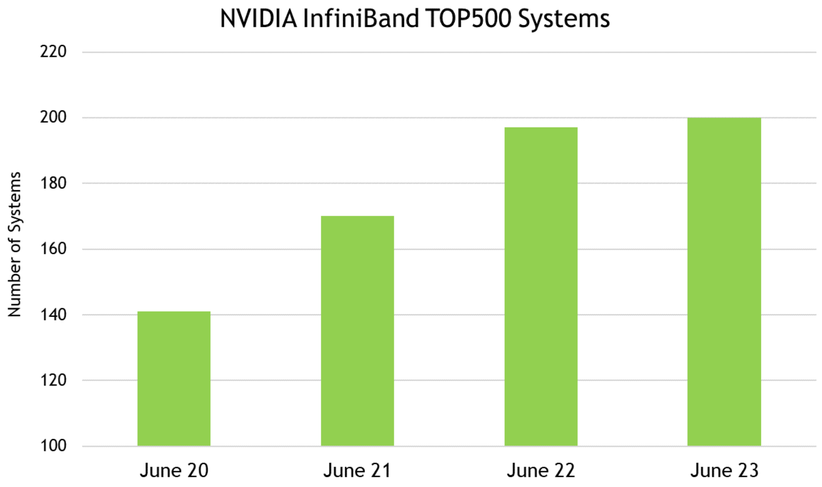
Accelerating the TOP500 Supercomputers

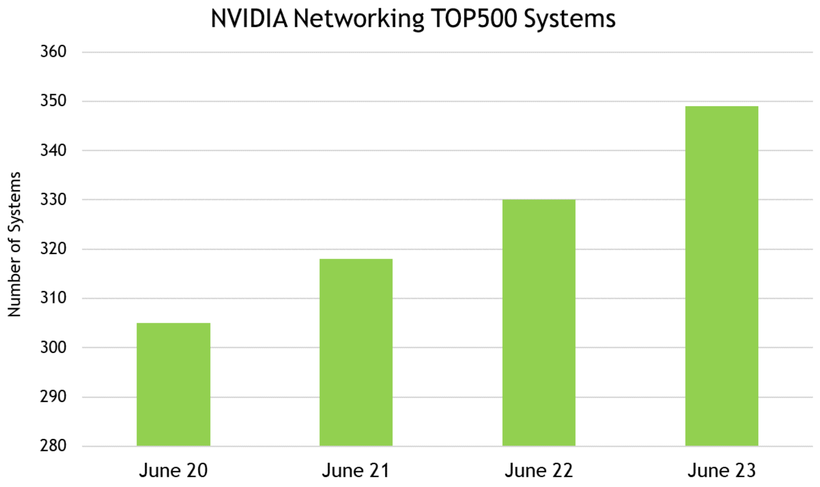
The Interconnect View on the TOP500 Supercomputers, June 2023

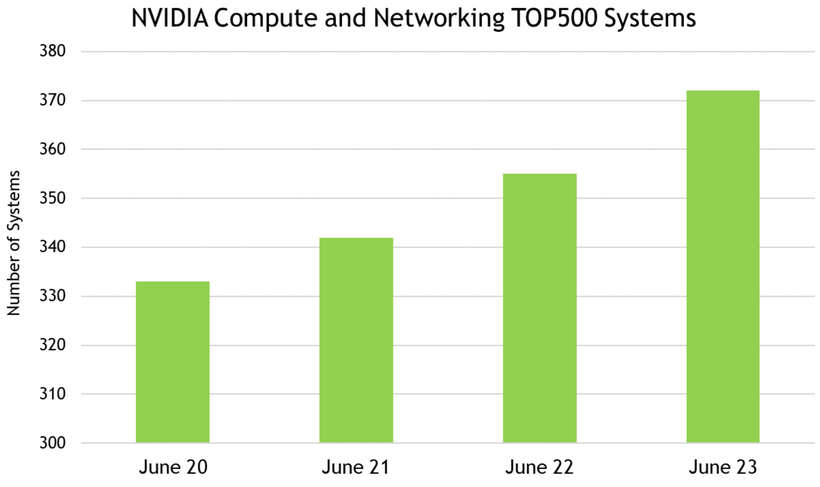
NVIDIA InfiniBand and Ethernet Accelerate World-Leading Supercomputers on the June'23 TOP500 List

