



# Ganymede System Controller

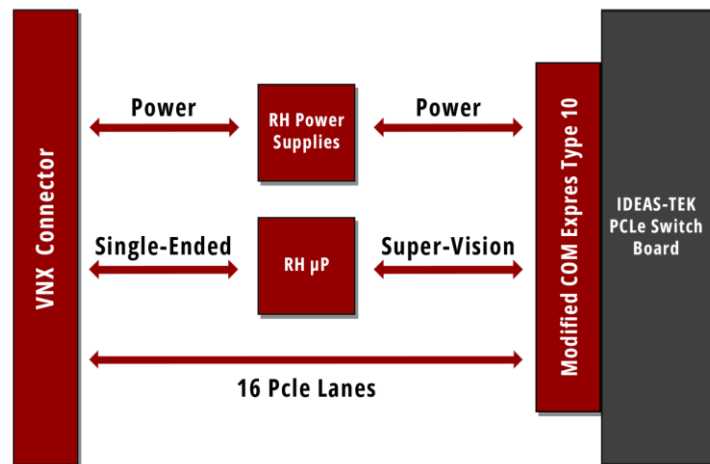
## OVERVIEW

The Galileo Ganymede™ System Controller Board is a 19mm VNX module designed by IDEAS-TEK to supervise the correct operation of the Galileo system and provide fault-tolerance capabilities. Ganymede uses radiation-hardened components to monitor latch up protection circuitry and the operation of COTS components in other modules connected to the Galileo backplane. It is a supervisory module that can enable, disable, and monitor other modules connected to the backplane. In the case of a latch up event, the system controller will initiate a reset to the afflicted module.

Additionally, the Ganymede System Controller is designed to carry a COTS PCIe switch mezzanine card with root-complex failover capabilities.

## COMPLIANCE

The RTVS is backplane-based modular system aligned with VNX+ (VITA 74) to facilitate re-use and interoperability during the implementation of fault-tolerant, high-performance systems for spacecraft and other high-availability applications.



## KEY FEATURES

### General

- VITA-74 aligned modular system
- Space-Hardened 32-Bit Microcontroller
- 256 Mbit Serial NOR Flash Memory
- 5V Voltage rail for 3.3V MCU I/O supply and 1.5V Core supply

### Ecosystems

- Rad-Hard 32-bit ARM Cortex M0 Microcontroller
- Uses a high-reliability clock oscillator to provide a clock signal for the VORAGO VA10820 microcontroller.
- HI-3110 standalone Controller Area Network (CAN) controller has a built-in transceiver and provides a solution to implement the CAN 2.0B specification.

### Environmental Resiliency

- -55°C to +200°C

### Radiation Tolerance

- >300KRad (Si)

## DISCLAIMER

Product data is current as of the publication date. This document gives only a general description of the product and, except where expressly provided otherwise, shall not form any part of any contract. From time to time, changes may be made in the products or the conditions of supply.

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