

VIA Smart Transportation – In-Station Solutions



The proliferation of the IoT is enabling the development of a new generation of innovative smart applications and services that not only enhance passenger convenience through automated ticketing, queue management, and information display but also increase safety and security through real-time video monitoring and surveillance.

No matter whether it's a train station, bus terminus, airport, warehouse, or parking lot, VIA provides the tools you need for building the smart transportation hub of the future. Combining rich multimedia and HMI capabilities with seamless I/O and wireless connectivity, VIA In-Station Solutions include a wide selection of scalable systems, starter kits, and IoT acceleration platforms that can be rapidly customized to deliver reliable 24/7 operation in even the most challenging environments.

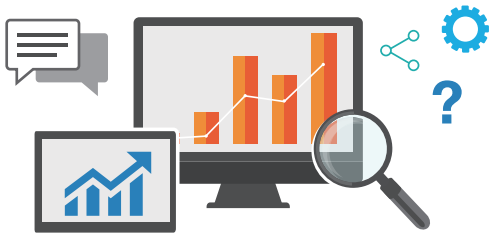
Core Applications

VIA In-Station Solutions enable you to boost passenger convenience and safety while simultaneously increasing operational efficiency and ROI through the following core applications :



Data Collection :

Rich wireless and I/O connectivity options for capturing and transmitting mission-critical data such as passenger, goods, and vehicle flows, ticket transactions, and equipment status.



Data Analysis :

Real-time data processing and analysis to optimize capacity utilization, minimize queuing times, and maximize revenues.



Monitoring and Surveillance :

Remote 24/7 video monitoring and surveillance to enhance security and safety.



Passenger Information Display :

Advanced multimedia features for the delivery of navigation, ticketing, and scheduling information and services in rich user-friendly formats to boost passenger satisfaction and minimize operational costs.

VIA IoT Acceleration Platforms

VIA IoT Acceleration Platforms combine ultra-reliable, high-performance system hardware with a stable software framework that enables the rapid development of multimedia-rich applications and services, using touch, voice, and wireless interfaces. The platforms provide highly-customizable solutions for installing a host of smart passenger information display, ticketing and metering, shopping and storage, and surveillance and monitoring systems for stations, airports, parking lots, and other transportation hub environments.



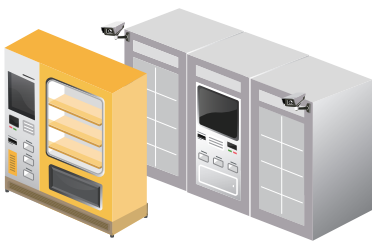
Passenger Information Display :

These flexible platforms facilitate the development of passenger information display applications, including video walls, signage, and interactive kiosks. A wealth of system hardware and software customization options are available to meet your exact deployment needs.



Ticketing and Metering :

These scalable platforms enable the rapid design and deployment of ticketing and metering applications in transportation hub environments. With their advanced multimedia capabilities, stable software framework, and multiple I/O and wireless integration options, the platforms can be configured to handle multiple types of transactions and payment methods.



Shopping and Storage :

These versatile platforms allow transportation hub operators to boost passenger convenience by offering automated shopping and luggage storage applications and services. Combining rich I/O and wireless connectivity with powerful multimedia capabilities, the platforms can be rapidly customized to meet specific installation requirements.



Surveillance and Monitoring :

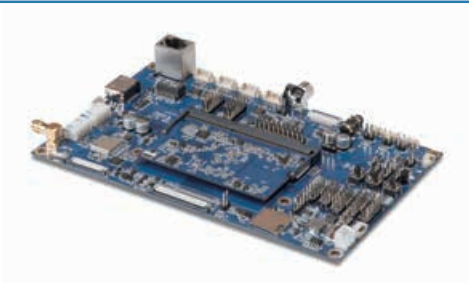
These ultra-reliable platforms integrate support for multiple HD cameras to boost passenger safety in transportation hub environments. A wealth of system hardware, camera integration, and software customization options are available.