- NVIDIA GPU or Network (InfiniBand, Ethernet) accelerates 372 systems or 74% of overall TOP500 systems
- InfiniBand accelerates 5 of the top ten supercomputers in the world, and 63 of the top one hundred systems
- NVIDIA InfiniBand and Ethernet networking solutions connect 349 systems or 70% of overall TOP500 platforms
- InfiniBand accelerates 200 systems, NVIDIA high speed Ethernet solutions connect 149 Ethernet systems
- NVIDIA Quantum InfiniBand and H100 Tensor Core GPU connect the #1 system on the Green500 with 65.4GF/W

NVIDIA Compute or Network Accelerate 72% Top500 Systems



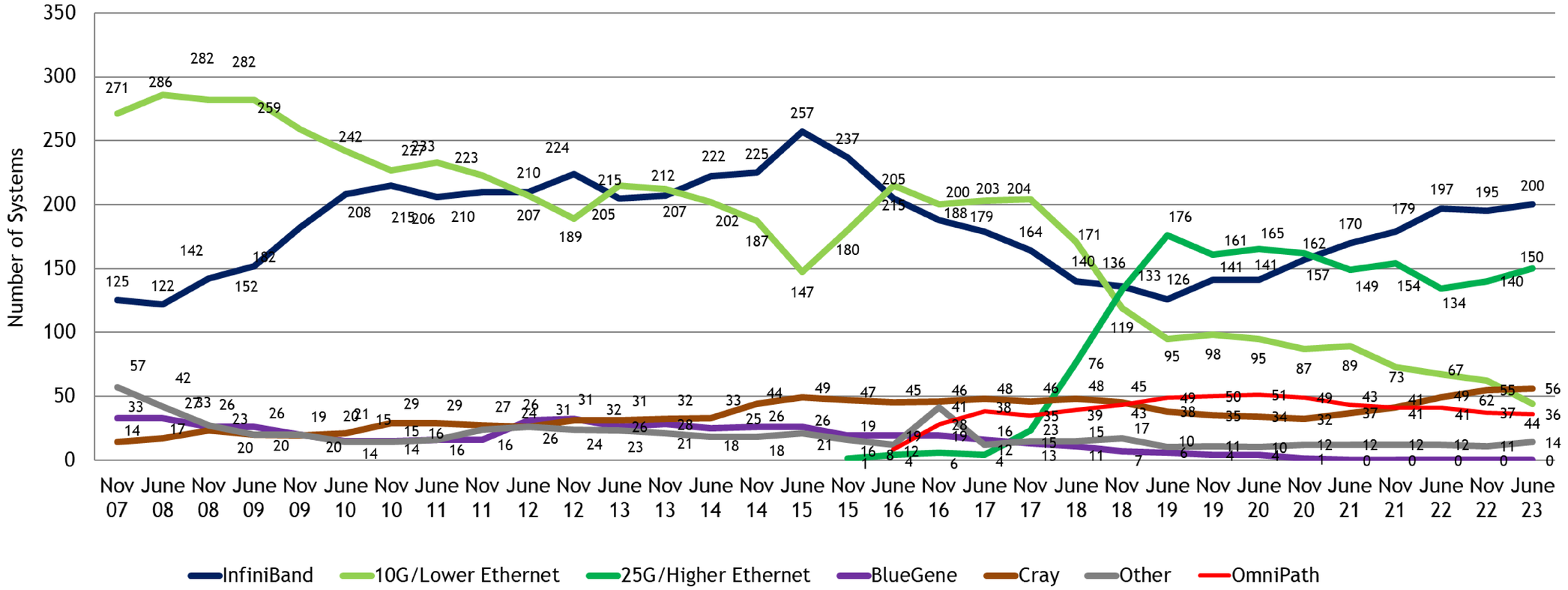




NVIDIA compute or network accelerates 372 systems on the TOP500 list (5% increase June’22-June’23)

NVIDIA InfiniBand and Ethernet networking accelerate 349 systems on the TOP500 list

