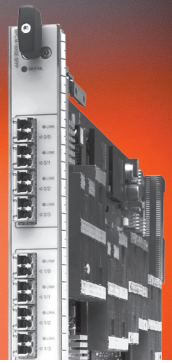


Modular Port Concentrators for MX Series 3D Universal Edge Routers



Product Overview

Modular Port Concentrators are powered by the programmable Trio chipset and provide high-speed packet processing, forwarding, and network connectivity options for chassis-based MX Series 3D Universal Edge Routers.

Product Description

Modular Port Concentrators (MPCs) are single-slot line cards for Juniper Networks® MX240, MX480, and MX960 3D Universal Edge Routers, as well as the MX2000¹ line of 3D Universal Edge Routers. Powered by the programmable Trio chipset, MPCs support a wide range of Layer 2, Layer 2.5, and Layer 3 services, integrated telemetry, and standards-based transport-class network timing, as well as a wide variety of connectivity options to address the broadest range of service provider, cloud, and enterprise applications.

Architecture and Key Components

Modular Port Concentrators and Modular Interface Cards

MPCs support comprehensive L2/L3 switching and routing, MPLS, inline services, and wireline forwarding, among many other features. Additionally, MPCs can collect and stream component-level statistics that identify resource utilization, loss and delay measurements, and queue depth. Currently, the MPC1E through MPC5E and MPC7E are available for the MX2000 line, MX960, MX480, and MX240.²

MPCs provide network connectivity directly or via hosted Modular Interface Cards (MICs) that allow users to mix and match interfaces.

- The MPC-3D-16XGE-SFPP, MPC4E, MPC5E, and MPC7E offer a variety of fixed Ethernet interfaces.
- The MPC1E, MPC2E, NG-MPC2E, MPC3E, and NG-MPC3E host two MIC slots.

MPCs optionally support licensed inline services, including video and flow monitoring, lawful intercept, network address translation (NAT), tunnel services (generic routing encapsulation [GRE] and IP over IP [IP-IP]), IP reassembly, Multilink Point-to-Point Protocol (MLPPP), Layer 2 Tunneling Protocol (L2TP), L2TP access concentrator (LAC), and L2TP network server (LNS).

Multiservices MPCs and Multiservices MICs

MS-MPCs are single-slot service cards for the MX960, MX480, and MX240 that provide dedicated processing for network edge services (carrier-grade NAT, IPsec, stateful firewall, deep packet inspection [DPI], flow monitoring, and other compute-intensive services).

MS-MICs are modular service processing cards for the MPC1E, MPC2E, NG-MPC2E, MPC3E, and NG-MPC3E that provide dedicated processing for network edge services (carrier-grade NAT, IPsec, stateful firewall, deep packet inspection [DPI], flow monitoring, and other compute-intensive services).

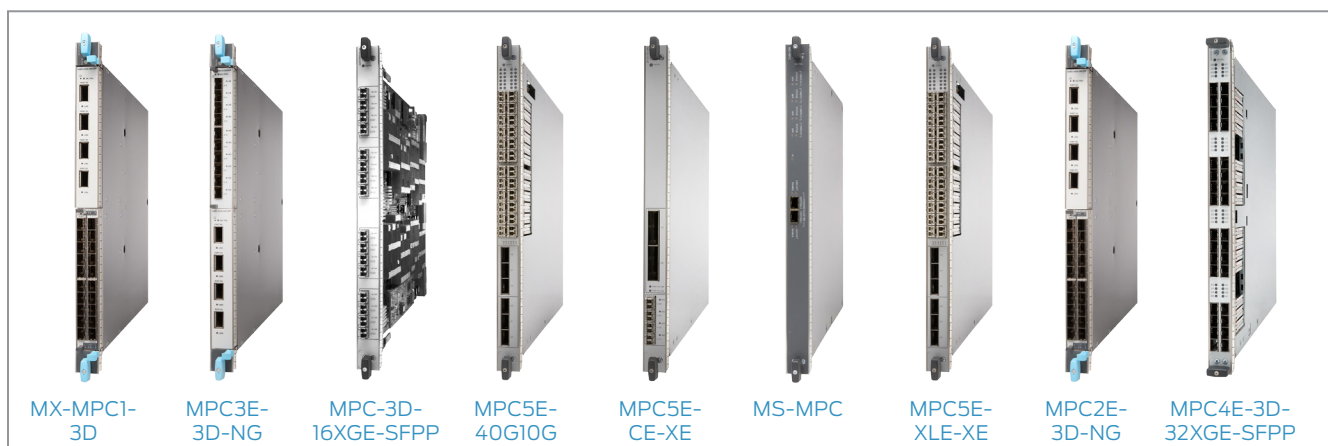
For more details on the MS-MPCs and MS-MICs, see www.juniper.net/assets/us/en/local/pdf/datasheets/1000454-en.pdf.

