



**TRENTON
SYSTEMS**
Rugged Computers

TKL8255
Single Board
Computer

XEON OR 6TH GEN CORE PERFORMANCE

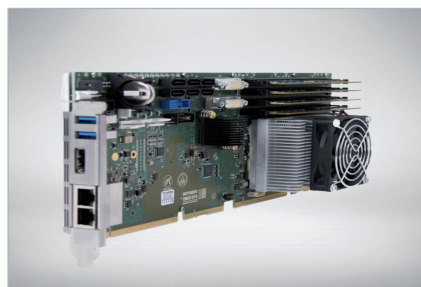
PICMG 1.3 Series Architecture delivers 20 lanes of PCIe to a compatible Backplane

Ruggedized, designed and made in USA single board computer for demanding applications

DDR4-2400 64 ECC unregistered memory with a wide operating temperature range, integral ruggedization features, and a wide range of industry standard high performance and legacy I/O.

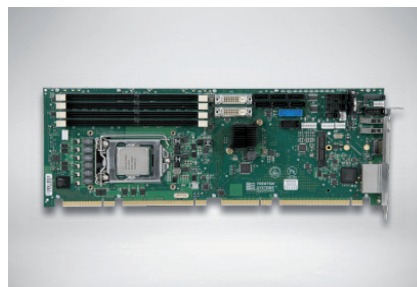
The TKL8255 is designed to tackle the widest range of industrial and embedded computing challenges.

PRODUCT DETAILS



NVMe M.2 Drive Support

Single CPU deliver high performance and 10+ years of availability for embedded applications.



20 Lanes of PCIe Gen 3

Pair with a compatible HDEC Series Backplane to integrate large numbers of COTS PCIe cards.



Aluminum Backing Plate

0.125" thick Aluminum backing plate puts an end to board flexing.



www.trentonsystems.com

Check out our website for configuration options.

Phone: (770) 287-3100

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BLOCK DIAGRAM



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Model Number

TKL8255

Form Factor

PICMG® 1.3 Form Factor – 20 PCIe link 3.0 configurations.

Environmental**Temperature:** -10° C to 50° C (operating)* and -40° C to 70° (storage) *processor dependent - extended temperature ranges may be available.**Humidity:** 5% to 90% non-condensing

Environmental ratings assume 350LFM of airflow across the board. Additional cooling solutions may be available. Contact Trenton for more information.

Processors

Model	Processor	Cores	Threads	Clock Speed	TDP
92-825507200000	E3-1275 v6	4	8	3.8GHz	73W
92-825507300000	E2-1245 v6	4	8	3.7GHz	73W
92-825500600000	E3-1275 v5	4	8	3.6GHz	80W
92-825502200000	E3-1268L v5	4	8	2.3GHz	35W
92-825507700000	E3-1225 v6	4	4	3.3GHz	73W
92-825501300000	E3-1225 v5	4	4	3.3GHz	80W
92-825508800000	Core i7-7700	4	8	3.6GHz	65W
92-825508600000	Core i7-7700T	4	8	2.9GHz	35W
92-825503500000	Core i7-6700	4	8	3.4GHz	65W
92-825509300000	Core i5-7500	4	4	3.2GHz	65W
92-825509100000	Core i5-7500T	4	4	2.7GHz	35W
92-825504500000	Core i5-6500	4	4	3.2GHz	65W
92-825509700000	Core i3-7101TE	2	4	3.4GHz	35W
92-825506300000	Core i3-6100TE	2	4	2.7GHz	35W

Memory

4x 288-pin DIMM slots supporting DDR4-2400 ECC memory up to 64GB*

*ECC Support on Xeon SKUs

Chipset

Intel® C236 Platform Controller Hub (PCH) (PCH-H, "Greenlow")

I/O**Rear Bracket:** 1 - DisplayPort 1.3; 2 - 10/100/1000 Base-T Ethernet; 2 - USB 3.0**Routed to Backplane:** 20 - PCIe 3.0 Links; 1 - PCI (32bit, 33MHz); 1 - 10/100/1000 Base-T Ethernet; 4 - USB2**Onboard:** 6 - SATA/600 ports with RAID; 8 - USB interfaces (2 - USB3 and 2 - USB2); 2 - DVI-D, dual DVI-D connector I/O bracket (part number 198500001166-00) simplifies dual DVI-D video integration; Serial Port Header 1: RS232/422/485; Serial Port Header 2: RS232

1 - x4 PCIe 3.0 M.2 slot supports standard NVMe SSD Socket 2/B-keyed or Socket 3/M-keyed modules - Up to 2280



TKL8255 SINGLE BOARD COMPUTER



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