



High-Performance SmartNIC, DPU &
Cybersecurity Infrastructure Provider

PRODUCT BROCHURE



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Partner with Raymax Technology
SmartNIC. DPU . Network Acceleration Solutions



WHY PARTNER WITH US

- Advanced SmartNIC & DPU Portfolio
- FullNAT Acceleration
- Intel/ Marvell/Broadcom Ecosystem
- Network & Infrastructure Offload
- Traffic Capture Solutions
- FPGA & AMD Architecture

RECRUITING PARTNERS WORLDWIDE

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RAYMAX TECHNOLOGY LTD

High-Performance SmartNIC, DPU & Cybersecurity Infrastructure Provider

Raymax Technology is a high-performance networking and cybersecurity infrastructure company specializing in SmartNIC, DPU, and high-speed NIC solutions for cloud, telecom, enterprise, and critical industry networks.

Our FPGA-based SmartNIC platforms—built on Xilinx and Altera technologies—enable programmable packet processing, encryption offload, traffic management, and large-scale FullNAT acceleration for cybersecurity appliances and network infrastructure systems. These platforms also provide high-performance packet capture and capture-to-storage offload, enabling efficient traffic recording, analysis, and forensic workloads.

In high-speed connectivity, Raymax provides NIC and infrastructure offload solutions based on Intel, Marvell, and Broadcom ecosystems, delivering flexible deployment options across virtualization, storage, AI, and security infrastructure environments.

Raymax DPU platforms combine FPGA acceleration with AMD CPU processing, forming heterogeneous architectures that offload networking, storage, security, and virtualization workloads while enabling infrastructure programmability and tenant isolation.

In addition, Raymax delivers high-assurance cybersecurity systems including FPGA-based data diodes and secure gateways, supporting physically isolated data exchange and resilient cyber defense architectures.

Our 400G portfolio empowers next-generation cloud, AI, telecom, and security workloads with ultra-high throughput, low latency, and scalable efficiency.

Key Capabilities

- FPGA Programmable SmartNICs
- Intel / Marvell / Broadcom NICs
- FPGA + AMD CPU DPUs
- FullNAT Offload Acceleration
- Packet Capture & Storage Offload
- Virtualization Acceleration
- xServerBox FPGA System
- FPGA-based Data Diode & Secure Gateway
- 400G Cloud & AI Connectivity

Product Portfolio

- FPGA SmartNICs (Xilinx / Altera)
- DPU Cards (FPGA + AMD CPU)
- Intel / Marvell / Broadcom NICs
- 25G / 100G / 200G / 400G Adapters
- Virtualization Offload Platforms
- Security Accelerator Cards
- Packet Capture Accelerators
- Data Diode Systems
- IPSafe Hardware-Level IP Security Protection
- Network Test & Visibility Platforms
- xServerBox FPGA

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Product Introduction

xSmartNIC

The FPGA/CPU-based Smart NIC series leverages high-performance hardware offloading technology to intelligently offload network processing tasks, reducing CPU computational burden and achieving seamless acceleration. By optimizing packet forwarding, protocol processing, and traffic scheduling, it significantly enhances network throughput and effectively reduces communication latency, meeting the demands of high-concurrency, low-latency application scenarios.

					
Models:	xSmartNIC-200-OVS	xSmartNIC-250-OVS	xSmartNIC-500-X	xSmartNIC-500-TOE	xSmartNIC-200-TOE
Ports:	2*10G	2*25G	2*25G	2*25G	2*10G
Controller:	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p	Xilinx ku3p
Speeds:	10Gbps	25Gbps	25Gbps	25Gbps	25/10/1GbE
PCIe interface:	PCIe3.0 x8	PCIe3.0 x8	PCIe3.0 x8	PCIe 3.0x8	PCIe 4.0x8
Connector Type:	SFP+,DAC,AOC	SFP28+,DAC,AOC	SFP28+,DAC,AOC	QSFP28,DAC,AOC	SFP28,DAC,AOC
Form Factor:	Half-Height, Half Length				
Warranty:	1year	1year	1year	1year	1year

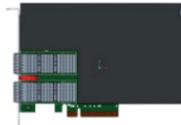
xSmartNIC

					
Models:	xSmartNIC-500-BXW	xSmartNIC-500-BIW	xSmartNIC-1000D	xSmartNIC-1000D-3PG2	xSmartNIC-2000-P4
Ports:	2*25G	2*25G	2*40G/2*50G	2*40G/2*50G	2*100G
Controller:	Xilinx ku5p+E810XXVAM2	Intel s10 及 E810	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p
Speeds:	25/10/1GbE	25Gbps	40Gbps/50Gbps	40Gbps/50Gbps	100Gbps
PCIe interface:	PCIe 4.0x8	2*PCIe 3.0x8	PCIe3.0 x16	PCIe3.0 x16	PCIe 3.0x16
Connector Type:	SFP28,DAC,AOC	QSFP+,DAC,AOC	QSFP+,DAC,AOC	QSFP+,DAC,AOC	QSFP28,DAC,AOC
Form Factor:	Half-Height, Half Length	Full-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length
Warranty:	1year	1year	1year	1year	1year

xSmartNIC

			
Models:	xSmartNIC-2000-P4G2	xSmartNIC-2000	xSmartNIC-2000-3PG2
Ports:	2*100G	2*100G	2*100G
Controller:	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p
Speeds:	100Gbps	100Gbps	100Gbps
PCIe interface:	PCIe3.0 x16	PCIe3.0 x16	PCIe 3.0x16
Connector Type:	QSFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC
Form Factor:	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length
Warranty:	1year	1year	1year

xSmartNIC

		
Models:	xSmartNIC-2000-CN106	xSmartNIC-2000-CN103
Ports:	2*100G	1*200G/2*100G
Controller:	Marvel CN106 DPU	Marvel CN103 DPU
Speeds:	100Gbps	200Gbps
PCIe interface:	PCIe5.0*8(Server PCIe 5.0x4 Interface)	PCIe5.0*8 (Server PCIe 5.0x4 Interface)
Connector Type:	QSFP28+,DAC,AOC	QSFP28+,DAC,AOC
Memory:	Max128G	Max 128G
Form Factor:	Full-Height,Half-Length	Half-Height, Half Length
Warranty:	1year	1year

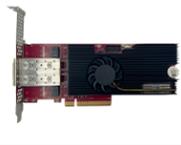
Features

- PCIe 5.0 x4 interface
- 2 x QSFP28 100GbE ports
- 2 x DDR5 SODIMM slots
- High reliability with over-temperature/over-current/over-power protection
- Supports customized development
- Optional passive/active cooling

