

# 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

Purpose-built for various air, sea, land, space, and cyber missions with extensive configurability and expansion options, the TAC is a truly made-in-USA, small-form-factor, embedded, passive-cooled, sealed C6ISR solution.

On-the-spot flexibility and integration to current and future technologies with a superior cybersecurity feature set adherent to DaR, NIST, and NSA's CSfC make it ideal for mission-critical applications that need comprehensive protection of sensitive data and reduced physical and digital attack surface.

TAC mission systems are the modern warfighter's field replaceable units packaged with next-gen performance, security, and ruggedness.

### 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

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