TOP500 Interconnect Trends

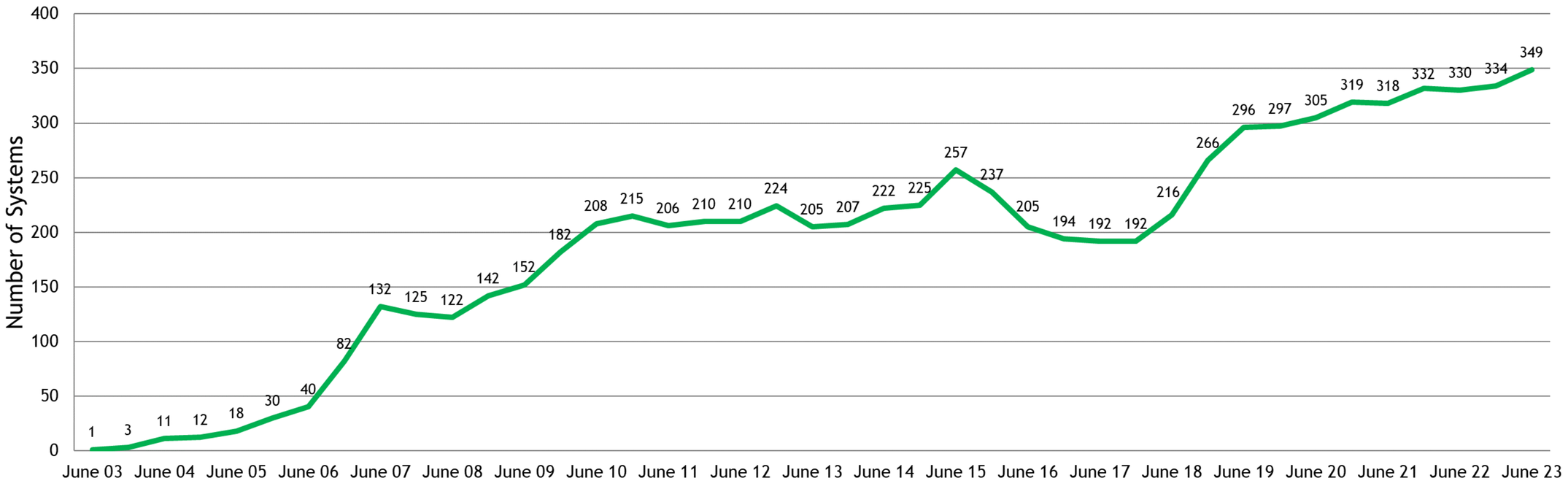


The TOP500 list includes both HPC and Cloud / Hyperscale platforms

InfiniBand continues its leadership as the most used interconnect solution for HPC platforms

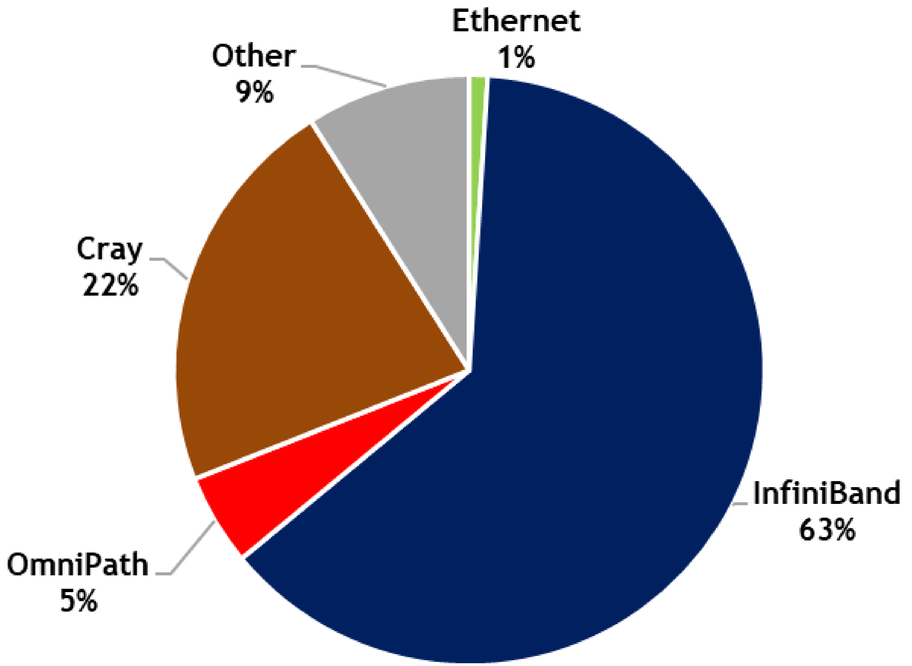
NVIDIA connects most of 25G and faster Cloud and Hyperscale Ethernet systems