Application

- Network Acceleration IPU/Smart NIC
- Storage Acceleration
- 5G Communications & Networking
- Network Security
- Supports IPSec Acceleration
- DPU Workload Acceleration
- Virtualization Support
- Hardware Acceleration
- Supports VPP Hardware Acceleration
- Supports UPF Acceleration
- Supports NPC Acceleration
- Supports Nginx Acceleration
- Cryptography
- Supports SM2/SM3/SM4
- Supports Crypto Encryption/Decryption

xSmartNIC

					
Models:	xSmartNIC-200-L	xSmartNIC-200	xSmartNIC-400	xSmartNIC-400-L	xSmartNIC-500
Ports:	2*10G	2*10G	4*10G	4*10G	2*25G
Controller:	Xilinx ku040	Xilinx ku040	Xilinx ku040	Xilinx ku040	Xilinx ku5p
Speeds:	10Gbps	10Gbps	10Gbps	10Gbps	25Gbps
PCIe interface:	PCIe3.0x8	PCIe3.0x8	PCIe3.0x8	PCIe3.0x8	PCIe3.0x8
Connector Type:	SFP+,DAC,AOC	SFP+,DAC,AOC	SFP+,DAC,AOC	SFP+,DAC,AOC	SFP28,DAC,AOC
Form Factor:	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length
Warranty:	1year	1year	1year	1year	1year

xSmartNIC

				
Models:	xSmartNIC-800	xSmartNIC-800-3PG2	xSmartNIC-2000T	xSmartNIC-2000T-3PG2
Ports:	2*40G	2*40G	2*100G	2*100G
Controller:	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p
Speeds:	100Gbps	100Gbps	100Gbps	100Gbps
PCIe interface:	PCIe3.0 x16	PCIe3.0 x16	PCIe3.0 x16	PCIe3.0 x16
Connector Type:	QSFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC
Form Factor:	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length	Half-Height, Half Length
Warranty:	1 year	1 year	1 year	1 year

xSmartNIC Series RDMA

	
Model:	xSmartNIC-2000-R
Ports:	2*100G
Chip:	Xilinx
Speeds:	2*100Gbps
PCIe interface:	PCIe3.0*16
Connector Type:	QSFP28+,DAC,AOC
Memory:	32G
Form Factor:	Full-Height, Half Length
Warranty:	1year

Features

- Supports RoCEv2 protocol
- Supports RC mode
- Supports RDMA Read/Write operations
- Supported QP count: 2K
- Supports Flow Control
- Supports traffic statistics
- Supports VA/PA address types
- Supports Verbs API interface
- Supports standard PerfTest tools
- Ethernet modes: Supports DPDK and kernel mode
- High reliability with over-temperature, over-current, and over-power protection
- Optional passive/active cooling
- Powered by PCIe or external power supply

xSync - Clock Synchronization Card

xSync is a high-performance clock synchronization card based on FPGA design, specifically developed for application scenarios demanding high time and frequency accuracy as well as precise clock synchronization. The card is equipped with an onboard high-precision GPS chip and a voltage-controlled temperature-compensated crystal oscillator (DCTCXO), delivering high-stability clock signals with an accuracy of $\pm 6.25\text{ppm}$. The hardware design of the xSync card is flexible and efficient, integrating a rich array of interface resources. These include: 1 SMA GPS input interface, 3 SMA output interfaces, 3 sets of 8 IPEX output interfaces each (24 channels in total). It supports simultaneous output of 10MHz, PPS, and B code signals, catering to diverse and complex application requirements.

	
PCIe interface:	PCIe Gen2x1
Connector Type:	SMA Interface IPEX Interface
Power	Powered by PCIe
Compatible with CPU	Intel, AMD, ARM
Operating System	Ubuntu, CentOS, Linux
Temperature Range	Operating Temperature: 0° C to 80° C Storage Temperature: -10° C to 60° C
Technical Support & Warranty Period	1 year

Features

High-Precision Clock Synchronization

- On-board GPS chip enables real-time acquisition of precise timing information, providing a reliable time reference for accurate clock synchronization.
- Voltage-Controlled Temperature-Compensated Crystal Oscillator (DCTCXO): Delivers a highly stable clock signal with $\pm 6.25\text{ppm}$ accuracy, ensuring clock precision even in complex environments.

Comprehensive Interface Support

- On-board GPS chip enables real-time acquisition of precise timing information, providing a reliable time reference for accurate clock synchronization.
- Features 3 SMA output interfaces and 3 sets of 8 IPEX output interfaces (totaling 24 channels), capable of simultaneously outputting 10MHz, PPS, and B code signals.
- The multi-channel output design adapts to diverse application scenarios, enhancing flexibility and compatibility.

Powerful FPGA Support

- Developed based on FPGA, offering high programmability and supporting custom clock synchronization logic and expansion functions.
- Easily upgradable or customizable, providing flexible solutions for varying requirements.

Wide Range of Application Scenarios

- Suitable for communication base stations, precision measurement, industrial automation, financial systems, military equipment, and other fields, facilitating highly reliable clock synchronization.
- Enhances overall system efficiency and reliability through high-precision time synchronization.

Cost-Effective Design

- The overall solution is designed to be concise and efficient, balancing performance with cost, making it suitable for large-scale deployment.
- Reduces dependence on external clock equipment, saving resources for users.

xCapture

		
Model:	xCapture-200	xCapture-500
Ports:	2*10G	2*25G
Chip:	Xilinx	Xilinx
Speeds:	10Gbps	25Gbps
PCIe interface:	PCIe3.0*8	PCIe3.0*8
Connector Type:	SFP+,DAC,AOC	SFP+,DAC,AOC
Memory:	8G	8G
Form Factor:	Half-Height, Half Length	Half-Height, Half Length
Warranty:	1 year	1 year

Features

- Supports both DPDK and kernel mode
- Enables line-rate packet capture for dual-port 10G
- Storage format: PCAP with timestamped recording
- Supports symmetric RSS for L3/L4 with RSS value reporting
- Supports data preprocessing offload
- Offloads checksum calculation for IP/TCP/UDP/ICMP/IGMP
- Supports up to 16 RX/TX queues
- PCIe 3.0 interface with backward compatibility
- Supports Jumbo Frame up to 16KB
- Compliant with PCIe half-height, half-length standard
- Supports online upgrades
- High reliability with over-temperature, over-current, and over-power protection
- Optional passive/active cooling
- Powered by PCIe slot
- Supports customized application development and hardware-level acceleration

xFast Accelerator cards

The xFast series accelerator cards deliver robust programmability and parallel processing capabilities based on FPGA/CPU, while ARM cores provide control and computing support. This series is suitable for various hardware acceleration scenarios, such as Infrastructure Processing Units (IPUs) and Smart NICs, and is widely applied in fields including cybersecurity, 5G networks and base stations, 5G application acceleration, data center computing, artificial intelligence, signal processing, fintech, radar systems, and network encryption/decryption.

					
Model:	xFast-4000-A	xFast-6000	xFast-2000-CN106 Arm	xFast-2000-CN103 Arm	xFast-4000
Ports:	2*200G	1*400G 1*200G	2*100G	200G/2*100G	2*200G
Chip:	Intel Agilex 7 FPGA F-Series	Xilinx Versal XCV1202	Marvel CN106 DPU	Marvel CN106 DPU	Intel Agilex 7 FPGA F-Series
Speeds:	2*200GE QSFP56 RJ45	2*200GE QSFP56 RJ45	2*100Gbps QSFP28+ RJ45	QSFP56 200G RJ45	2*200GE QSFP56 RJ45
PCIe interface:	PCIe 5.0 x16	PCIe 5.0 x8	PCIe5.0*8(Server-side PCIe 5.0 x4 interface)	PCIe5.0*8(Server-side PCIe 5.0 x4 interface)	PCIe 4.0 x16
Connector Type:	2*200GE QSFP56 HPS Interfaces: Ethernet, UART, and eMMC	400GE QSFP112 200GE QSFP56 HPS Interfaces: Ethernet, UART, and eMMC	2*100Gbps QSFP28+ RJ45	QSFP56 200G RJ45	2*200GE QSFP-DD HPS Interfaces: Ethernet, UART, and eMMC
Memory:	8GB+4GB(HPS)	LPDDR 16GB	Max 128G	Max 128G	8GB+4GB(HPS)
Form Factor:	Full-Height, Half Length	Full-Height, Half Length	Full-Height, Half Length	Half Height, Half Length	Full-Height, Half Length
Heat Sink:	Active/Passive	Active/Passive	Active/Passive	Active/Passive	Active/Passive
Warranty :	1 year	1 year	1 year	1 year	1 year

