



# Accelerate Your Time-to-Mission™

## IVHM-35CP0C - Integrated Vehicle Health & Monitoring System



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

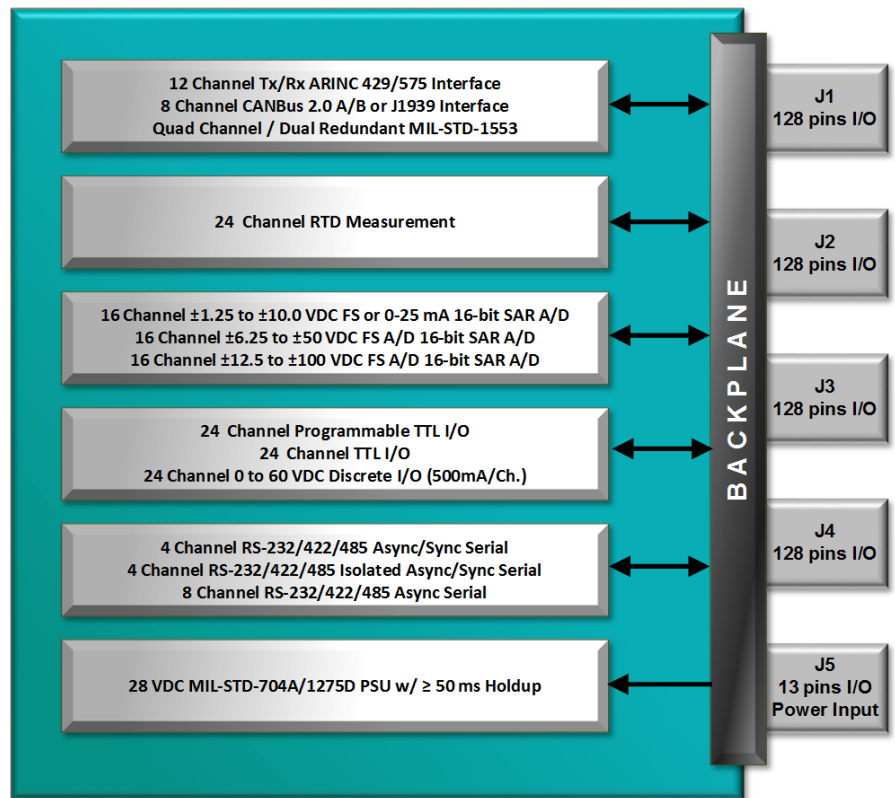
NAI designs **Integrated Vehicle Health Monitoring** systems (IVHM) around core COTS technology building blocks, offering our customers readily available, interoperable, field-proven systems (or subsystems) designed to withstand the rigors of harsh, SWaP-constrained environments. The **IVHM-35CP0C** is a pre-configured rugged system ideally suited to support a multitude of functions that require “SBC-less” remote Gig-E command and control of high-density, multi-channel, programmable ARINC 429/575; Dual-Redundant, Quad Channel MIL-STD-1553B; CANBus (CAN 2.0 A&B or J1939); A/D Conversion; RTD Measurement; RS-232/422/485 Serial Communications; Discrete I/O; TTL/CMOS I/O and Dual-Port Gig-E Ethernet.

The IVHM-35CP0C deliver an off-the-shelf, preconfigured hardware solution that accelerates deployment of SWaP-optimized systems in rugged air, land and sea applications. Pairing the IVHM-35CP0C hardware with your application will accelerate your time to mission!



### Features

- Meets or exceeds MIL-STD-461F and MIL-STD-810G requirements
- < 15 lbs. typical
- COTS/NDI
- Built-in-Test (BIT)
- COSA® architecture
- Conduction cooled SWaP
- 28 VDC power @ 75 W typical



## Architecture

With our exclusive, modular, interoperable **Custom on Standard Architecture™ (COSA®)**, NAI's integrated vehicle health & monitoring (IVHM) systems seamlessly integrate with our **intelligent multifunction I/O boards**, containing highest packaging density and greatest flexibility of any multifunction I/O modules in the industry, and can be deployed rapidly with no NRE.

## Applications

With decades of experience in embedded rugged electronics, NAI's flexible, modular **Integrated Vehicle Health Monitoring (IVHM)** systems are a perfect fit for a number of military/aerospace applications where compact, low-power systems are required. NAI's IVHM systems combine a range of diagnostic tools within a single platform and provide around-the-clock, intelligent diagnostics on critical mission, air, land and sea applications including:

- Fault detection and diagnostics
- Proactive maintenance and failure prevention
- Data management

## 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

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.  
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