

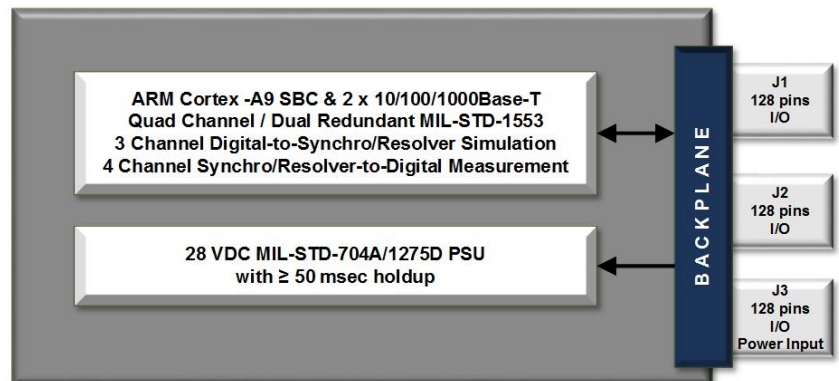


## FCT-31CP0D – Fire Control & Targeting System

*Off-the-shelf, 3U, 1-slot chassis designed for remote, rugged environment operation*

NAI designs [Fire Control & Targeting systems](#) (FCT) 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 FCT-31CP0D](#) is a pre-configured, rugged system with a high-performance, low power ARM® Cortex®-A9 processor. It is ideally suited to support a multitude of military/aerospace applications that require 3-axis precision, dual-speed synchro drive and measurement with Dual-Redundant, Quad Channel MIL-STD1553B; Digital-to-Synchro Simulation, Synchro-to-Digital Measurement and Dual-Port Gig-E Ethernet.

The FCT-31CP0D delivers an off-the-shelf, preconfigured hardware solution that accelerates deployment of SWaP optimized systems in rugged air, land and sea applications. Pairing the FCT-31CP0D hardware with your application will accelerate your time to mission!



### Features

- Meets or exceeds: MIL-STD-461F and MIL-STD-810G requirements
- VxWorks®, Xilinx® PetaLinux OS
- Continuous Background Built-in-Test (BIT)
- < 5 lbs. typical
- COTS/NDI
- COSA® Architecture
- Conduction cooled SWaP
- 28 VDC power @ 15 W, typical

## Architecture

With our exclusive, modular, interoperable [Configurable Open Systems Architecture™ \(COSA®\)](#), NAI's data acquisition 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

An FCT from NAI provides rugged dependability, precise threat evaluation and other advantages during critical, tactical air, land and sea missions where compact size, low weight and low-power systems are required. Dynamic, high performance, [Fire Control & Targeting \(FCT\)](#) systems from NAI can be applied to a broad spectrum of applications to control a multitude of sensor and command interfaces, such as, pitch, roll and yaw inputs, which need to be maintained to ensure steady "on target" aim and control in "on-the-move" air, land or sea gunships. Other critical applications include targeting of "line-of-sight" communications, radar, and laser guidance.

## 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 lifecycle costs and keeps your system mission-ready.

## Single-Source Efficiencies

Eliminate man-months of integration with a configured, field-proven system from NAI. Requirements review through to 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 VxWorks® and Xilinx® PetaLinux. 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 system practices*

*Specifications are subject to change without notice.*

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Made in the USA  
Certified Small Business