xFast Accelerator cards

					
Model:	xFast-2000-13P	xFast-2000-9P	xFast-2000-5P	xFast-1000-13P	xFast-1000-9P
Ports:	2*100G	2*100G	2*100G	4*25G	4*25G
Chip:	Xilinx VU13P	Xilinx VU9P	Xilinx VU5P	Xilinx VU13P	Xilinx VU9P
Speeds:	100/50/40/25/10/1GbE	100/50/40/25/10/1GbE	100/50/40/25/10/1GbE	25/10/1GbE	25/10/1GbE
PCIe interface:	PCIe x16				
Connector Type:	QSFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP,DAC,AOC	QSFP,DAC,AOC
Memory:	32GB	32GB	32GB	32GB	32GB
Form Factor:	Full-Height, Half Length				
Heat Sink:	Active/Passive	Active/Passive	Active/Passive	Active/Passive	Active/Passive
Warranty :	1year	1year	1year	1year	1year

xFast Accelerator cards

					
Model:	xFast-1000-5P	xFast-2000	xFast-2000-G2	xFast-1000x16	xFast-500x16
Ports:	4*25G	2*100G	2*100G	4*25G	2*25G
Chip:	Xilinx VU5P	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p	Xilinx vu3p
Speeds:	25/10/1GbE	100/50/40/25/10/1GbE	100/50/40/25/10/1GbE	25/10/1GbE	25/10/1GbE
PCIe interface:	PCIe x16				
Connector Type:	QSFP,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC	SFP28,DAC,AOC	SFP28,DAC,AOC
Memory:	32GB	8GB	8GB	8GB	
Form Factor:	Full-Height, Half Length	Half Height, Half Length			
Heat Sink:	Active/Passive	Active/Passive	Active/Passive	Active/Passive	Active/Passive
Warranty :	1 year				

xFast Accelerator cards

			
Model:	xFast-1000x8	xFast-1000	xFast-400
Ports:	4*25G	4*25G	4*10G
Chip:	Xilinx vu3p	ku5p	Xilinx KU040/KU060
Speeds:	25/10/1GbE	25/10/1GbE	10/1GbE
PCIe interface:	PCIe x16	PCIe x8	PCIe x8
Connector Type:	SFP28,DAC,AOC	SFP28,DAC,AOC	SFP+,DAC,AOC
Memory:	4GB	8GB	8GB
Form Factor:	Half Height, Half Length	Half Height, Half Length	Half Height, Half Length
Heat Sink:	Active/Passive	Active/Passive	Active/Passive
Warranty :	1 year	1 year	1 year

		
Model:	BXW500	BIW500
Ports:	2*25G	2*25G
Chip:	Xilinx ku5p+E810	Intel E810+Intel S10 FPGA
Speeds:	25/10/1GbE	25/10/1GbE
PCIe interface:	PCIe x8	PCIe x16
Connector Type:	SFP28,DAC,AOC	SFP28,DAC,AOC
Memory:	4GB	8GB+4GB
Form Factor:	Half Height, Half Length	Full-Height, Half Length
Heat Sink:	Active/Passive	Active/Passive
Warranty :	1 year	1 year

xFAST-THOR

Empowered by an onboard CPU, the Raymax xFast-Thor Accelerator Card enables offloading and acceleration for a variety of applications in smart NIC/DPU scenarios, including virtualization, edge networking, storage, and security encryption/decryption. The Thor Card provides a secure and reliable acceleration platform for diverse applications across multiple environments. The product series supports various port configurations and speeds, such as dual-port 25GbE, quad-port 25GbE, dual-port 100GbE, and single-port 200GbE, among others.

	
Form Factor	Full-Height, Half Length
CPU	Intel Xeon-Silver CPU 20 Cores
memory	64GB/128GB/256GB/512GB
Ports	1 Gigabit Management Port Dual-port 25GbE / Quad-port 25GbE / Single-port 100GbE / Dual-port 100GbE / Dual-port 200GbE
Power	External Power Supply
Operating System	Windows, Linux
Temperature	Operating Temperature: 0° C to 50° C Storage Temperature: -10° C to 60° C
Technical Support & Warranty Period	1 year

Highlights

- Secure and reliable acceleration platform
- Supports network offload
- Supports storage offload
- Supports virtualization
- Supports RDMA
- Supports network security encryption and decryption
- PCIe powered, requires external power supply
- Supports customized development

Network xTester

Currently, the proliferation of various network applications is driving continuous growth in network throughput, while demands for network security and domestic localization are also increasing. Network testers play a crucial role in network testing and standard benchmarking, and the need for domestically produced network testers is becoming more urgent. The Raymax xTester Ethernet Test Module, with its diverse port types, meets these demands by providing multi-rate support and performance testing for this essential market. Its flexibility and security are indispensable for domestically developed network testers. The Raymax xTester series of Ethernet test modules supports multiple rates including 2x100GbE, 50GbE, 40GbE, 25GbE, 10GbE, 2.5GbE, and 1GbE. It can handle transmission and reception of Layer 2-3 Ethernet packets with hardware support for up to 255 templates. Additionally, users can extend its capabilities to Layer 4-7 applications and security features based on their requirements.

		
Models:	xTester-500	xTester-2000
Ports:	2*25G	2*100G
Chip:	Xilinx vu3p	Xilinx vu3p
Speeds:	25GbE/ 10GbE /2.5GbE/1GbE	100GbE/ 50GbE/ 40GbE/ 25GbE/ 10GbE
Memory:	8GB	8GB
PCIe interface:	PCIe3.0 x8	PCIe 3.0 x16
Connector Type:	SFP,DAC,AOC	SFP28,DAC,AOC
Form Factor:	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot
Warranty :	3 years	3 years

Features

- Supports multiple rates 2x100GbE/50GbE/40GbE/25GbE/10GbE
- Supports multiple rates 25GbE/ 10GbE /2.5GbE/1GbE
- Support optical fiber, Active Optical Cables (AOC), and Direct Attach Copper (DAC) cables
- Support FEC AN , and LT.
- Support intel , AMD , ARM CPU

Data Diode Systems

In highly secure network environments, information security isolation and unidirectional data transfer are critical requirements for ensuring the stable operation of core systems. Traditional bidirectional firewalls or network gateways can implement access control at the logical level but still carry potential risks of being bypassed or compromised.

The xDataDiode series of unidirectional data transfer gateways, launched by Raymax Technology, adopts a physically irreversible unidirectional link design and a dual FPGA chip board processing architecture. This hardware-level approach completely blocks reverse channels, ensuring that data is transmitted strictly in the preset direction. The devices perform integrity verification and security filtering during data transmission, effectively preventing threats such as malicious code backflow and attack command penetration.