For more details on network edge services, see www.juniper.net/us/en/products-services/network-edge-services/.

¹An adapter card permits the use of the MPC1E through MPC5E, MPC7E, and MS-MPC in the MX2020 and MX2010 line chassis.
²The MPC6E, MPC8E, and MPC9E are also available for the MX2000 line only.

Features and Benefits

Feature	Description	Benefit
Modularity	<ul style="list-style-type: none"> • Increase scale and performance by adding more MPCs to existing chassis. • Each generation of MPC increases throughput and port density while maintaining compatibility with pre-existing MPCs. • Mix and match MPCs and MICs to meet specific requirements. • MPC7E multi-rate ports improve capital efficiency by supporting multiple Ethernet rates (10GbE, 40GbE, and 100GbE). This approach, which would typically consume two or three slots on a traditional edge router, also provides built-in scale and investment protection. 	<ul style="list-style-type: none"> • Nondisruptive • Investment protection • Agile and efficient • Capitally efficient
Integrated services	<ul style="list-style-type: none"> • All services share the same OS and chassis; no extra space, power, or cabling are needed for external probes and appliances. • The MS-MPC offers dedicated compute resources for processor-intensive applications without impacting control or forwarding planes. 	<ul style="list-style-type: none"> • Lower TCO • High service performance and scale
Cross-platform consistency and portability	<ul style="list-style-type: none"> • Common hardware (programmable Trio chipset) and software (Junos OS) on all MPCs enable nondisruptive network evolution. • All MPCs can be supported side by side in the same chassis . 	<ul style="list-style-type: none"> • Operational and feature consistency • Investment protection
Embedded analytics	<ul style="list-style-type: none"> • MPCs stream component-level data to monitoring, analytics, and performance management applications, as well as Path Computation Elements such as Juniper Networks NorthStar Controller. 	<ul style="list-style-type: none"> • Improved network operations and utilization
Junos Continuity	<p>Junos Continuity allows the use of new MPCs in an MX Series router without requiring a Juniper Networks Junos® operating system upgrade or system reboot, reducing the barriers associated with new MPC adoption by:</p> <ul style="list-style-type: none"> • Reducing the risk of service downtime • Reducing the time to qualify (new card only, not OS and upgrade procedures) • Reducing the cost to qualify (less burden on staff, time in lab, time spent testing) 	<ul style="list-style-type: none"> • No OS upgrade or reboot



Specifications

Please refer to the hardware installation manuals at www.juniper.net/techpubs/hardware.

Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services that are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to maximize operational efficiency while reducing costs and minimizing risk, achieving a faster time to value for your network. Juniper Networks ensures operational excellence by optimizing the network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services.

