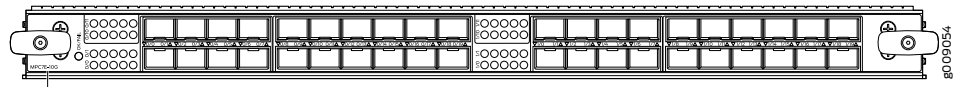


MPC7E 10G



MPC7E-10G

Software release	<ul style="list-style-type: none">• Junos OS Release 15.1F5 with Junos Continuity• Junos OS release 16.1R1 and later
Description	<ul style="list-style-type: none">• Fixed-configuration MPC with forty 10-Gbps ports• Weight: 17 lb (7.7 kg)• Model number: MPC7E-10G• Name in the CLI: MPC7E 3D 40XGE
Hardware features	<ul style="list-style-type: none">• Line-rate throughput of up to 400 Gbps on MX240, MX480, and MX960 routers.• Line-rate throughput of up to 400 Gbps on MX2000 routers.• Junos Trio chipsets for increased scaling for bandwidth, subscribers, and services.• Forty 10-Gigabit Ethernet ports. The ports support SFP+ transceivers.• Requires high-capacity power supplies, high-capacity fan trays, and SCBE2 on MX240, MX480, and MX960 routers.• Requires an adapter card to be housed in MX2000 routers.• Supports maximum transmission units (MTUs) from 256 bytes through 16,000 bytes for transit traffic, and from 256 bytes through 9,500 bytes for host bound packets.• The ports are labeled as (with the MPC orientation as shown in the figure):<ul style="list-style-type: none">• 0/0 through 0/9• 0/10 through 0/19• 1/0 through 1/9• 1/10 through 1/19

Software features

- Supports MACsec using the following encryption algorithms: gcm-aes-128 and gcm-aes-256.
- Supports **Hyper mode** to speed up packet processing.
- Supports **Flexible queuing** using an add-on license to support 32,000 queues per line card, including queues on both ingress and egress interfaces. You can use an additional license to support up to 512,000 queues.
- Optical diagnostics and related alarms
- See “[Protocols and Applications Supported by the MPC7E for MX Series Routers](#)” on page 373 for information about the protocols and applications that MPC7Es support.

NOTE: On MX240, MX480, and MX960 routers, MPC7E powers on only if the **network-services** mode on the router is configured as either **enhanced-ip** or **enhanced-ethernet**. On MX2000 routers, no additional configuration is required because by default the router operates in **enhanced-ip** mode.

Cables and connectors

TIP: You can use the [Hardware Compatibility Tool](#) to find information about the pluggable transceivers supported on your Juniper Networks device.

The list of supported transceivers for the MX Series is located at <https://pathfinder.juniper.net/hct/category/#catKey=100001&modelType;=All&pf;=MX+Series>.

- 10GBASE-ZR (model number: SFPP-10G-ZR-OTN-XT)

NOTE: MPC7E 10G does not support OTN rates.

- 10GBASE-ZR (model number: SFPP-10G-DT-ZRC2)

NOTE:

- Supported from Junos OS release 16.1R1 and later.
- Supports 40° C ambient temperature operation at any altitude, and 55° C ambient temperature operation at sea level.

Power requirements

- Typical: 405 W
- At different temperatures:
 - 55° C: 500 W
 - 40° C: 465 W
 - 25° C: 430 W

NOTE: On MX960 routers, all the MPC slots can be occupied by MPC7E 10G at an ambient temperature of up to 40° C and at any altitude. All the MPC slots can be occupied by MPC7E 10G at temperatures of up to 55° C and at sea level. At an ambient temperature of 55° C and above, and at an altitude above sea level, slot 11 cannot host MPC7E 10G.

LEDs

OK/FAIL LED, one bicolor:

- Steady green—MPC is functioning normally.
- Yellow—MPC has failed.

Link LED, one green per port:

- Steady green—Link is up.
- Off—Link is down or disabled.

Related Documentation

- [MPC7E 10G on MX Series Routers Overview](#)
- [MX Series MPC Overview on page 11](#)
- [MPCs Supported by MX Series Routers on page 12](#)
- [Junos Continuity Software User Guide \(Junos OS Release 14.1R4 and Later Releases\)](#)