

TCL8332 SBC | 8th or 9th Gen Core[®]

Single board computer that can tackle the widest range of defense and industrial computing challenges. Customize and scale your system designed in accordance with next-gen PICMG 1.3 architectures as workloads evolve according to your most complex requirements.



COMPARABLE FORM, FIT, AND FUNCTION WITH TKL8255

Configure/reconfigure a system to meet the demand of critical applications, networks, and services without loss of performance.



MODULAR DESIGN FOR INTEROPERABILITY

Easily integrate the processor board into various chassis and backplane configurations without compatibility issues.



EXTENDED LIFECYCLE AND AVAILABILITY

Prolong a system's operational efficiency while reducing downtime and minimizing disruption to existing infrastructure.



Overview

Standard single board computer compatible with a wide variety of system configurations, simplifying upgrades and reducing total cost of ownership.

Deliver enhanced compute and connectivity within a flexible, compact solution that can easily adapt to changing workload requirements, all without loss of performance!



SOLUTION HIGHLIGHTS



Multi-layer cybersecurity creates a secure computing platform while enhancing resilience against sophisticated cyberthreats.



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



In-house engineers (hardware, software, mechanical, and electrical) control the design of your system down to the board and chip level.



Five-year warranty means we will repair, replace, or refund for any potential defects in material, workmanship, and design.



Counterfeit Protection Program (CPP) helps Trenton detect, remove, and destroy counterfeit parts and components.



TAA compliance is achieved because Trenton manufactures the TCL8332 SBC, and its other solutions, in the United States.



Lifetime support gives you unlimited access to our team of experts that help troubleshoot problems and offer solutions.



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



CSfC, ITAR, ISO9001, and AS9100 adherence and compliance allow Trenton to consistently provide secure, high-quality computing solutions.

Technical Overview

SPECIFICATION	DETAILS
CPUs	Intel® 8 th or 9 th Gen Core® (Coffee Lake)
Memory	4x DDR4-2666 ECC UDIMM slots
Storage	6x SATA headers
Form Factors	13.33" x 4.98" (33.86cm x 12.65cm)
Network Interface	3x 1GbE ports

PROCESSORS (UP TO 4 CORES PER CPU)

Intel® 8th or 9th Gen Core® (Coffee Lake) up to 65 W
Chipset: Intel® C246 Coffee Lake

MEMORY

4x DDR4-2666 ECC UDIMM slots

I/O

- **NVMe:** 1x M.2 boot drive
- **SATA:** 6x SATA headers
- **USB:** 2x USB3 ports (internal headers), 2x USB3 ports (rear I/O)
- **Video:** 3x Display Ports: 2x ports (internal headers), 1x port (rear I/O)
- **LAN:** 2x 1GbE RJ-45 ports on rear I/O driven from dual Intel® i350 controller; 1x 1GbE RJ-45 port to backplane driven from Intel® i219 controller
- **Serial:** 2x RS232 ports

SECURITY

- **TPM 2.0**

*For a comprehensive list of cybersecurity features, please contact one of our team members.

SYSTEM BIOS

- InsydeH20 UEFI BIOS from Insyde
 - Plug and Play (PnP)
 - PCI 2.2
 - ACPI 1.0 / 2.0
 - USB Keyboard Support
 - SMBIOS 2.3
 - UEFI

OS COMPATIBILITY

- Windows 11 Enterprise, Server
- Linux
 - RHEL
 - Ubuntu
 - SUSE

*Contact us for the full compatibilities list

DIMENSIONS

13.33" x 4.98" (33.86cm x 12.65cm)

