

VIA Smart Industry – Industrial Automation Solutions



Technology advances have blurred the boundaries between the digital and physical worlds, and given rise to the next great industrial revolution known as the Industrial Internet of Things or Industry 4.0. As a result, today's factories require intelligent, interconnected systems linked to cloud services and big data analysis to drive greater manufacturing efficiency, flexibility, and responsiveness.

We provide the foundation for shaping the smart factory of the future with our market-leading range of VIA Industrial Automation Solutions. Combining rich multimedia and HMI capabilities with seamless I/O and wireless connectivity to manufacturing equipment and production networks, VIA Industrial Automation Solutions include a wide selection of ruggedized low power systems that can be rapidly customized to deliver reliable 24/7 operation in even the most challenging factory environments.

Core Applications

VIA Industrial Automation Solutions enable you to minimize development and management costs for sophisticated factory IoT system deployments. In addition to increasing manufacturing efficiency and flexibility by facilitating the collection, processing, and display of critical production data, they also reduce operational costs through real-time monitoring of the status of production machinery and the energy consumption of equipment, lighting, and air-conditioning. Core applications include the following:



Data Collection :

Rich I/O connectivity options for collecting mission-critical data from manufacturing equipment, air-conditioning and heating systems, lighting fixtures and sensors.



Monitoring and Control :

Redundant networking options to ensure 24/7 remote monitoring and control of even the most isolated installations.



Data Analysis :

Real-time data processing and analysis to safeguard against equipment breakdowns, ensure optimum production efficiency, and minimize labor, material and energy costs.



Data Visualization :

Real-time display of critical manufacturing data in rich user-friendly formats to improve operator productivity and optimize production flows.

VIA Starter Kits

By combining a board, connectivity module, screen, cabling, and BSP into an integrated package that can be rapidly customized to meet specific requirements, the VIA Starter Kits accelerate the development of all-in-one HMI systems for the display of and interaction with relevant factory data in rich multimedia formats.

VIA HMI Panel Display Starter Kit

This starter kit features a highly-integrated board, an optional 17" display, and a Linux BSP optimized to enable HTML5-based digital signage applications to provide a flexible and reliable solution for a wide variety of industrial HMI usage scenarios.



- 1.0GHz VIA Cortex-A9 dual-core SoC
- 10/100Mbps Ethernet with PoE support
- Onboard Wi-Fi support
- HTML5 support
- Optional 17" panel for rapid time-to-market

VIA HMI Touch Panel Starter Kit

This starter kit comprises a highly-integrated board, an optional 10.1" LVDS projective capacitive touch screen, an optional Wi-Fi module, and an optimized Android 4.2 BSP to provide an affordable solution for touch-based industrial HMI applications.



- VIA Cortex-A9 dual-core SoC
- Wide input voltage range supporting 9~36V DC-in
- Lockable connectors
- Optional USB Wi-Fi module
- Optional 10.1" projective capacitive touch screen support

VIA Systems

Combining ultra-reliable operation and low power consumption with advanced functionality and performance, VIA Systems have been installed in manufacturing facilities around the world for a wide range of industrial automation applications. They include a variety of robust system platforms with a wealth of customization options.

VIA AMOS-3005

This high-performance fanless ruggedized system is a powerful and flexible solution for the collection, processing, and analysis of high volumes of critical data from factory equipment and sensors.



- 1.2 GHz VIA Eden® X4 processor with VIA PadLock® Security Engine
- Wide input voltage range supporting 9V~36V DC-in
- Wide operating temperature range from - 40°C up to 60°C
- Dual Gigabit Ethernet, optional Wi-Fi and 3G/4G modules
- Rich I/O feature set including lockable USB, COM and GPIO

VIA AMOS-820

This rugged ultra-compact fanless system provides a proven low-power solution for machinery and equipment management monitoring and control applications with multiple hardware and software customization options.



- 1.0GHz NXP i.MX 6Quad Cortex-A9 SoC
- Power over Ethernet (PoE) option
- Wide operating temperature range from -20°C up to 65°C
- Legacy I/O support including dual CAN bus, dual COM, and GPIO
- Linux and Android BSPs, including VIA Smart ETK

VIA ARTiGO A600

This sleek fanless system is an affordable and flexible system platform for facility and equipment energy management data collection and visualization applications.



- High performance 800MHz VIA Cortex-A9 SoC
- Rich I/O connectivity including COM, Digital I/O, and USB 2.0 ports
- Dual Ethernet ports and optional high-speed wireless networking modules
- Four 3-pole Phoenix RS-485 ports with full 3.75KV isolation
- Customized Linux BSP services

VIA VIPRO VP7910

This high-performance fanless panel PC with a 10.4" TFT LCD resistive or projective capacitive touch screen is ideal for industrial HMI applications requiring low power consumption, noise-free operation, and multiple I/O ports.



- 1.2GHz VIA Eden® X4 quad-core processor
- Resistive or projective capacitive touch screen options
- Supports one mSATA and one hard disk drive bay
- Supports two miniPCIe slots and two SIM card slots for 3G/Wi-Fi communication
- Front panel IP65 compliant against water and dust

VIA ALTA DS 2

This compact fanless Android media player offers dual independent Full HD screen support for a host of industrial digital signage and data display applications.



- Commercial-grade fanless Android digital signage system
- High-performance 1.0GHz dual core VIA Elite E1000 Cortex-A9 SoC
- Dual-screen with extended & independent screen content support
- Signage solution pack including customized Android 4.4.2 BSP with VIA Smart ETK

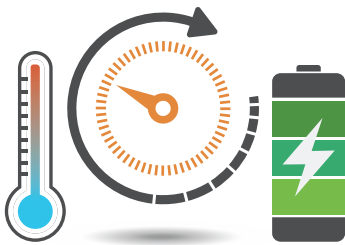
— Rapid Customization —

VIA Smart Industrial Automation Solutions are based on a modular design approach that facilitates rapid hardware and software customization. Key customization options include :



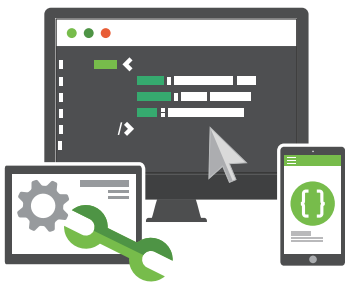
Peripheral integration :

With a wide selection of RS-232, RS-485, USB, GPIO, and DIO ports, VIA Industrial Automation Solutions provide a wealth of connectivity options to both modern and legacy equipment and systems. Gigabit Ethernet, Wi-Fi, and 4G networking options ensure high-speed network connections for mission-critical applications such as remote monitoring and control.



Operational environment optimization :

With their ruggedized form factors, low power consumption, and wide operating temperature ranges, VIA Industrial Automation Solutions can be optimized to operate in the most demanding factory environments.



Software customization :

Drawing on a wealth of Android, Linux and Windows software development experience and expertise and easy-to-use BSPs and SDKs, including the VIA Smart ETK, we provide a complete range of software customization services for optimizing the compatibility, performance, I/O connectivity, and peripheral integration of VIA Industrial Automation Solutions across multiple platforms.

— Superior Reliability and Longevity —

Built to the highest quality standards, VIA Industrial Automation Solutions undergo rigorous testing to ensure optimum reliability in even the toughest manufacturing environments. To meet the extended life-cycle needs of our customers, longevity support for up to seven years is provided for selected models.



Americas :
embedded@viatech.com

Europe :
embedded@via-tech.eu

Rest of the World :
embedded@via.com.tw

Website :
www.viatech.com