</a>: Automotive Dual Buck Regulator and Controller with Voltage Monitors and Watchdog Timer</li> <li>• <a href="#">AC-DC Controllers</a>: AC-DC Controllers</li> <li>• <a href="#">PF3000</a>: 12-Channel Configurable PMIC for i.MX6 and i.MX7 Application Processors</li> <li>• <a href="#">MC34VR500</a>: Multi-Output DC/DC Regulator</li> </ul>
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Interfaces	<ul style="list-style-type: none"> <li>• <a href="#">I<sup>2</sup>C Voltage Level Translators</a>: I<sup>2</sup>C Voltage Level Translators</li> <li>• <a href="#">PTN5110</a>: USB PD TCPC PHY IC</li> <li>• <a href="#">MC34975</a>: MSDI with Suppressed Wake-up and 32 mA Wetting Current</li> <li>• <a href="#">MC36XSD</a>: 36 V Industrial Low RDSON eXtreme Switch</li> <li>• <a href="#">TJA1055T</a>: Fault-Tolerant CAN Transceiver</li> </ul>
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RF	<ul style="list-style-type: none"> <li>• <a href="#">MMG30271B</a>: 900-4300 MHz, 17.5 dB, 26.9 dBm BTS Driver Amplifier</li> <li>• <a href="#">MHT1008N</a>: 2450 MHz, 12.5 W CW, 28 V RF LDMOS Transistor for Consumer and Commercial Cooking</li> <li>• <a href="#">MRF24300N</a>: 300 W CW over 2400-2500 MHz, 32 V RF Power LDMOS Transistor</li> </ul>
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Non-Volatile Storage	<ul style="list-style-type: none"> <li>• <a href="#">NXH5104UK</a>: 4 Mbit Serial SPI EEPROM</li> </ul>

Security (EdgeLock Discrete)

- [EdgeLock® SE050: Plug & Trust Secure Element Family – Enhanced IoT security with maximum flexibility](#)

View our complete solution for [Industrial Control](#).

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

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