Ordering Information

Model Number	Description	Model Number	Description
Modular Port Concentrators (MPCs)			
MPC7-10G	Fixed 48x 10GbE line card bundle with full scale L2/L2.5 and reduced scale L3 features; optional license permits integrated MACsec and support for up to 32,000 queues with hierarchical quality of service (HQoS).	MPC5E-40G10G-IRB	Fixed 6x 40GbE or 24x 10GbE line card bundle with full scale L2/L2.5, L3 features, and up to 16 L3VPN instances; optional license permits up to 32,000 queues with HQoS.
MPC7-10G-RB	Fixed 48x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3, and L3VPN features; optional license supports integrated MACsec.	MPC5E-40G10G-RB	Fixed 6x 40GbE or 24x 10GbE line card bundle with full scale L2/L2.5, L3, and L3VPN features; optional license permits up to 32,000 queues with HQoS.
MPC7-10G-I-RB	Fixed 48x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3 features, and up to 16 L3VPN instances; optional license supports integrated MACsec.	MPC5EQ-100G10G	Fixed 2x 100GbE and 4x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5 and reduced scale L3 features.
MPC7-MRATE	Fixed 12x quad small form-factor pluggable transceiver (QSFP) line card bundle for the MPC7-MRATE only; all ports support 4x 10GbE, 40GbE, and 4 ports support 100GbE (QSFP 28), with full scale L2/L2.5 and reduced scale L3 features; optional license permits up to 32,000 queues with HQoS.	MPC5EQ-100G10G-IRB	Fixed 2x 100GbE and 4x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3 features, and up to 16 L3VPN instances.
MPC7-MRATE-RB	Fixed 12x QSFP line card bundle for the MPC7-MRATE only; all ports support 4x 10GbE, 40GbE, and 4 ports support 100GbE (QSFP 28); includes full scale L2/L2.5, L3, and L3VPN features.	MPC5EQ-100G10G-RB	Fixed 2x 100GbE and 4x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3, and L3VPN features.
MPC7-MRATE-I-RB	Fixed 12x QSFP line card bundle for the MPC7-MRATE only; all ports support 4x 10GbE, 40GbE, and 4 ports support 100GbE (QSFP 28); includes full scale L2/L2.5, L3 features, and up to 16 L3VPN instances.	MPC5EQ-40G10G	Fixed 6x 40GbE or 24x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5 and reduced scale L3 features.
MPC7-MRATE-Q	Fixed 12x QSFP line card for the MPC7-MRATE only; all ports support 4x 10GbE, 40GbE, and 4 ports support 100GbE (QSFP 28), with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5 and reduced scale L3 features.	MPC5EQ-40G10G-IRB	Fixed 6x 40GbE or 24x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3 features, and up to 16 L3VPN instances.
MPC7-MRATE-Q-RB	Fixed 12x QSFP line card bundle; all ports support 4x 10GbE, 40GbE, and 4 ports support 100GbE (QSFP 28), with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3, and L3VPN features.	MPC5EQ-40G10G-RB	Fixed 6x 40GbE or 24x 10GbE line card bundle with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3, and L3VPN features.
MPC7-MRATE-Q-I-RB	Fixed 12x QSFP line card bundle for the MPC7-MRATE only; all ports support 4x 10GbE, 40GbE, and 4 ports support 100GbE (QSFP 28), with HQoS; supports 1 million queues and 128,000 sessions; includes full scale L2/L2.5, L3 features, and up to 16 L3VPN instances.	MPC4E-3D-2GE	Fixed 2x 100GbE and 8x 10GbE line card bundle with full scale L2/L2.5 and reduced scale L3 features.
MPC5E-100G10G	Fixed 2x 100GbE and 4x 10GbE line card bundle with full scale L2/L2.5 and reduced scale L3 features; optional license permits up to 32,000 queues with HQoS.	MPC4E-3D-32XGE-SFP	Fixed 32x 10GbE line card bundle with full scale L2/L2.5 and reduced scale L3 features.
MPC5E-100G10G-IRB	Fixed 2x 100GbE and 4x 10GbE line card bundle with full scale L2/L2.5, L3 features, and up to 16 L3VPN instances; optional license permits up to 32,000 queues with HQoS.	MPC4E-3D-2CGE-8XGE-IRB	Fixed 2x 100GbE and 8x 10GbE line card bundle with full scale L2/L2.5, L3 features, and up to 16 L3VPNs per MPC.
MPC5E-100G10G-RB	Fixed 2x 100GbE and 4x 10GbE line card bundle with full scale L2/L2.5, L3, and L3VPN features; optional license permits up to 32,000 queues with HQoS.	MPC4E-3D-32XGE-IRB	Fixed 32x 10GbE SFP line card bundle with full scale L2/L2.5, L3 features, and up to 16 L3VPNs per MPC.
MPC5E-40G10G	Fixed 6x 40GbE or 24x 10GbE line card bundle with full scale L2/L2.5 and reduced scale L3 features; optional license permits up to 32,000 queues with HQoS.	MPC4E-3D-2CGE8XGE-RB	Fixed 2x 100GbE and 8x 10GbE line card bundle with full scale L2/L2.5, L3, and L3VPN features.
		MPC4E-3D-32XGE-RB	Fixed 32x GbE SFP line card bundle with full scale L2/L2.5, L3, and L3VPN features.
		MX-MPC3E-3D	MPC3 with support for 100GbE, 40GbE, and 10GbE interfaces; L2.5 features; optics sold separately.
		MX-MPC3E-3D-R-B	MPC3E with support for 100GbE, 40GbE, and 10GbE interfaces; includes full scale L2, L3, L3VPN features; optics sold separately.
		MPC3E-3D-NG	Next-generation MPC3E with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 and reduced scale L3 features. Flexible queuing option enables hierarchical QoS support with up to 32,000 total queues. Supports all MICs supported by MPC1E, MPC2E, and MPC3E.

