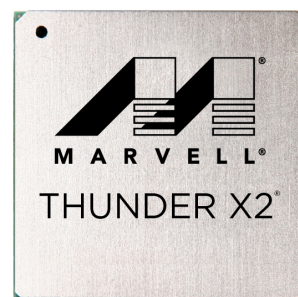
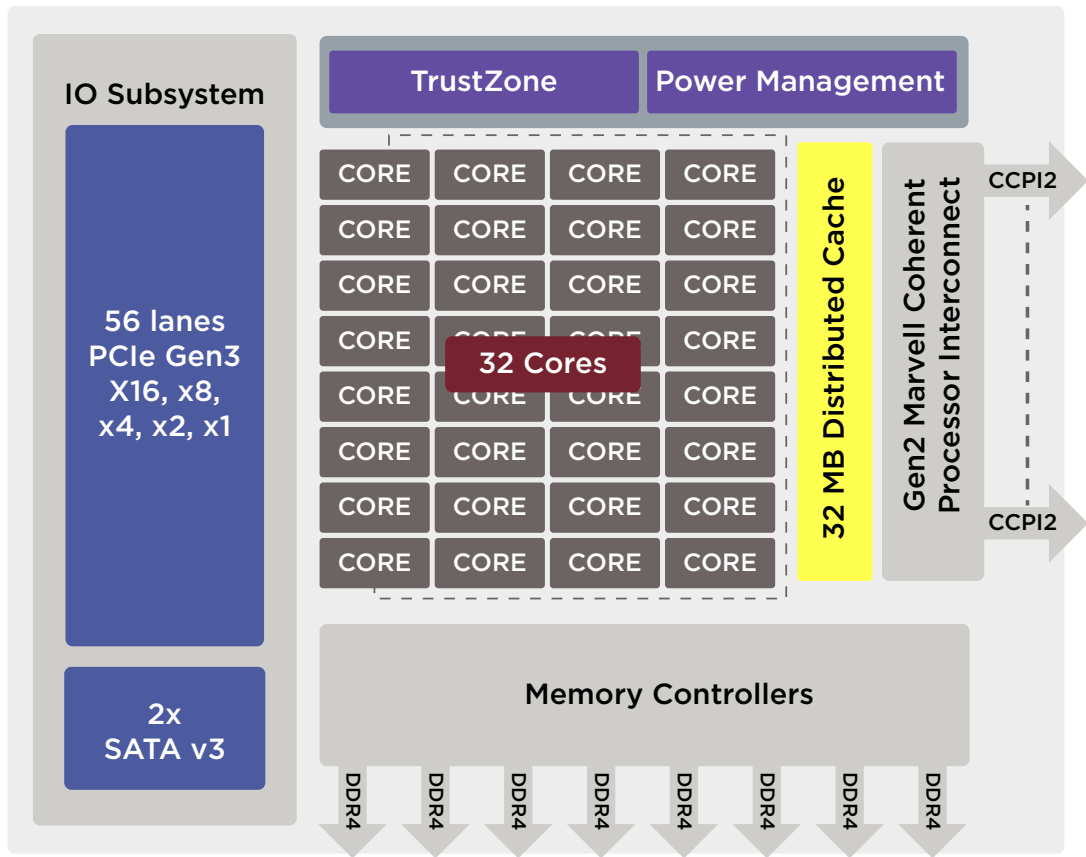


Marvell® ThunderX2® CN99XX Product Brief



KEY FEATURES

HIGH LEVEL FEATURES	
Core	<ul style="list-style-type: none"> - Arm architecture - Arm®v8-A - Highest supported core count - Up to 32 in single socket, 64 in dual socket - Highest supported frequency - Up to 2.5GHz in nominal mode, 3GHz in Turbo mode - Simultaneous multithreading - Up to 4 per physical core - Virtualization - Arm virtual extensions - Advanced RAS supported using RAS extension
Cache	<ul style="list-style-type: none"> - 32 KB L1 instruction and data cache, 256KB L2 per core - 32 MB distributed L3 cache - Advanced RAS supported using RAS extension
Memory	<ul style="list-style-type: none"> - Controllers: Up to 8 DDR4 per chip - Speeds: Up to 2666MHz in 1DPC and up to 2400MHz in 2DPC - Capacity per socket: Up to 4TB in dual socket
Coherent Processor Interconnect	<ul style="list-style-type: none"> - Generation: CCPI2™ - Speed: 600Gbps - Number of sockets: 2
I/O	<ul style="list-style-type: none"> - Integrated: Yes - PCIe: Up to 56 PCIe Gen3 lanes with 14 controllers - Supported widths x1, x2, x4, x8 and x16 - Storage: 2 SATA Gen 3.0 ports - USB: 2 USB 3.0 ports - Advanced RAS support
Power Management	<ul style="list-style-type: none"> - Autonomous Turbo (DVFS) - On-chip management processor - Low Power Idle State support
Security	<ul style="list-style-type: none"> - Supported by Arm TrustZone™
Package	<ul style="list-style-type: none"> - Process Technology: 16nm FinFET - Connectivity: LGA, BGA



ThunderX2® CN99XX block diagram



ABOUT MARVELL: Marvell first revolutionized the digital storage industry by moving information at speeds never thought possible. Today, that same breakthrough innovation remains at the heart of the company's storage, networking and connectivity solutions. With leading intellectual property and deep system-level knowledge, Marvell semiconductor solutions continue to transform the enterprise, cloud, automotive, industrial, and consumer markets. For more information, visit www.marvell.com.