

TACTICAL ADVANCED COMPUTER (TAC)

Mighty. Light.

A family of rugged mission computers dominating SWaP-C and achieving cutting-edge performance across the modern cyber battlespace with the latest in embedded computing technology.

LIGHT, DURABLE, READY FOR EXTREMES

Less than 5 pounds, fanless, sealed, and operating between -40°C and +70°C at 100% stress.

MADE IN THE USA

Proudly designed, manufactured, assembled, tested, and supported in Atlanta, Georgia.

FULL CONTROL & CONFIGURABILITY

Easily remove storage drives and change out the real-time clock's field-replaceable battery.



Overview

- Intel® Next-Gen processors
- Multiple, sealed storage drives
- Secure operation with Trusted Platform Module (TPM 2.0)
- Optional internal cards: 1553, GPS, Video
- Supports NVIDIA graphics on MXM module
- Designed to meet IP67, MIL-STD-810, MIL-STD-901, DO-160, EMI/EMC, CE

FULL SECURITY STACK



Intel® TXT uses hardware-based mechanisms that protect the confidentiality and integrity of stored data.



Strict revision control is achieved through Trenton Systems' approved vendor list (AVL), ensuring engineer-vetted parts.



FIPS-140-2-certified SEDs take protection of classified, secret, and top-secret data to the next level.



Intel® SGX includes predefined portions of memory that can better protect sensitive information.



Counterfeit Protection Program helps Trenton detect, remove, discard, document, and report suspected counterfeit electronics.



Military-grade, NSA-approved AES 256-bit encryption engine boasts the industry's tried-and-true gold standard of data encryption.



Crafted in a USA facility by security-conscious software, mechanical, and electrical engineers, TAA & BAA-approved.



Vetted supply chain helps protect your system from potentially compromised electronic parts and components.



Integrated management software for FIPS-140-2-certified SEDs simplifies data-at-rest security, implementation, and access control.



Rugged, Extreme, and Flexible

The first of its kind, the TAC is a truly made-in-USA, small-form-factor, embedded, passive-cooled, sealed system based on the COM Express Type 7 architecture.

Designed with tomorrow's warfighters and servicemembers in mind, as well as the various tactical air, sea, land, space, and cyber environments they encounter daily, the TAC is ruggedized and secured with the latest hardware, firmware, and software security technologies adherent to DaR requirements, NIST, and CSfC.

Add FIPS-140-2-certified SEDs with integrated management software to greatly improve DaR security.

CARRIER BOARD

COM Express Type 7

PROCESSORS

Intel® Next-Gen CPUs

MEMORY

Up to 48GB Dual Channel DDR4 ECC or Non-ECC

INPUT / OUTPUT [2x 38999 connectors: AMPHENOL TV07WCI-21-35P]

- ▶ **USB:** 4x USB 2.0 ports
- ▶ **Video:** 2x DVI ports (optional HD-SDI)
- ▶ **LAN:** 3x Gigabit Ethernet ports
- ▶ **Serial:** 2x RS232 serial ports
- ▶ **SATA:** 2x 6Gb/s SATA connectors
- ▶ **NVMe:** 2x NVMe connectors
- ▶ **TPM 2.0:** Infineon SLB9670

SWaP

As small as...

- ▶ **Size:**
 - Height: 2.75" (6.985 cm)
 - Width: 5.875" (14.9225 cm)
 - Depth without flanges: 7" (17.78 cm)
 - Depth with flanges: 7.75" (19.685 cm)
- ▶ **Weight:** less than 5 lbs.
- ▶ **Power:** 28VDC power source

STORAGE

Take advantage of improved data security and ease of access with the advanced physical protections of fully sealed removable storage drives.

FANLESS SYSTEM COOLING

The TAC's passive-cooling design is perfect for debris-heavy environments and noiseless operation.

Graphics

Designed to support the latest NVIDIA GPUs on a MXM module

SYSTEM BIOS

- ▶ **BIOS Type:** SPI NOR Flash with Insyde BIOS
- ▶ **BIOS Features:**
 - Plug and Play (PnP)
 - APM 1.2
 - PCI 2.2
 - ACPI 1.0 / 2.0
 - USB keyboard support
 - SMBIOS 2.3
 - UEFI

ENVIRONMENTAL SPECIFICATIONS

- ▶ Operating Temperature: -40°C - +70°C
- ▶ Storage Temperature: -51°C - +85°C
- ▶ Shock: 3 axis, 35g, 25ms
- ▶ Vibration: 4.76Grms, 10Hz to 2000 Hz (SSD)

**Preliminary numbers noted. Final numbers expected to outperform current specifications.*

COMPLIANCE

Designed to meet the following standards/certifications:

- ▶ IP67
- ▶ MIL-STD-810H
- ▶ MIL-STD-901H
- ▶ DO-160F
- ▶ 2014/35/EU (LVD)
- ▶ 2014/30/EU (EMC)
- ▶ CE