Model Number	Description	Model Number	Description
MPC3E-3D-NG-IR-B	Next-generation MPC3E line card bundle with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 and L3 features and up to 16 L3VPNs per MPC. Flexible queuing option enables hierarchical QoS support with up to 32,000 total queues. Supports all MICs supported by the MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-IR-B	Next-generation MPC2E line card bundle with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3 features, and up to 16 L3VPNs per MPC. Flexible queuing option enables HQoS support with up to 32,000 total queues. Supports all MICs supported by MPC1E and MPC2E.
MX-MPC3E-3D-R-B	MPC3E with support for 100GbE, 40GbE, and 10GbE interfaces; includes full scale L2, L3, L3VPN features; optics sold separately.	MPC2E-3D-NG-R-B	Next-generation MPC2E line card bundle with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3, and L3VPN features. Flexible queuing option enables HQoS support with up to 32,000 total queues. Supports all MICs supported by MPC1E and MPC2E.
MPC3E-3D-NG	Next-generation MPC3E with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 and reduced scale L3 features. Flexible queuing option enables hierarchical QoS support with up to 32,000 total queues. Supports all MICs supported by MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-Q	Next-generation MPC2E with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, reduced scale L3 features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by MPC1E and MPC2E.
MPC3E-3D-NG-IR-B	Next-generation MPC3E line card bundle with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 and L3 features and up to 16 L3VPNs per MPC. Flexible queuing option enables HQoS support with up to 32,000 total queues. Supports all MICs supported by the MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-Q-IR-B	Next-generation MPC2E line card bundle with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3, and up to 16 L3VPN features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by MPC1E and MPC2E.
MPC3E-3D-NG-R-B	Next-generation MPC3E line card bundle with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3, and L3VPN features. Flexible queuing option enables HQoS support with up to 32,000 total queues. Supports all MICs supported by the MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-R-B	Next-generation MPC2E line card bundle with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3, and L3VPN features. Flexible queuing option enables HQoS support with up to 32,000 total queues. Supports all MICs supported by MPC1E and MPC2E.
MPC3E-3D-NG-Q	Next-generation MPC3E with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 features, reduced scale L3 features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by the MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-Q	Next-generation MPC2E with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 features, reduced scale L3 features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by MPC1E and MPC2E.
MPC3E-3D-NG-Q-IR-B	Next-generation MPC3E line card bundle with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3, and up to 16 L3VPN features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by the MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-Q-IR-B	Next-generation MPC2E line card bundle with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3, and up to 16 L3VPN features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by MPC1E and MPC2E.
MPC3E-3D-NG-Q-R-B	Next-generation MPC3E line card bundle with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 features, L3 features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by the MPC1E, MPC2E, and MPC3E.	MPC2E-3D-NG-Q-R-B	Next-generation MPC2E line card bundle with upgraded CPU and memory. Offers full feature parity with MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5, L3 features, and HQoS with up to 512,000 queues per slot. Supports all MICs supported by MPC1E and MPC2E.
MPC-3D-16XGE-SFPP	Fixed 16x 10GbE line card bundle with L2.5 features.	MX-MPC2-3D	MPC2 with port queuing; includes full scale L2/L2.5 and reduced scale L3 features.
MPC-3D-16XGE-SFPP-R-B	Fixed 16x 10GbE line card bundle with full scale L2/L2.5 and L3 features.	MX-MPC2-3D-EQ	MPC2 line card bundle with per-IFL HQoS, 512,000 queues; includes full scale L2/L2.5 and reduced scale L3 features.
MPC2E-3D-NG	Next-generation MPC2E with upgraded CPU and memory. Offers full feature parity with the MPC1E, MPC2E, and MPC3E. Includes full scale L2/L2.5 and reduced scale L3 features. Flexible queuing option enables HQoS support with up to 32,000 total queues. Supports all MICs supported by MPC1E and MPC2E.	MX-MPC2-3D-EQ-R-B	MPC2 line card bundle with per-IFL HQoS, 512,000 queues; includes full scale L3, L2, and L2.5 features.
		MX-MPC2-3D-Q	MPC2 line card bundle with per-IFL HQoS, 256,000 queues (max 128,000 egress); includes full scale L2/L2.5 and reduced scale L3 features.
		MX-MPC2-3D-Q-R-B	MPC2 line card bundle; includes full scale L3, L2, and L2.5 features.

