



# Accelerate Your Time-to-Mission™

## VMS-35CP0A - Vehicle Management System



Made in the USA  
Certified Small Business

Off-the-shelf, 3U, 5-slot chassis, designed for remote rugged environment operation

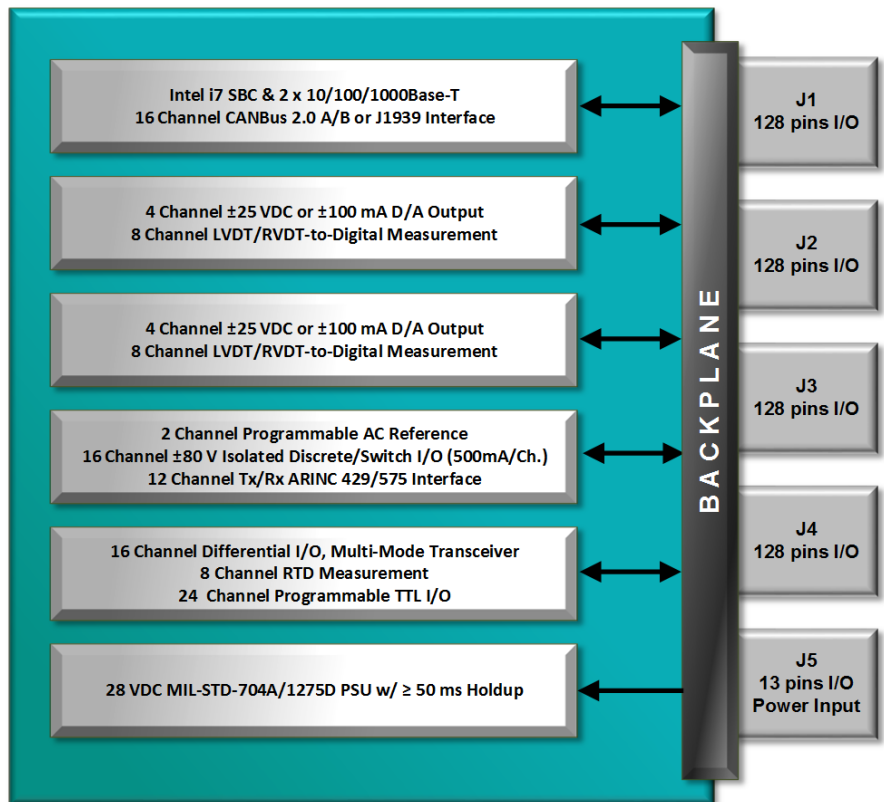
NAI designs **Vehicle Management Systems (VMS)** around core COTS technology building blocks, offering our customers readily available, interoperable, field-proven systems (or subsystems) designed to withstand the rigors of harsh, SWaP-constrained environments. The **VMS-35CP0A** is a pre-configured, rugged system with an Intel® i7 processor. It is ideally suited to support a multitude of military/aerospace applications that require high-density, multi-channel, programmable LVDT Measurement; Discrete I/O; D/A Conversion; AC Reference; CANBus (CAN 2.0 A&B or J1939); Differential Transceiver; RTD Measurement; TTL/CMOS I/O; ARINC 429/575 and Dual-Port Gig-E Ethernet.

The VMS-35CP0A delivers an off-the-shelf, preconfigured hardware solution that accelerates deployment of SWaP-optimized systems in air, land and sea applications. Pairing the VMS-35CP0A hardware with your application will accelerate your time to mission!



### Features

- Meets or exceeds MIL-STD-461F and MIL-STD-810G
- Linux (CentOS, Red Hat) and Windows Embedded Standard 7 OS
- Built-in-Test (BIT)
- <15 lb. typical
- COTS/NDI
- COSA® architecture
- Conduction cooled SWaP
- 28 VDC power @ 75 W, typical



## Architecture

With our modular, interoperable **Custom on Standard Architecture™ (COSA®)**, NAI's vehicle management systems (VMS) seamlessly integrate with our high-density, **intelligent multifunction I/O boards**— containing highest packaging density and greatest flexibility of any multifunction I/O board in the industry — and can be deployed rapidly with no NRE.

## Applications

NAI's **Vehicle Management Systems (VMS)** perform with a high level of stability and accuracy on military vehicles operating in hostile environments, and are vital on today's battlefield. The VMS-35CP0A provides a controller/monitoring system interface to discrete, analog and digital data inputs, and can control local functions based on input data.

The VMS-35CP0A provides system control and monitoring in a single package with Built-in-Test (BIT) capability and can perform many functions including:

- Engine control
- Electrical power distribution
- Flap control and monitoring
- Cabin or cockpit environmental control and monitoring
- Fuel system monitoring
- Crew alerting systems

## Continuous Background Built-In-Test (BIT)

BIT monitors the status of all I/O during normal operations and is totally transparent to the user. SBC resources are not consumed while executing BIT routines. This simplifies maintenance, assures operational readiness, and reduces life-cycle costs and keeps your system mission-ready.

## Single-Source Efficiency

Eliminate man-months of integration with a configured, field-proven system from NAI. Requirements review through deployment is a seamless experience as all design, state-of-the-art manufacturing, assembly and test are performed— by one trusted source. All facilities are located in the U.S. and optimized for high-mix/low volume production runs and extended lifecycle support.

## Software

Software support includes Linux® (CentOS®, Red Hat®) and Windows® Embedded Standard 7. All I/O and communications library Software Support Kits (SSKs) are supplied free of charge.

## Target Environment

All products are designed to operate under extreme temperature, shock, vibration and EMI environments. NAI's systems are designed to meet or exceed MIL-STD-461F and MIL-STD-810G requirements.

*MIL-STD-461F requires proper shielded cables and systems practices.*

*Specifications are subject to change without notice.*

*All product and company names are trademarks or registered trademarks of their respective holders.*