

September 30, 2020



Marvell Ships 1 Millionth OCTEON-Powered LiquidIO SmartNIC

OCTEON family, the most widely deployed DPU, delivers optimized performance, cost and power at cloud scale

SANTA CLARA, Calif., Sept. 30, 2020 /PRNewswire/ -- Marvell (NASDAQ: MRVL) today announced the shipment of the 1 Millionth OCTEON-powered LiquidIO® SmartNIC. Marvell's OCTEON® family is the most widely deployed data processing unit (DPU) for SmartNIC cloud applications. Following on the heels of multiple generations of proven OCTEON solutions, the latest release, LiquidIO III SmartNIC, is now being deployed at scale.

Cloud infrastructure requires optimized hardware for performance, cost and power at scale. The OCTEON LiquidIO SmartNIC solutions enable data centers to move user-specified workloads onto highly optimized offload engines for much greater speed and efficiency, at a lower total cost of ownership. A key benefit is that customers can free up data center compute cores used for infrastructure workloads to dramatically increase the efficiency of their applications.

The LiquidIO SmartNIC product line has shipped over one million units. The latest solution, LiquidIO III, is a SmartNIC platform that incorporates Marvell's widely deployed OCTEON TX2 DPU with up to 36 Arm® V8 based cores, 5 x100G network connectivity, up to 2 PCI Express Gen 4x16 host interfaces and 6 channels of DDR4 3200 controllers. Leveraging the dedicated OCTEON hardware blocks with open platform software APIs, this solution has the unique ability to offload and accelerate crypto operations, packet processing, security protocols, virtual switch, traffic management and tunneling operations. Marvell's DPDK networking suite supports performance optimized solutions for crypto, IPsec, TLS, network traffic management and packet processing. This makes the solution ideally suited for data processing, software-defined networks, network overlay methodologies, virtual appliances and virtual RAN solutions within the data center and emerging new segments. In addition, Marvell is engaged with multiple cloud hyperscaler data center operators to develop customized solutions allowing them to combine their own intellectual property with Marvell's hardened and widely deployed OCTEON LiquidIO SmartNIC DPUs. This unique offering allows them to optimize their data center infrastructure and offer innovative cloud services.

"The OCTEON family is designed for user-defined infrastructure offloading and application acceleration in hyperscale datacenters," said John Sakamoto, vice president of Marvell's Infrastructure Processor Business Unit. "This category of compute, now referred to as the Data Processing Unit, was pioneered by Marvell with the original introduction of OCTEON in 2005. OCTEON TX2 LiquidIO III SmartNIC further extends Marvell's leadership in the datacenter SmartNIC market."

One of the first customers to benefit from Liquid IO III is Oracle. "Deploying Marvell's OCTEON Liquid IO III in our datacenter enables Oracle to offer highly customizable virtual cloud networks and enhanced firewall security features to our customers," said Vithal Shirodkar, senior vice president, Networking, Storage and Migrations, Oracle. "By moving these functions off the compute processor, Oracle is able to offer industry leading TCO to the marketplace."

"Marvell pioneered the SmartNIC market with its original LiquidIO card aimed at cloud data centers," said Bob Wheeler, principal analyst, The Linley Group. "Its third generation SmartNIC continues to deliver excellent customer programmability while now enabling 100G Ethernet server connectivity."

Marvell's OCTEON LiquidIO SmartNIC solutions offer best-in-class performance, capacity, reliability, and programmability. The solutions improve system and workload efficiencies and performance, strengthen security, and offer customers faster time-to-market.

OCTEON LiquidIO III SmartNIC platform solutions are available and in production.

For more information please visit <https://www.marvell.com/products/infrastructure-processors/multi-core-processors/liquidio-smart-nics.html>.

About Marvell

To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

Marvell and the M logo are trademarks of Marvell or its affiliates. Please visit www.marvell.com for a complete list of Marvell trademarks. Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names and brands may be claimed as the property of others.

For further information, contact:
Stacey Keegan
Vice President, Corporate Marketing
pr@marvell.com



View original content to download multimedia: <http://www.prnewswire.com/news-releases/marvell-ships-1-millionth-octeon-powered-liquidio-smartnic-301141719.html>

SOURCE Marvell