Model Number	Description
MX-MPC2-3D-R-B	MPC2 line card bundle; includes full scale L3, L2, and L2.5 features.
MX-MPC2E-3D	Enhanced MPC2 with port queuing; includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-EQ	Enhanced MPC2 with per-IFL HQoS, 512,000 queues; includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-EQ-R-B	Enhanced MPC2 line card bundle; includes full scale L3, L2, and L2.5 features.
MX-MPC2E-3D-P	Enhanced MPC2 with 1588v2, port queuing; includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-P-Q-B	Enhanced MPC2 line card bundle; includes 1588v2, per-IFL HQoS, 256,000 queues (maximum 128,000 egress), full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-P	Enhanced MPC2 with 1588v2, port queuing; includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-P-Q-B	Enhanced MPC2 line card bundle; includes 1588v2, per-IFL HQoS, 256,000 queues (maximum 128,000 egress), full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-Q	Enhanced MPC2 line card bundle; includes per-IFL HQoS, 256,000 queues (maximum 128,000 egress); includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC2E-3D-Q-R-B	Enhanced MPC2E line card bundle; includes per-IFL HQoS, 256,000 queues (maximum 128,000 egress), full scale L3, L2, and L2.5 features.
MX-MPC1-3D	MPC1 with port queuing; includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC1-3D-Q	MPC1 with per-IFL HQoS, 128,000 queues (maximum 64,000 egress); includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC1-3D-Q-R-B	MPC1 line card bundle; includes full scale L3, L2, and L2.5 features.
MX-MPC1-3D-R-B	MPC1 line card bundle; includes full scale L3, L2, and L2.5 features.
MX-MPC1E-3D	Enhanced MPC1 with port queuing; includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC1E-3D-Q	Enhanced MPC1 with per-IFL HQoS, 128,000 queues (maximum 64,000 egress); includes full scale L2/L2.5 and reduced scale L3 features.
MX-MPC1E-3D-Q-R-B	Enhanced MPC1 with per-IFL HQoS, 128,000 queues (maximum 64,000 egress) line card bundle; includes full scale L3, L2, and L2.5 features.
MX-MPC1E-3D-R-B	Enhanced MPC1 line card bundle; includes full scale L3, L2, and L2.5 features.
MS-MPC-128	Multiservices MPC supports a variety of optionally licensed applications including stateful firewall, carrier-grade NAT (CGNAT), and deep packet inspection (DPI); each purchased separately.