The xDataDiode product series offers flexible electrical/optical interface options, multi-port expansion capabilities, and highly reliable caching mechanisms. It meets the security compliance requirements of key industries—such as power dispatching, financial transactions, national defense and classified operations, and industrial control—for scenarios including data collection, log export, and cross-network information exchange.

The xDataDiode series includes models with 2, 4, and 8 ports, supporting bandwidth configurations ranging from Gigabit to 100-Gigabit, catering to diverse needs from small industrial control scenarios to large-scale critical information systems. With hardware-level security protection and a highly reliable architecture, the product can be widely applied in critical industries such as power, finance, government, and military, meeting national standards for cybersecurity classification protection, critical information infrastructure protection, and cryptographic requirements.

Unidirectional or bidirectional network gateways/optical gateways based on domestically developed FPGA hardware.

Features

- Two FPGA boards achieve hardware-level isolation between internal and external networks.
- The external network supports switching and routing between network interfaces.
- Supports MAC binding and data flow filtering, with line-speed packet filtering capability, processing data up to 100 times faster than CPU-based solutions.
- Physically Unidirectional: Uses fiber optic/cable connections between two boards, with no light-emitting components or uplink circuits on the transmitting end, eliminating reverse transmission channels at the hardware level.
- Encrypted Transmission: Custom protocol for data transmission between boards, with encryption support.
- Policy Filtering: Line-speed quintuple matching, supporting whitelist restrictions for ports/network segments/protocols.
- Firmware Signing: Only signed firmware can be loaded.
- Security Hardening and Trusted Boot: Startup and configuration require correct key verification.
- High Reliability and Security Functions: The device does not rely on general-purpose CPUs internally, inherently immune to attacks targeting CPU architectures.
- Built-in management module, supporting remote monitoring and upgrades.
- A series of models covering various scenarios.



IPSafe Hardware-Level IP Security Protection

IPSafe is an FPGA-based IP protection gateway designed for high-security network environments requiring high-speed and low-latency communication. Built on a pure hardware-accelerated architecture, IPSafe delivers nanosecond-level packet processing and wire-speed forwarding performance.

Through hardware-level IP address masquerading and flow table management, IPSafe conceals real terminal IP identities, preventing IP-based tracking, targeted attacks, and reconnaissance activities. Integrated filtering, policy control, and encrypted forwarding mechanisms ensure secure and reliable data transmission without performance compromise.

Unlike traditional CPU-based firewalls, IPSafe performs quintuple policy matching, MAC binding, and packet filtering directly in FPGA hardware, achieving significantly higher throughput and deterministic latency. The system incorporates secure boot, firmware signing, and trusted verification mechanisms to enhance platform integrity.

Available in 1-, 2-, and 4-port models with bandwidth options from 1G to 100G, IPSafe supports flexible deployment across government, finance, industrial networks, enterprise data centers, and other critical infrastructure scenarios.

Features

- Based on a domestically produced FPGA pure hardware-accelerated architecture, featuring nanosecond-level data processing and forwarding capabilities
- IP address masquerading, filtering, and forwarding operations; shields the device's real IP, prevents targeted IP-based attacks, protects internal data transmission security, and reduces the risk of business confidential leaks
- Blocks IP-based behavioral tracking and targeted attacks, effectively defending against risks such as DDoS, scanning and positioning, and privacy theft
- Enables switching and routing between network interfaces
- Supports MAC binding and data flow filtering, featuring wire-speed packet filtering capabilities, with processing speeds over 100 times faster than CPU-based solutions
- Policy filtering: Wire-speed quintuple matching, supports port/network segment/protocol whitelist restrictions
- Firmware signing: Only loads signed firmware
- Security hardening and trusted boot: Requires key verification for startup and configuration
- High reliability and security functions: The device does not rely on a general-purpose CPU internally, naturally immune to CPU architecture-related attacks
- Built-in management module, supports remote monitoring and upgrades
- Series models cover various scenarios



xTesterServer

Raymax Network Tester Series is a research and development (R&D) testing product launched by the company, targeting routers, switches, and other network forwarding devices of similar levels. It adopts a modular design, offering 2 or 6 slots that support flexible combinations of testing modules with various rates. It also supports GPS connectivity, B code, and clock synchronization. The 6-slot version is the xTesterServer, which allows for the free selection of xTester series modules.

Paired with Raymax Technology's new-generation testing software xTester, the xTesterServer series testers enable Layer 2-3 traffic testing and protocol simulation for network devices and systems. They provide comprehensive testing solutions in terms of functionality, performance, and security, meeting the testing requirements in R&D, experimentation, and quality control processes.

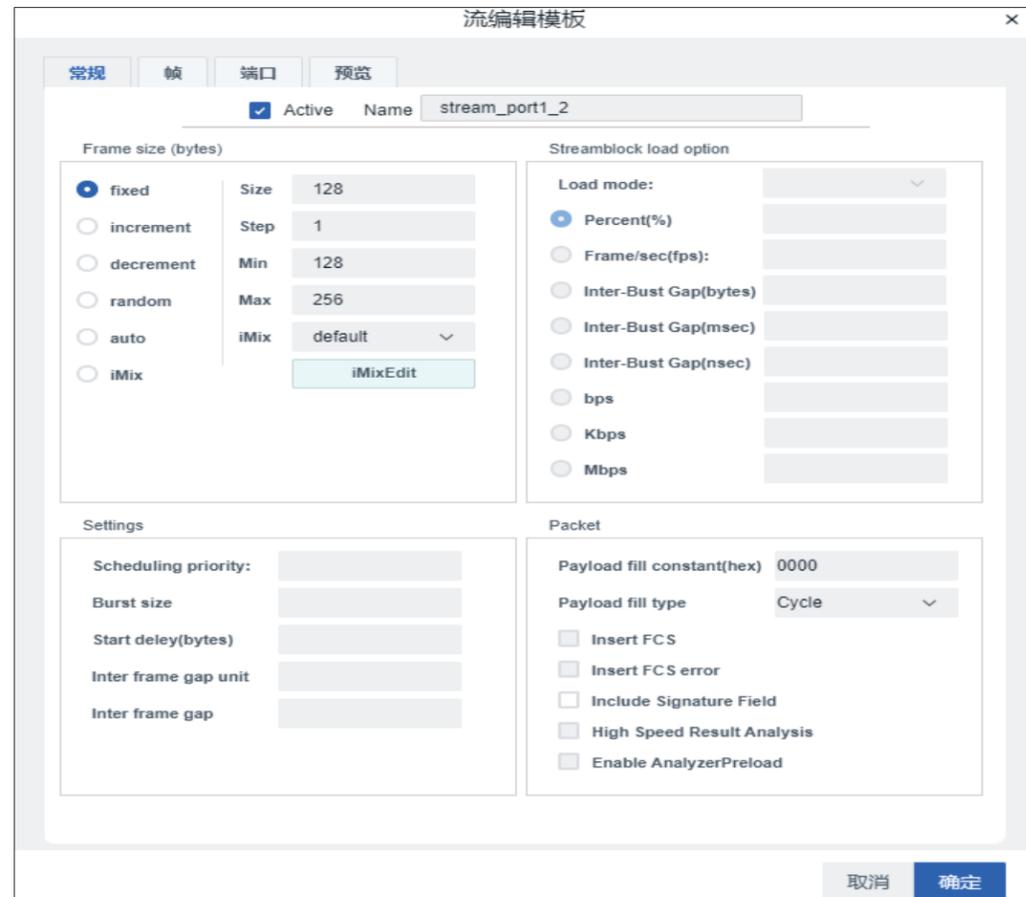
Main Features

- Maximum of 6 test card slots per unit, supporting up to 10x100G ports
- supporting multiple rates including 100G/50G/40G/25G/10G/5G/2.5G/2.5GbE/1GbE
- FPGA-based line-rate traffic generation, statistics, and capture
- Supports hardware-level transmission and reception of up to 255 templates of Layer 2-3 Ethernet packets
- Supports FEC, AN, and LT
- Supports benchmark tests such as RFC2544