ENVIRONMENTAL SPECIFICATIONS

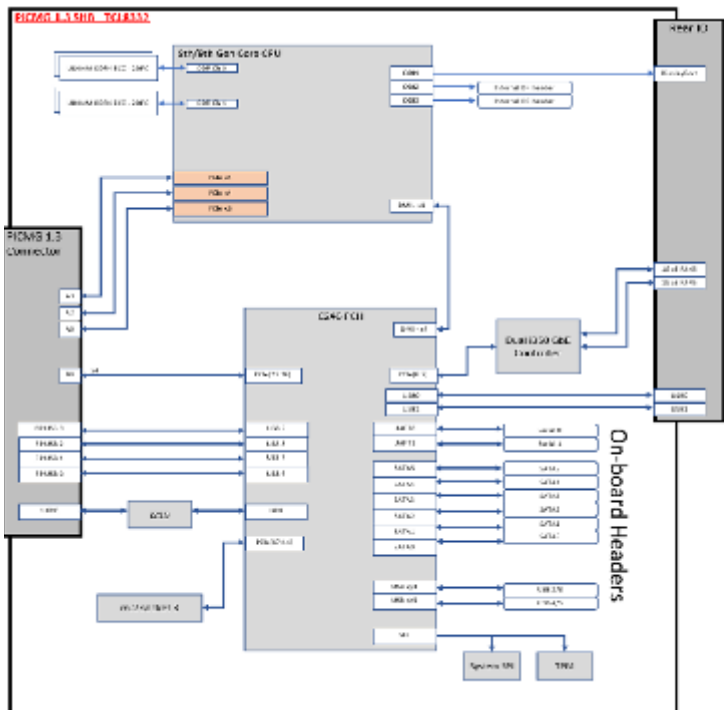
- Operating Temperature: 0°C - 50°C
- Storage Temperature: -40°C - 70°C
- Operating Humidity: 8% - 90% non-condensing
- Non-Operating Humidity: 5% - 95% non-condensing

*Temperature ranges are configuration-dependent. Performance degradation expected at extremes.

*Test reports available upon request.

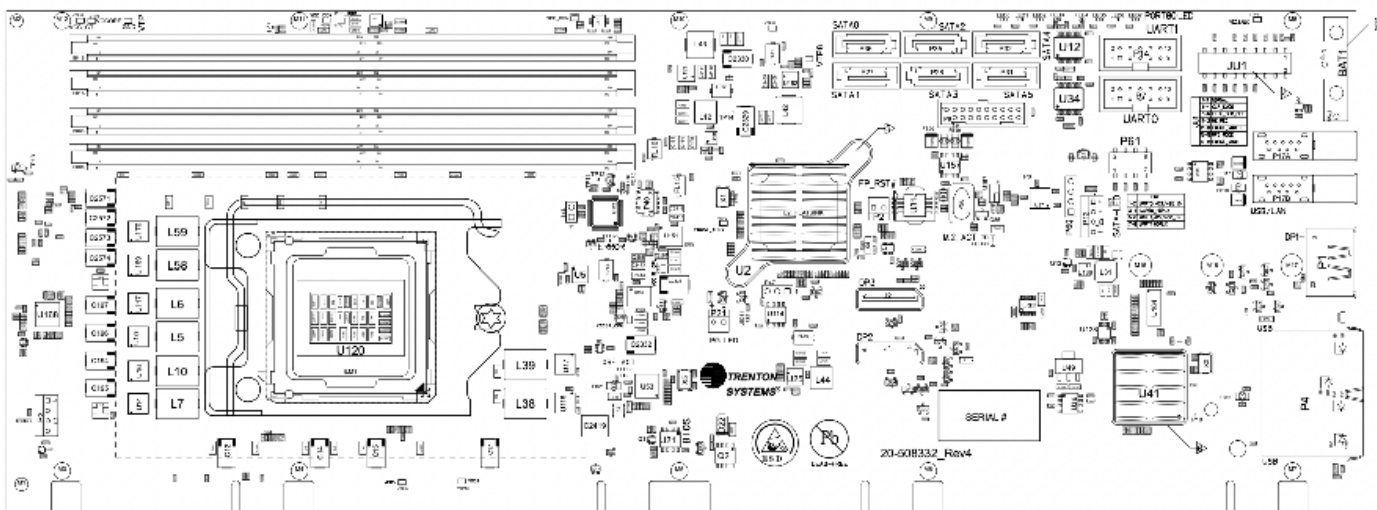
Our systems and solutions can be customized to your most complex technical, performance, and environmental specifications in consultation with our team.

Block Diagram

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Layout Drawing



Contact us for pricing and availability.

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