

Ethernet NIC Portfolio

More than 20 Years of Ethernet NIC Leadership,
Validated on All Major OEM Platforms

An Enterprise and Data Center Proven Portfolio

The Broadcom® Ethernet portfolio offers the breadth of 1G to 400G today, with a wide range of product configuration options:

- 1-port, 2-port, and 4-port options
- Optical and copper connectivity
- PCIe 3.0 / PCIe 4.0 / PCIe 5.0
- OCP 3.0

Broadcom Ethernet supports a full suite of drivers for all major operating system distributions and versions. Designed for enterprise and cloud-scale environments, Broadcom Ethernet adapters are the ideal solution for today’s demanding network applications requiring high-performance, intelligent data flow processing, and highly secure connectivity.



OCP 3.0



PCIe NIC

Key Benefits

- Strong growth potential
- Competitive pricing
- Most secure NIC solution
- Strong feature set and high performance
- Training and technical resources available
- Product availability

Criteria	Broadcom	Intel	Nvidia
Portfolio Breadth	✓	✓	✓
Long-Life Supply	✓	✓	✓
Advanced Security	✓	✓	✓
Power and Thermals at High Speeds	✓	✓	✗
Ecosystem Interoperability	✓	✓	✓
Focused Investment on Foundational/Performance NIC	✓	✗	✗
Advanced RDMA Support	✓	✗	✓
AI/ML Scale	✓	✓	✓

Controllers

 1G

 10G

 25G

 40G

 50G

 100G

 200G

 400G

Markets

 Cloud

 Enterprise

 Telco SP

 Embedded

 AI/ML

 Storage

Superior Power and Thermal Efficiency with Advanced Security and Leading Performance



Power

The latest generation of Broadcom Ethernet controllers and adapters are designed to provide lower power utilization and reduced cooling costs while maximizing network performance. Broadcom provides responsible power design and is the best choice for thermally challenged environments where high-speed Ethernet is integrated.



Performance

While some competitors tailor their configurations and micro-benchmarks to arrive at more desirable performance figures for publishing, Broadcom uses a default configuration with industry-accepted benchmarks and tools to measure TCP and DPDK performance. Broadcom designs, tests, and publishes its thermal and performance characteristics with transparency using industry-accepted best practices. Also, Broadcom advanced TruFlow™ packet processing and RoCEv2 capabilities assist in achieving line-rate performance with excellent host CPU utilization and efficiency, and low and deterministic tail latency.



Security

The latest generation of Broadcom Ethernet adapters provide the most advanced security features in the industry, enabling customers to deploy with confidence. Multiple levels of security, including a 4th generation Silicon root of trust and secure boot with attestation, means that your data is anchored in immutable hardware with no way to bypass the highly secure framework.



Interoperability

The Broadcom Ethernet Switch, PHY, Retimers, and NIC portfolio capitalize on core-IP in-house designed Ethernet MAC+SerDes and the support of open industry standards. This technology is utilized in industry-leading switches and other IT infrastructure solutions and deployments (HPC, ML/AI, storage servers, etc). This combination of shared core-IP and open standards delivers ecosystem end-to-end interoperability by design when used in the same system, and provides freedom from proprietary solutions.



AI/ML Scale

Ethernet offers the broadest ecosystem for hardware and software, and provides a unifying fabric for all customers to connect existing and newly deployed compute, storage, and AI/ML workloads. Broadcom 400Gb Ethernet Adapters provide 400Gb bandwidth and 250 Mpps packet rate with leading-industry 100G SerDes, low-latency hardware congestion control (DCQCN), active latency management (SARA), hardware retransmission (RoCE), TLS hardware encryption, and lower power/LFM in support of demanding AI/ML applications and deployment.

NIC Product Comparison Matrix: Choose Broadcom

FF	I/O	Broadcom	Intel	Nvidia
PCIe	2x 1G	5720-2P BCM95720A2003AC	I350-T2V2	—
	4x 1G	5719-4P BCM95719A1904AC	I350-T4V2	—
	2x 10GBaseT	P210TP BCM957416A4160C	X550-T2, X710-T2L	—
	2x 10G	P210p BCM957412A4120AC	X557, X520-DA2, X710-DA2	MCX4121A
	2x 25G	P225p BCM957414A4142CC	E810-XXVDA2, XXV710-DA2, XXV710-DA2T	MCX4121A, MCX512A, MCX512F, MCX621102AE/C/N, MCX623102AC/N
	4x 25G	P425G BCM957504-P425G	E810-XXVDA4	MCX713104AS
	2x 50G	P2100G BCM957508-P2100G	—	MCX414A, MCX516A, MCX623102AN
	1x 100G	P1200G BCM957508-P1200G	E810-CQDA1	MCX515A, MCX555A, MCX623105AN
	2x 100G	P2100G BCM957508-P2100G	E810-CQDA2	MCX516A, MCX623106AC/E/N/S/PN,
	1x 200G	P1200G BCM957508-P1200G	—	MCX623105AN
	1x 400G	P1400GD BCM957608-P1400GDF00	—	MCX715105AS, MCX75310AAC/S
	2x 200G	P2200G BCM957608-P2200GQF00	—	MCX755106AC/S
	2x 100G	P2100G2 BCM957608-P2100GQF00	—	MCX713106AS
	4x 100G	P4100G BCM957608-P4100GSF00	—	—
OCP 3.0	4x 1G	N41T BCM95719N1905C	I350T4OCPV3	—
	2x 10G	N210tp BCM957416N4160C	X720-T2L	—
	2x 10G	N210p BCM957412N4120C	—	—
	2x 25G	N225p BCM957414N4140C	E810XXVDA2OCPV3	MCX4121A, MCX562A, MCX623432AC/E/N-, MCX6232AC/E/N, MCX631432AC/N
	4x 25G	N425G BCM957504-N425G	—	—
	2x 50G	N2100G BCM957508-N2100G	—	MCX516A, MCX623432AC/N
	1x 100G	N1100G BCM957504-N1100G	E810-CQDA1OCPV3	MCX623432AC/N, MCX623435AC/E/N/MN, MCX565A/M
	2x 100G	N2100G BCM957508-N2100G	—	MCX566A, MCX623436AC/E/N
	1x 200G	N1200G BCM957508-N1200G	—	MCX623435AC/N
	1x400G	N1400GD BCM957608-N1400GDP00	—	MCX75343AMC/S
	2x 200G	N2200G BCM957608-N2200GQP00	—	MCX753436MC/S
	1x 200G	N1200G2 BCM957608-N1200GQP00	—	MCX623435AC/N
	4x 100G	N4100G BCM957608-N4100GSP00	—	—

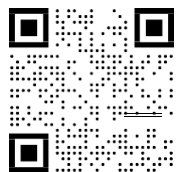


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To learn more about Broadcom Ethernet adapters, visit:

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