xTesterServer

xTester Software



xServerBox FPGA

FPGA Server Performance and Features

- Highest density from 1U to 10U
- Pre-integrated with Ruiven xFast_FPGA cards
- Pre-integrated with Ruiven clock synchronization card and GPS
- Expandable chassis
- Rapid development and deployment platform, validation platform
- Low risk, low cost
- 3-year warranty



1U4FPGA



2U4FPGA



3U6FPGA



3U10FPGA



4U4FPGA



4U10FPGA



10U20FPGA



xFast_FPGA

xServerBox Manager Software

Choose the xServerBox FPGA server, and you will get a pre-configured and tested solution. This includes the setup and installation of your selected FPGA cards and related hardware, as well as your chosen operating system and development tools. It is ready to use upon arrival, allowing your team to focus more time on development and deployment.

For system management, it works with Raymax's software development kit to program the FPGA via PCIe, monitor the card's power consumption and temperature, and reprogram the onboard clock. You can also set up triggers to shut down the card if it becomes too hot, access JTAG, or use software tools remotely

FPGA开发板 | xFast-2000

固件烧录

基本信息

Device Name
XCVU3P_2FFVC1517

Logic	Memory	I/O	Integrated IP	Flash
System Logic Cells (K) 862	Max. Dist. RAM (Mb) 12.0	Max. Single-Ended HP I/Os 520	DSP Slices 2280	Flash Name MT28EW01GABA1LPC-0SIT
CLB Flip-Flops (K) 788	Total Block RAM (Mb) 25.3	GTY 32.75 Gb/s Transceivers 40	Peak INT8 DSP (TOP/s) 7.1	Size (Gb) 1
CLB LUTs (K) 394	UltraRAM (Mb) 90.0		PCIe® Gen3 x16 2	BandWidth x16
			150G Interlaken 3	
			100G Ethernet w/ KR4 RS-FEC 3	

RAYMAX 帮助文档

FPGA开发板

- 03:00.0 xFast-2000(XCVU3P_2F...
- 04:00.0 xFast-2000(XCVU3P_2F...
- 05:00.0 xFast-2000(XCVU3P_2F...
- 82:00.0 xFast-1000-X8V(XCVU3...
- 83:00.0 xFast-1000-X8V(XCVU3...
- 84:00.0 xFast-1000-X8V(XCVU3...

xServerBox Manager

操作日志

消息编号	操作对象	描述	操作时间

xVisionBox

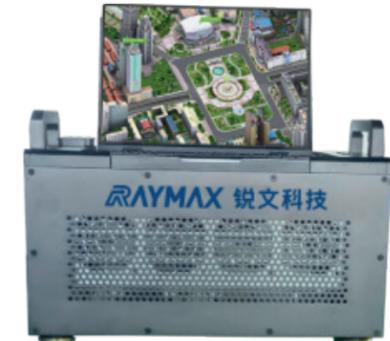
The Raymax xVisionBox multi-node cloud PC system adopts a built-in multi-node architecture, with each node independently developed based on Intel Core® processors. Each node supports one GPU acceleration card, delivering outstanding computational performance alongside exceptionally high space efficiency. Its compact and portable design allows it to be easily transported by plane, high-speed rail, or other means alongside project teams for on-site data collection. Once data is collected, it enables immediate and highly efficient data processing.

Application Fields

- 3D Modeling
- Real-time Rendering
- Video Editing
- Research and Education
- Data Processing and Analysis
- AI Training and Edge computing
- High-Performance Computing and Simulation



RW7U6NG



RW5U3NG

Chassis

5U/7U standard 19-inch rack-mount server chassis with custom logo support.

Power Supply

Optional hot-swappable power modules (2x800W) with 80 PLUS Platinum efficiency; Redundancy support is optional.

Cooling

Integrated temperature-controlled cooling modules inside each node.

Chassis Dimensions

438 × 260 × 237 mm (L × W × H)

Operating Temperature

5 °C to 30 °C during operation

Node

Independent physical nodes: *3 / *6

Processor

Control Node: Core i9-14900HX
Compute Node: Core i9-14900HX (24 cores, 32 threads, up to 5.8 GHz Turbo frequency)

Motherboard

Customized dedicated motherboard

Memory

64 GB DDR5 5600 MHz per node

Storage

1 TB NVMe M.2 SSD per node

Graphics Card

RTX 4070 *3 / *6 (compute nodes)

Network Interface

Gigabit network card (1000/2500 Mbps), optional 10 Gigabit support

Management Interface

Built-in 2.5G switch, KVM over IP switch

External Interfaces

USB 3.0 × 3, USB 2.0 × 2, 10G SFP+ optical port × 1, 1G RJ45 × 1

Ambient Temperature

Operating: 5 °C – 30 °C

Storage: -40 °C – 70 °C

Net Weight

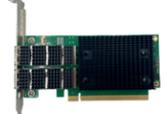
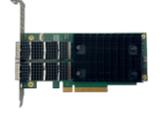
18 kg-20kg

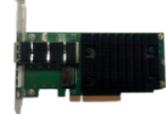
Operating System

Windows, Linux, etc

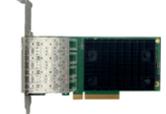
Ethernet NICs

The Ethernet PCI-Express® Network Interface Cards are developed based on Intel ASICs such as E810, XL710, X710, 82599ES and I350 . They support multiple port speeds, including 2x100GbE, 50GbE, 40GbE, 25GbE, 10GbE, 2.5GbE, and 1GbE. The Network Adapter proven to be reliable and standards-based solutions.