Model Number	Description
Modular Interface Cards (MICs)	
MIC3-100G-DWDM	MIC with 1x100GbE OTU4 DWDM PIC, DP-QPSK, full C-band tunable, GFEC, HGFE, SDFEC; requires MPC3E or MPC3E-NG; optics sold separately
MIC3-3D-10XGE-SFPP	MIC with 10x10GbE small form-factor pluggable plus transceiver (SFPP+) interface, optics sold separately
MIC3-3D-1X100GE-CFP	MIC with 1x100GbE C form-factor pluggable transceiver (CFP) interface, optics sold separately
MIC3-3D-1X100GE-CXP	MIC with 1x100GbE 100-gigabit small form-factor pluggable transceiver (CXP) interface, optics sold separately
MIC3-3D-2X40GE-QSFPP	MIC with 2x40GbE quad small form-factor pluggable plus transceiver (QSFPP+) interface, optics sold separately
MIC-3D-1CHOC48	1 port channelized OC48/channelized STM16 (down to DS0) MIC
MIC-3D-1OC192-XFP	1 port OC192/STM64 MIC
MIC-3D-20GE-SFP	20x10/100/1000 MIC for MX Series; requires optics sold separately
MIC-3D-2XGE-XFP	2x10GbE MIC for MX Series; requires optics sold separately
MIC-3D-40GE-TX	40x10/100/1000 RJ-45 full height MIC (fixed optics)
MIC-3D-4CHOC3-2CHOC12	4 port channelized OC3/2 port channelized OC12 (down to DS0) MIC
MIC-3D-4COC3-1COC12-CE	Multi-rate circuit emulation MIC, 4 port channelized OC3/STM1 (to DS0) or 1 port channelized OC12/STM4 (to DS0)
Dense Port Concentrators (DPCs)	
DPCE-R-20GE-2XGE	20-port GbE + 2-port 10GbE DPC with L2+L3 features
DPCE-R-Q-20GE-2XGE	20-port GbE + 2-port 10GbE enhanced queuing DPC with L2+L3 features
DPCE-R-Q-20GE-SFP	20x10GbE L2/L3 capable with enhanced queuing
DPCE-R-2XGE-XFP	2x10GbE enhanced DPC for MX Series
DPCE-R-40GE-SFP	40x10GbE L2/L3 capable
DPCE-R-Q-40GE-SFP	40x10GbE enhanced queuing DPC for MX Series with L2/L3 features and VLAN-HQoS
DPCE-R-40GE-TX	40-port 10/100/1000 RJ-45 DPC with L2+L3 features
DPCE-X-40GE-SFP	40x10GbE L2+ capable
DPCE-X-Q-40GE-SFP	40x10/100/1000 Ethernet L2/L3 capable with RJ45
DPCE-X-4XGE-XFP	4x10GbE L2+ capable
DPCE-R-4XGE-XFP	4x10GbE enhanced DPC with L2/L3 features
DPCE-R-Q-4XGE-XFP	4x10GbE queuing DPC with L2/L3 features and VLAN-HQoS
DPCE-X-Q-4XGE-XFP	4x10GbE L2+ capable board with enhanced queuing
MX-FPC2	DPC with 2 slots for type 2 PICs
MS-DPC	Multiservices DPC providing 20 Gbps of service throughput

About Juniper Networks

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