TOP500 NVIDIA Interconnect Trend



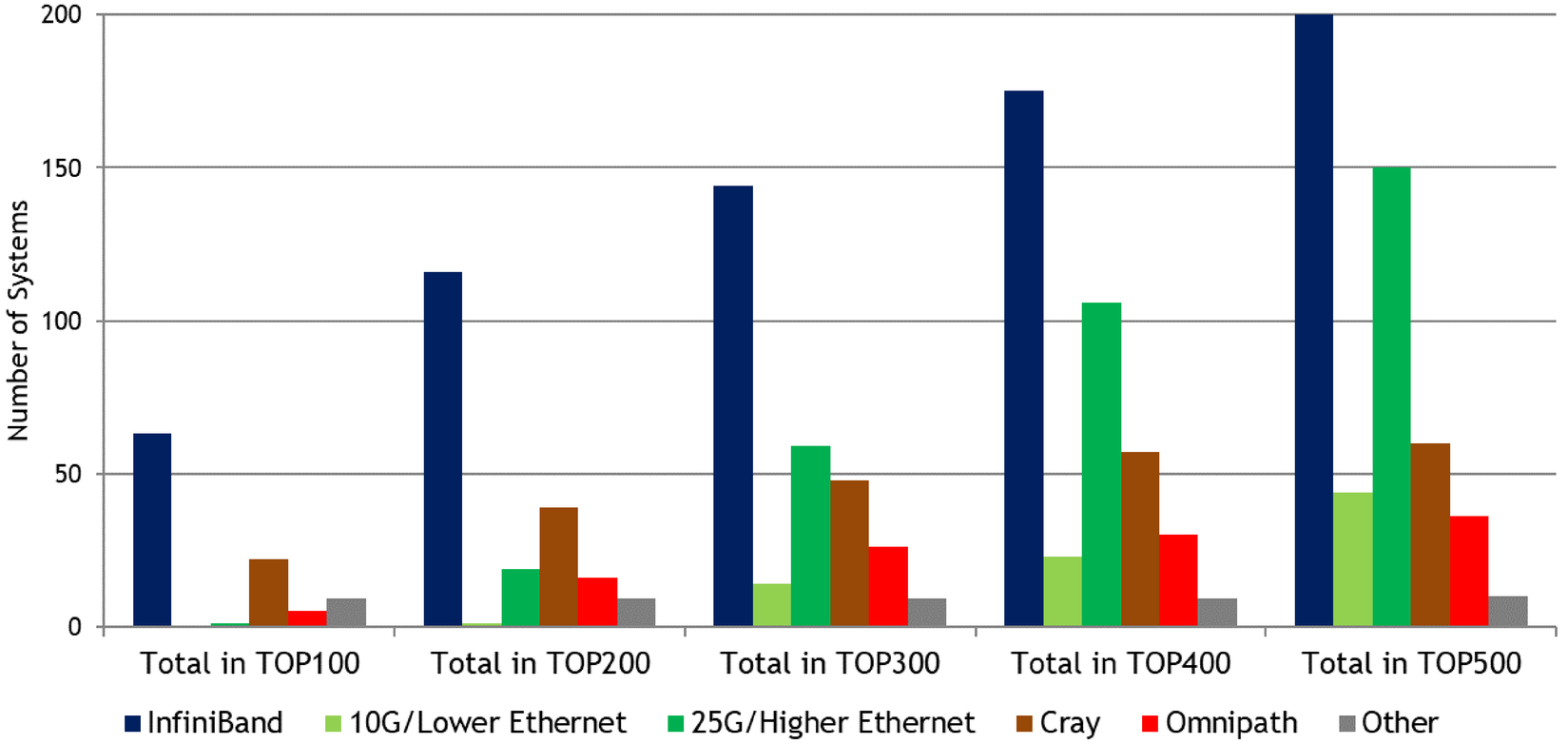
NVIDIA InfiniBand and Ethernet Interconnect Solutions Accelerate Majority of TOP500 Platforms

Interconnects - TOP100 Supercomputers



InfiniBand accelerates 63 of top 100 supercomputers

Interconnects – TOP100, 200, 300, 400, 500 Distribution



InfiniBand is the most used high-speed interconnect of top supercomputers

Superior performance, scalability, efficiency and return-on-investment

NVIDIA