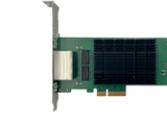
			
Models:	NIC-2000-E810	NIC-2000-E810-S	NIC-2000-E810-X8
Ports:	2*100G	2*100G	2*100G
Controller:	E810-CAM2	E810-CAM2	E810-CAM2
Speeds:	100/50/25/10/1GbE	100/50/25/10/1GbE	100/50/25/10/1GbE
PCIe interface:	PCIe 4.0x16	PCIe 4.0x16	PCIe 4.0x8
Connector Type:	QSFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC
Form Factor:	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot
Max. Power Consumption:	27.1W	27.1W	27.1W
Warranty :	3 years	3 years	3 years

			
Models:	NIC-1000S-E810	NIC-1000S-E810-X8	NIC-1000-E810
Ports:	1*100G	1*100G	4*25G
Controller:	E810-CAM1	E810-CAM1	E810-CAM1
Speeds:	100/50/25/10/1GbE	100/50/25/10/1GbE	25/10/1GbE
PCIe interface:	PCIe 4.0x16	PCIe 4.0x16	PCIe 4.0x16
Connector Type:	QSFP28,DAC,AOC	QSFP28,DAC,AOC	SFP28,DAC,AOC
Form Factor:	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot
Max. Power Consumption:	22.9W	22.9W	22.9W
Warranty :	3 years	3 years	3 years

Ethernet NICs

						
Models:	NIC-1000-E810-X8	NIC-500-E810	NIC-500-E810-S	NIC-500-E810-X4	NIC-400-710	NIC-200-599
Ports:	4*25G	2*25G	2*25G	2*25G	4*10G	2*10G
Controller:	E810-CAM1	E810XXVAM2	E810XXVAM2	E810XXVAM2	XL710-BM1	82599ES
Speeds:	25/10/1GbE	25/10/1GbE	25/10/1GbE	25/10/1GbE	10/1GbE	10/1GbE
PCIe interface:	PCIe 4.0x8	PCIe 4.0x8	PCIe 4.0x8	PCIe 4.0x4	PCIe 3.0x8	PCIe 2.0x8
Connector Type:	SFP28,DAC,AOC	SFP28,DAC,AOC	SFP28,DAC,AOC	SFP28,DAC,AOC	SFP+,DAC,AOC	SFP+,DAC,AOC
Form Factor:	Half Height, Half Length PCIe® Single slot					
Max. Power Consumption:	22.9W	13.7W	13.7W	13.7W	7.4w	6.8w
Warranty :	3 years					

Ethernet NICs

				
Models:	NIC-200-710	NIC-200-710-E	NIC-20-I350-E	NIC-20-I350
Ports:	2*10G	2*10G	2*1G	2*1G
Controller:	X710	X710	I350-AM2	I350-AM2
Speeds:	10/1GbE	10/1GbE	10/100/1000Mbps	10/100/1000Mbps
PCIe interface:	PCIe 3.0x8	PCIe 3.0x8	PCIe x4	PCIe x4
Connector Type:	SFP+,DAC,AOC	RJ45	RJ45	SFP
Form Factor:	Half Height, Half Length PCIe® Single slot			
Max. Power Consumption:	7.4w	7.4w	3.0w	3.0w
Warranty :	3 years	3 years	3 years	3 years

Ethernet NICs

			
Models:	NIC-40-I350-E	NIC-40-I350	NIC-25-I226
Ports:	4*1G	4*1G	1*2.5G
Controller:	I350-AM4	I350-AM4	I226
Speeds:	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps/2.5Gbps
PCIe interface:	PCIe x4	PCIe x4	PCIe x4
Connector Type:	RJ45	RJ45	RJ45
Form Factor:	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot
Max. Power Consumption:	5.0w	5.0w	5.0w
Warranty :	3 years	3 years	3 years

Ethernet NICs

The Ethernet OCP Network Interface Cards are developed based on Intel ASICs such as E810, XL710, X710, 82599ES and I350. They support multiple port speeds, including 2x100GbE, 50GbE, 40GbE, 25GbE, 10GbE, 2.5GbE, and 1GbE. The Network Adapter proven to be reliable and standards-based solutions.

							
Models:	NIC-20-OCPI350-E	NIC-40-OCPI350-E	NIC-40-OCPI350	NIC-200-OCPI350	NIC-200-OCPI599	NIC-200-OCPI710	NIC-200-OCPI710-E
Ports:	2*1G	4*1G	4*1G	2*10G	2*10G	2*10G	2*10G
Controller:	I350-AM2	I350-AM4	I350-AM4	82599ES	X710	X710	X710
Speeds:	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/1GbE	10/1GbE	10/1GbE	10/1GbE
PCIe interface:	OCP3.0	OCP3.0	OCP3.0	OCP3.0	OCP3.0	OCP3.0	OCP3.0
Connector Type:	RJ45	RJ45	RJ45	SFP+,DAC,AOC	SFP+,DAC,AOC	RJ45	RJ45
Form Factor:	OCP	OCP	OCP	OCP	OCP	OCP	OCP
Max. Power Consumption:	3.0w	5.0w	5.0w	6.8w	7.4w	7.4w	7.4w
Warranty :	1year	1year	1year	1year	1year	1year	1year

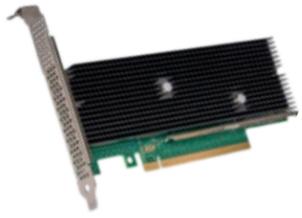
Ethernet NICs

			
Models:	NIC-400-710FE-OCP	NIC-400-OCPI710	NIC-500-OCPE810
Ports:	2*10Gbps SFP+,2*10G RJ45,OCP3.0	4*10G	2*25G
Controller:	X710	XL710-BM1	E810XXVAM2
Speeds:	10/5/2.5/1GbE, 100Mb	10/1GbE	25/10/1GbE
PCIe interface:	OCP3.0	OCP3.0	OCP3.0
Connector Type:	SFP+,DAC,AOC,RJ45	SFP+,DAC,AOC	SFP28,DAC,AOC
Form Factor:	OCP	OCP	OCP
Max. Power Consumption:	4.8w	7.4w	13.7W
Warranty :	1year	1year	1year

Ethernet NICs

			
Models:	NIC-1000-OCPE810	NIC-1000-OCPE810	NIC-2000-OCPE810
Ports:	4*25G	1*100G	2*100G
Controller:	E810-CAM1	E810-CAM1	E810-CAM2
Speeds:	25/10/1GbE	100/50/25/10/1GbE	100/50/25/10/1GbE
PCIe interface:	OCP3.0	OCP3.0	OCP3.0
Connector Type:	SFP28,DAC,AOC	QSFP28,DAC,AOC	QSFP28,DAC,AOC
Form Factor:	OCP	OCP	OCP
Max. Power Consumption:	22.9W	22.9W	27.1W
Warranty :	1year	1year	1year

QAT- Cryptographic Accelerator

		
Models:	Intel QuickAssist Adapter 8970	Intel QuickAssist Adapter 8960
Form Factor:	Half Height, Half Length PCIe® Single slot	Half Height, Half Length PCIe® Single slot
PCIe interface:	PCIe3.0 x16	PCIe3.0 x8
Speeds:	Up to 100GbE	Up to 100GbE
Cryptography:	DES, Triple DES, RC4, MD5, AES, SHA-1, ECDSA, AES-CCM, SHA-2, AES-GCM, ECDHE, AES-XTS, SHA-3,HMAC,KASUMI,ZUC,Snow 3G	DES, Triple DES, RC4, MD5, AES, SHA-1, ECDSA, AES-CCM, SHA-2, AES-GCM, ECDHE, AES-XTS, SHA-3,HMAC,KASUMI,ZUC,Snow 3G
Max. Power Consumption:	21W	23W
Supported Operating Systems:	Linux	Linux
Warranty :	3years	3years

Features

- Up to 100Gbps hardware acceleration performance
- Commercial ready Intel-branded solution
- Virtualization support for Network Function Virtualization (NFV) deployments
- Utilizes existing Intel® QuickAssist Technology Software Libraries and APIs supporting IPsec,SSL/TLS, network, storage, communications services, and workloads

Xilinx FPGA Accelerator Card

General-Purpose Compute Accelerators

Among our most versatile accelerator cards in the portfolio, our compute accelerators targeting workloads including analytics, HPC, packet monitoring, network switching, storage, and algorithmic trading.