VIA Starter Kits

VIA Starter Kits accelerate the development of affordable HMI kiosks and systems that enhance safety and security, boost convenience, and increase operational efficiency by enabling passengers to view and interact with relevant transportation information in rich multimedia formats.

VIA SOM-6X50

This starter kit includes a compact System-on-Module, an optional reference carrier board featuring built-in Wi-Fi and Bluetooth, and a Linux BSP to provide a versatile and cost-effective solution for smart transportation signage and HMI systems.



- 1.0GHz VIA Cortex-A9 SoC
- Supports up to 6 UART and 2 USB 2.0 ports
- Supports HDMI and LVDS
- Linux BSP
- Reference carrier board with built-in Wi-Fi and Bluetooth available

VIA VAB-630 3.5" SBC

This starter kit combines a highly-integrated 3.5" SBC form factor motherboard with an optional 10.1" touch panel screen to provide a robust solution for interactive multimedia kiosks and signage systems.



- Compact 3.5" SBC Form Factor
- Support for 3G, Wi-Fi, & BT wireless connectivity
- Optional 5V or 12V power input
- Android solution pack available
- Optional 10.1" LVDS LCD touch panel available

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 transportation 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 transportation 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-dependable 24/7 operation with advanced functionality and performance, VIA Systems have been adopted by a growing number of operators throughout the globe for a broad spectrum of data tracking, passenger information display, and security and surveillance applications. They include a rich array of robust and scalable systems with multiple customization options.

VIA AMOS-3005

This ruggedized fanless system is an ultra-reliable high-performance solution for data-intensive processing and monitoring scenarios as well as multimedia infotainment applications.



- 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 ultra-compact fanless system provides a highly-integrated low-power solution for transportation facility 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 provides a flexible platform for transportation 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 ARTiGO A1250

This high-performance, feature-rich ultra-slim system fits easily into any environment and is suitable for a broad spectrum of digital signage, kiosk, and security and surveillance applications.



- 1.2GHz VIA QuadCore E-Series processor with VIA PadLock® Security Engine
- Ultra-slim 17.7cm x 12.5cm x 3.0cm (WxDxH) form factor
- Support for dual independent VGA + HDMI displays
- Rich I/O features, including VGA, Micro-HDMI, USB 2.0, and USB 3.0 ports
- VIA MagicView® content management software available

VIA ARTiGO A1300

This robust ultra-compact fanless quad-core system integrates a wealth of connectivity and networking features designed for a wide range of signage, kiosk, and HMI passenger information display applications.



- 1.0GHz VIA QuadCore E-Series processor with VIA PadLock® Security Engine
- Two HDMI ports with dual independent display support
- Rich I/O features, including COM, Digital I/O, USB 2.0, and USB 3.0 ports
- Optional 3G and Wi-Fi modules
- VIA MagicView® content management software available

VIA VIPRO VP7910

This high-performance fanless panel PC with a 10.4" TFT LCD resistive or projective capacitive touch screen is ideal for advanced transportation HMI and data processing applications that require 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 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 In-Station Solutions are based on a modular design philosophy that speeds up system hardware and software optimization and customization for demanding commercial applications. Key customization options include :



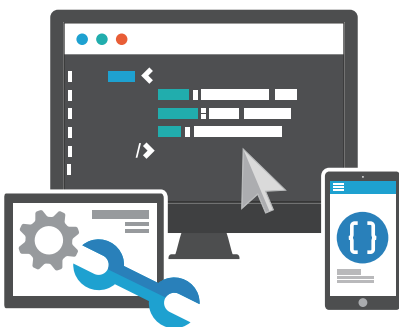
Peripheral integration :

With a wide selection of UART, USB, GPIO, and HDMI ports, VIA In-Station Solutions provide flexible connections to modern and legacy systems and devices. Gigabit Ethernet, Wi-Fi, 4G, and GPS options ensure high-speed network connections for real-time navigation and vehicle monitoring and control applications.



Operational environment optimization :

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



Software customization :

Drawing on a wealth 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 In-Station Solutions across multiple platforms.