

Ruggedized Embedded Computer System

Thermite® TVC-3.0 Model 1100

High Performance in Any Environment

The Thermite TVC-3.0 Model 1100 offers state-of-the-art embedded computing, mobile graphics, and conduction cooling, delivering unparalleled graphics and processor performance for rugged battlefield applications. The Thermite TVC-3.0 Model 1100 is perfect for high-performance computing, advanced graphics, shader-based rendering, and GPGPU processing in a compact form factor for any environment.



The Thermite TVC-3.0 Difference

The Thermite TVC-3.0 features a 1.6 GHz Intel Core 2 Duo processor with a NVIDIA FX770M GPU for superior compute and graphics processing performance, making it ideal for performance rich applications in battlefield, ground, air and maritime environments.

Processing Powerhouse

The Thermite TVC-3.0 Model 1100 with a CUDA enabled GPU can handle accelerated GPGPU operations to solve complex compute-intensive applications in the most demanding of environments. The Thermite TVC-3.0 is perfect for field-based training, situational awareness, sensor processing/display, mission planning, mission rehearsal, weapon system control, maintenance, and other augmented reality simulations.

CUDA is a general purpose parallel computing architecture that leverages the parallel compute engine in NVIDIA graphics processing units to solve many complex computational problems in a fraction of the time required on a CPU. The fast parallel computing architecture is easily accessed using the most common programming languages in use today.

The Thermite TVC-3.0 brings capabilities of the most powerful PC workstations to the battlefield—for deployment on Ground Vehicles, Aircraft, Maritime, or other vehicles.

Benefits/Features of the TVC-3.0

- **Aggressive Performance** – Intel® Core 2 Duo LV processor and a CUDA-enabled GPU
- **3D Graphics** - NVIDIA® Quadro® FX770M GPU for visual rich applications
- **Power Efficient** – Dynamic power control manages power consumption and thermal dissipation
- **Versatile I/O** – Built-in USB, RS-232, RS-422, and gigabit Ethernet
- **Rugged** - Designed to work in the most demanding field environments
- **Storage for your needs** – Drive size and drive type to suit your needs
- **Video Capture** – Advanced PCIe-based video capture and processing options for real-time video capture

Specifications

Technical:




<p>CPU</p> <ul style="list-style-type: none"> Intel Core 2 Duo LV 1.6 GHz Intel 965GME "Santa Rosa" MCH, ICH8-M south bridge Up to 4MB L2 Cache <p>Memory</p> <ul style="list-style-type: none"> 4 GB dual-channel DDR2 DRAM <p>Graphics Processor</p> <ul style="list-style-type: none"> NVIDIA® FX770 CUDA parallel computing processor 32- core GPU module 256 MB DDR2 DRAM PCIe x16 interface 	<p>Operating System</p> <ul style="list-style-type: none"> Microsoft® Windows® XP Embedded <p>Removable Storage Options</p> <ul style="list-style-type: none"> High-performance rugged SSDs: 32GB or 128GB Rotating Hard Drive: 80GB <p>Interfaces</p> <ul style="list-style-type: none"> VGA Eidetix PCIe video capture IEEE 802.3 10/100/1000 Ethernet Two USB 2.0 2 RS-232C, 1 RS-422 Asynchronous, 1 RS-422 Synchronous (SDLC) 	<p>Power/Performance</p> <ul style="list-style-type: none"> 10 – 36 VDC (Designed for MIL-STD-704F, STANAG 1008 and MIL-STD 1275) Advanced power-saving technologies <p>Dimensions & Weight</p> <ul style="list-style-type: none"> 244 mm x 160 mm x 81.5 mm (D x W x H) 4 kg (8.8 lbs)
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Environmental*:

	With Rotating Disk Drive		With Solid State Drive	
	Operating	Non - Operating	Operating	Non - Operating
Ambient Temperature	0° C to +50 °C	-40° C to +70 °C	-25° C to +62 °C	-40° C to +85 °C
Humidity Level	5% - 90%, NC	5% - 95%, NC	5% - 90%, NC	5% - 95%, NC
Altitude Level	-200 to 10,000 ft	-200 to 40,000 ft	-200 to 40,000 ft	-200 to 40,000 ft
Vibration Resistance	1 G, 15 -500 Hz	5 G , 22 -500 Hz	Up to 12 G RMS	Up to 12 G RMS
Shock Resistance	Up to 20 G	Up to 40 G	Up to 40 G	Up to 40 G
Immersion Resistance	1m for 30 minutes	1m for 30 minutes	1m for 30 minutes	1m for 30 minutes

*Subject to validation testing, and subject to change at any time

Which Thermite is right for you?

 <p>Thermite TVC-2.0 TL</p>	 <p>Thermite TVC-2.0</p>	 <p>Thermite TVC-3.0</p>
<p>The lightest of the Thermite rugged computers, designed for man-wearable applications in the field.</p>	<p>Designed for vehicle mounted applications, in environments where 28V power is available.</p>	<p>The most powerful of Thermite rugged computers, designed for compute and visual rich battlefield applications.</p>



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