			
Model:	Xilinx ALVEO U50	Xilinx Alveo™ V80	AMD Alveo™ U55C
Ports:	1 x QSFP28 (100GbE)	4x QSFP56 optical ports	2 x QSFP28 ports 2*100GbE
PCIe interface:	PCIe Gen3 x 16、Dual PCIe Gen4 x8、CCIX	PCIe® Gen4 x16 or 2x Gen5 x8	Gen3 x16, 2 x Gen4 x8
Form Factor:	Half Height, Half Length	Full-Height, ¾ Length (FH¾L) Dual-slot	Full-Height, Half Length
Power and Thermal:	Up to 75W TDP, passive cooling	Up to 190W TDP, passive cooling	passive cooling
Warranty:	1 year	1 year	1 year

			
Model:	Alveo™ UL3422	Alveo™ UL3524	Alveo X3522PV
Ports:	2 x QSFP-DD (16 X 10/25G)	4x QSFP-DD (32 x 10/25G ports)	4x10/25GbE Ports
PCIe interface:	PCIe Gen4 x8 (x16 physical connecto)	PCIe Gen4 x8 (x16 physical connector)	PCIe Gen3 x8 / Gen4 x8
Form Factor:	Full-Height, Half Length	Full-Height, Half Length	Full-Height, Half Length
Power and Thermal:	passive cooling	passive cooling	passive cooling
Warranty:	1 year	1 year	1 year

Optical Transceivers

1.6T OSFP 800G OSFP/QSFP-DD(DSP) 800G OSFP(LPO) 400G OSFP(DSP) 400G OSFP/QSFP112(LPO) 400G QSFP-DD(DSP) 400G QSFP112(DSP) 200G QSFP56/QSFP112 100G QSFP28 40G QSFP+ 25G SFP28/10G SFP+/BIDI PON SERIES PRODUCTS AOC DESCRIPTION



1.6T OSFP

Features

- Supports 1x1.6T or 2x800G
- Single 3.3V Power Supply
- OSFP MSA Compliant
- 8x212.5 Gb/s (PAM4) optical interface
- 8x212.5 Gb/s (PAM4) electrical interface
- Commercial case temperature range of 0°C to 70°C
- CMIS 5.0 or later version

Part Number: RMCC-OSFP16DR8-12D
 Rate: 1.6T
 Wavelength(nm): 1311
 Reach: 500m
 Source: CW/PN
 Fiber: SMF
 Interface: Dual MPO-12
 TX Power(dBm): -3.3~+4
 Sen(dBm):-4.3dBm + TDECQ

Optical Transceivers

800G OSFP(LPO)



Features:

- Supports 850Gb/s
- Single 3.3V Power Supply OSFP MSA Compliant
- 8x106.25Gbps (PAM4) optical interface
- 8x106.25 Gb/s (PAM4) electrical interface
- Commercial case temperature range of 0°C to 70°C CMIS 5.0 or later version

800G OSFP/QSFP-DD (DSP)



Features:

- Supports 2x 425Gb/s or 850Gb/s
- Single 3.3V Power Supply
- OSFP MSA Compliant
- 8x106.25 Gb/s (PAM4) optical interface
- 8x106.25 Gb/s (PAM4) electrical interface
- Commercial case temperature range of 0°C to 70°C
- CMIS 5.0 or later version

800G OSFP(LPO)

Package	Part Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
OSFP VR8	RMCC-OSFP08VR8-12L	800G	850	50m	VCSEL/PIN	MMF	DualMPO-12	-1~+3	<-4.6
OSFP DR8	RMCC-OSFP08DR8-12L	800G	1310	500m	CW/PIN	SMF	Dual MPO-12	-2.9~+4	<-5.1

800G OSFP/QSFP-DD (DSP)

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
OSFP VR8	RMCC-OSFP08VR8-12D	800G	850	50m	VCSEL/PIN	MMF	Dual MPO-12	-4.6~+4	<-4.4
QSFP-DD SR8	RMCC-QSFD08SR8-16D	800G	850	50m	VCSEL/PIN	MMF	MPO-16	-4.6~+4	<-4.4
OSFP SR8	RMCC-OSFP08SR8-12D	800G	850	100m	VCSEL/PIN	MMF	Dual MPO-12	-4.6~+4	<-4.6
OSFP DR8	RMCC-OSFP08DR8-12D	800G	1310	500m	EML/CW/PIN	SMF	Dual MPO-12	-2.9~+4	<-5.1
OSFP2*FR4	RMCC-OSFP08FR4-LCD	800G	1271-1331	2km	EML/CW/PIN	SMF	Dual Duplex LC	-3.2~+4.4	<-7.2

Optical Transceivers

400G OSFP/QSFP112(LPO)



Features:

- Supports 425Gb/s
- Single 3.3V Power Supply
- OSFP/QSFP112 MSA Compliant
- 4x106.25Gbps (PAM4) optical interface
- 4x106.25Gbps (PAM4) electrical interface
- Commercial case temperature range of 0°C to 70°C CMIS 5.0 or later version

400G QSFP112(DSP)



Features:

- Supports 425Gb/s
- Single 3.3V Power Supply QSFP112 MSA Compliant
- 4x106.25 Gb/s (PAM4) optical interface
- 4x106.25 Gb/s (PAM4) electrical interface
- Commercial case temperature range of 0°C to 70°C CMIS 5.0 or later version.

400G OSFP/QSFP112 (LPO)

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
QSFP112 VR4	RMCC-QSFP04VR4-12L	400G	850	50m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.4
OSFP VR4	RMCC-OSFP04SR4-12L	400G	850	50m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.6
OSFP DR4	RMCC-OSFP04DR4-12L	400G	1310	500m	CW/PIN	SMF	MPO-12	-2.9~+4.0	<-5.1
QSFP112DR4	RMCC-QSFP04DR4-12L	400G	1310	500m	CW/PIN	SMF	MPO-12	-2.9~+4.0	<-5.9

400G QSFP112 (DSP)

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
QSFP112 VR4	RMCC-QSFP04VR4-12D	400G	850	50m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.4
QSFP112SR4	RMCC-QSFP04SR4-12D	400G	850	100m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.6
QSFP112DR4	RMCC-QSFP04DR4-12D	400G	1310	500m	EML/PIN	SMF	MPO-12	-2.9~+4.0	<-5.9
QSFP112FR4	RMCC-QSFP04FR4-LCD	400G	1271-1331	2km	CWDM4EML/PIN	SMF	LC	-3.2~+4.4	<-7.2
OSFP2*FR4	RMCC-OSFP08FR4-LCD	800G	1271-1331	2km	EML/CW/PIN	SMF	Dual Duplex LC	-3.2~+4.4	<-7.2

Optical Transceivers

400G OSFP (DSP)



Features:

- Supports 2x 212.5Gb/s, 4x106.25Gb/s or 425Gb/s
- Single 3.3V Power Supply
- OSFP MSA Compliant
- 8x53.125Gb/s(PAM4) or 4x106.25 Gb/s(PAM4) optical interface
- 8x53.125Gb/s(PAM4) electrical interface
- Commercial case temperature range of 0°C to 70°C
- CMIS 5.0 or later version

400G OSFP (DSP)

