

TF-100

COMPACT, RUGGED & FANLESS LOW SWaP TEMPEST SDIP-27 LEVEL B MILITARY COMPUTER

Features Include:

- Compact & Light Weight Design
- Onboard Intel Atom E3845 Quad Core CPU
- Up to 8GB DDR3 Memory Supported
- Dual Independent Display
- AC Power via External AC/DC Adapter
- -20°C to 70°C Operating Temperature

Testing:

- DEF STAN 00-35 Shock & Vibration
- DEF STAN 59-411 EMC
- MTBF @40°C: 104094 Hours
- Tempest SDIP-27 Level B



System Overview

Powered by the quad-core Intel® Bay Trail E3845 processor, the **TF-100** perfectly balances energy efficiency (**consuming less than 20 watts**) and processing power.

Tackle everything from simple embedded computing tasks to HD-intensive and multi-display applications, the **TF-100** overcomes the limitations of other similarly-sized military systems.

Modular Design

The **TF-100** manages to pack a diverse array of I/O into its small form factor, with four RS-232/422/485 COM ports, dual Gigabit ethernet, and programmable 8-bit DIO. The system can also power dual independent displays over DVI-I or DisplayPort.

External AC/DC PSU with a 3-pin terminal block connector for stable, secure power even in vibration-prone or fluctuating power environments.

Complete Rugged Solution

All that functionality is wasted if it can't be protected in the environments where it's needed, so the **TF-100** has been built to last, enclosed in a compact, fully fanless and ventless enclosure that protects it against dust, dirt, and vibration.

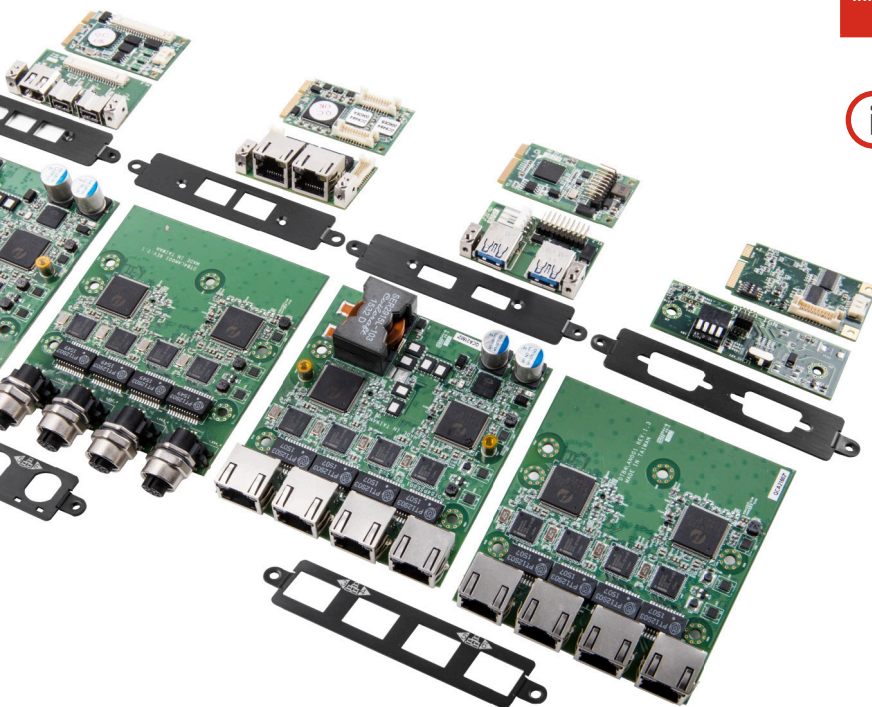
With additional shock and vibration testing, the **TF-100** complies with DEF STAN 00-35 (Shock & Vibration), DEF STAN 59-411 (EMC), and Tempest SDIP-27 Level B approvals making it a perfect fit for military application.



SPECIFICATIONS

CPU Options	Intel® Atom® E3845 Quad Core CPU
Memory	1 x 204 Pin DDR3 SO-DIMM Memory Slot Max Memory Supported: 8GB
Storage	1 x 2.5" SATA SSD / HDD Bay 1 x External CFast Socket 1 x External SIM Card Socket
I/O	1 x DVI-I & 1 x DisplayPort 1 x DVI-D & 1 x VGA (With Optional Split Cable) 1 x DisplayPort & 1x VGA (With DVI-I to VGA Adapter) 2 x Gigabit Ethernet Ports With Support Wake-on-LAN & PXE 1 x USB 3.0 Port 3 x USB 2.0 Ports 4 x Serial RS-232/422/485 Ports With Auto Flow Control 2 x Antenna Hole 1 x Power Switch 1 x AT/ATX Switch 1 x Audio Mic Input & 1 x Speak Output 4 x Digital Input & 4 x Digital Output
Expansion	2 x Full-size Mini PCIe Socket For Wi-Fi / GSM / Expansion Module 1 x Universal I/O Bracket
Watchdog Timer	Software Programmable Supports 1~255 sec. System Reset
Operating System	Windows® 7 / 8.1 / 10 Linux® Kernel 3.x
Power	Support AT/ATX Power Mode 1 x 3 Pin Terminal Block Connector External AC/DC Power Adapter

Temperature	Operating: -20°C to 70°C Storage: -30°C to 85°C Humidity: 10%~95% (Non-Condensing)
Design	Extruded Aluminium With Heavy Duty Metal
Mounting Options	Wall Optional: Side / VESA / DIN-Rail Mounting
Dimensions (W x D x H)	185mm x 131mm x 54mm
Weight	1.58 Kg
MTBF @40°C	104094 Hours
Designed To Meet	Shock & Vibration: - DEF STAN 00-35 Procedure M3 Section 4.1 - DEF STAN 00-35 Part 3 Chapter 2-01 Test M1 EMC: - DEF STAN 59-411 Test DCE01.B - DEF STAN 59-411 Test DCE02.B - DEF STAN 59-411 Test DCE03.B - DEF STAN 59-411 Test DCS01.B - DEF STAN 59-411 Test DCS02.B - DEF STAN 59-411 Test DCS03.B - DEF STAN 59-411 Test DCS05.B - DEF STAN 59-411 Test DCS06.B - DEF STAN 59-411 Test DCS10.B - DEF STAN 59-411 Test DCS12.B - DEF STAN 59-411 Test DRE01.B - DEF STAN 59-411 Test DRE02.B - DEF STAN 59-411 Test DRS01.B - DEF STAN 59-411 Test DRS02.B - DEF STAN 59-411 Test DRS03.B Tempest: - SDIP-27 Level B CE / FCC Class A
Ordering Information	TF-100-BT NDURA-MIL-PSU-19V-01 - AC/DC PSU



TF-100_Datasheet_07_2021.pdf

Technical specifications are subject to change without notice.
E & OE Issue A.