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
OSFP VR4	RMCC-OSFP04VR4-12D	400G	850	50m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.4
OSFP SR4	RMCC-OSFP04SR4-12D	400G	850	100m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.6
OSFP SR8	RMCC-OSFP04SR8-16D	400G	850	100m	VCSEL/PIN	MMF	MPO-16	-6.5~+4	<-6.5
OSFP DR4	RMCC-OSFP04DR4-12D	400G	1310	500m	EML/CW/PIN	SMF	MPO-12	-2.9~+4.0	<-5.1

400G QSFP-DD(DSP)

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
QSFP-DD VR4	RMCC-QSFD04VR4-12D	400G	850	50m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.4
QSFP-DD SR8	RMCC-QSFD04SR8-16D	400G	850	100m	VCSEL/PIN	MMF	MPO-16	-6.5~+4	<-7.9
QSFP-DD DR4	RMCC-QSFD04DR4-12D	400G	1310	500m	EML/PIN	SMF	MPO-12	-2.9~+4	<-5.9

Optical Transceivers

200G QSFP56/QSFP112



Features:

- Supports 212Gb/s
- Single 3.3V Power Supply QSFP56 MSA Compliant
- 4x53.125Gb/s (PAM4) electrical and optical interface Commercial case temperature range of 0°C to 70°C SFF 8636

100G QSFP28



Features:

- Supports 103Gb/s and 112 Gb/s
- 4x25.78 Gb/s and 4x27.95 Gb/s (NRZ) electrical interface
- 4x25.78 Gb/s (NRZ) or 2x53.125 Gb/s (PAM4) optical interface Commercial case temperature range of 0°C to 70°C

200G QSFP56/QSFP112

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
QSFP112 VR2	RMCC-QSFP02VR2-12C	200G	850	50m	VCSEL/PIN	MMF	MPO-12	-4.6~+4	<-4.4
QSFP56 SR4	RMCC-QSFP02SR4-12C	200G	850	100m	VCSEL/PIN	MMF	MPO-12	-6.5~+4	<-8.4
QSFP56FR4	RMCC-QSFP02FR4-LCD	200G	1310	2km	DFB/PIN	SMF	LC	-4.2~+4.7	<-6

100G QSFP28

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
QSFP28SR4	RMCC-QK110M-SD	100G	850	100m	VCSEL/PIN	MMF	MPO	-8.4~+2.4	≤-10.3
QSFP28CWDM4	RMCC-QKCC0L-SD	100G	1271-1331	2km	CWDMDFB/PIN	SMF	LC	-6.5~+2.5	≤-11.5
QSFP28LR4	RMCC-QKLL1L-SD	100G	1294-1310	10km	LWDMDFB/PIN	SMF	LC	-4.3~+4.5	≤-10.6
QSFP28ER4	RMCC-QKLL4L-SD	100G	1294-1310	40km	LWDMDFB/PIN	SMF	LC	-2.9~+6.5	≤-20.5
QSFP28ZR4	RMCC-QKLL8L-SD	100G	1294-1310	80km	LWDMDFB/PIN	SMF	LC	-1~+4	≤-12.5

Optical Transceivers

40G QSFP+



Features:

- 4 independent full-duplex channels up to 11.2Gbps per channel bandwidth Digital diagnostic capabilities
- Commercial case temperature range of 0°C to 70°C

40G QSFP+

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
QSFP+SR4	RMCC-QJ110M-SD	40G	850	100m	VCSEL/PIN	MMF	MPO	-8~+1	≤-13
QSFP+LR4	RMCC-QJCC1L-SD	40G	1271-1310	10km	CWDMDFB/PIN	SMF	LC	-7~+2.3	≤-14
QSFP+ER4	RMCC-QJCC4L-SD	40G	1271-1310	40km	CWDMDFB/PIN	SMF	LC	-3.7~+4.5	≤-22

25G SFP28

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
SFP28SR	RMCC-PM110L-SD	25G	850	100m	VCSEL/PIN	SMF	LC	-6.0~+2.4	≤-10.3
SFP28LR	RMCC-PM221L-(S)ID	25G	1310	10km	DFB/PIN	SMF	LC	-4.5~+2.5	≤-11.4
SFP28BIDI	RMCC-PM56(65)1L-(S)D	25G	TX1270(1330)/RX1330(1270)	10km	DFB/PIN	SMF	LC	-4~+4	≤-13.3

25G SFP28



Features:

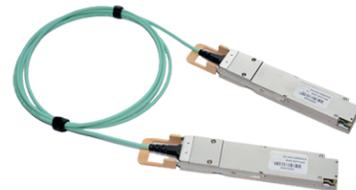
- Operating Data Rate Support 24.33Gbps and 25.78Gbps with CDR engaged Mode or 9.95Gbps and 10.31Gbps with CDR bypassed
- Mode
- Distances up to 10km, 20km, 30km, 40km and 80km
- Duplex LC Connector Interface, Hot Pluggable
- Commercial case temperature range of 0°C to 70°C or Industrial case temperature range of -40°C to 85°C

Optical Transceivers

10G SFP+/ BIDI



AOC



Features:

- Multi rate of up to 11.3Gb/s
- Transmission distance up to 100km (SM fiber)
- Commercial case temperature range of 0°C to 70°C or Industrial case temperature range of -40°C to 85°C

10G SFP+/ BIDI

Package	CcloudPart Number	Rate	Wavelength(nm)	Reach	Source	Fiber	Interface	TX Power(dBm)	Sen(dBm)
SFP+ ER	RMCC-P11444L-(S)ID	10G	1550	40km	EML/PIN	SMF	LC	-1~+3	≤-16
SFP+ZR	RMCC-P11448L-(S)ID	10G	1550	80km	EML/APD	SMF	LC	0~+4	≤-23
SFP+BIDI	RMCC-P1134(43)8L-(S)ID	10G	TX1490(1550)/ RX1550(1490)	80km	EML/APD	SMF	LC	0~+4	≤-22

AOC

CC-AOC-O808-XXD	OSFP800G,Active Optical Cable,UP to 20m on MMF,0°C ~+70°C
CC-AOC-D8D8-XXD	QSFP-DD800G,Active Optical Cable,UP to 20m on MMF,0°C ~+70°C
CC-AOC-D4D4-XXD	QSFP-DD400G,Active Optical Cable,UP to 30m on MMF,0°C ~+70°C
CC-AOC-D4Q2-XXD	QSFP-DD400Gto QSFP56 2X200GBreakout Active Optical Cable,UP to 30m on MMF,0°C ~+70°C
CC-AOC-Q2Q1-XXC	QSFP56200Gto QSFP282X100GBreakoutActive Optical Cable,UP to 100m on MMF,0°C ~+70°C
CC-AOC-Q2Q2-XXC	QSFP56200G,Active Optical Cable,UP to 30m on MMF,0°C ~+70°C
CC-QKKAOCX-SD	QSFP28 100G,Active Optical Cable,UP to 30m on MMF,0°C ~+70°C
CC-QJJAOCX-SD	QSFP+40G,Active Optical Cable,UP to 30m on MMF,0°C ~+70°C
CC-PMMAOCX-SD	SFP2825G,Active Optical Cable,UP to 30m on MMF,0°C ~+70°C
CC-P11AOCX-SD	SFP+ 10G,Active Optical Cable,UP to 30m on MMF,0°C ~+70°C