# 6x40GE + 24x10GE MPC5EQ



#### Software release

Junos OS Release 13.3R2 and later

#### Description

- Fixed-configuration MPC with six 40-Gigabit Ethernet ports and twenty-four 10-Gigabit Ethernet ports
- Weight: 21 lb (9.52 kg)
- Model number: MPC5EQ-40G10G
- Name in the CLI: MPC5E 3D Q 24XGE+6XLGE

#### Hardware features

- · Line-rate throughput of up to 240 Gbps
- Supports one of the following port combinations:
  - Six 40-Gigabit Ethernet ports
  - Twenty-four 10-Gigabit Ethernet ports
  - Three 40-Gigabit Ethernet ports and twelve 10-Gigabit Ethernet ports
- Supports up to 1 million queues per-slot
- LAN-PHY mode at 10.3125 Gbps on a per-port basis
- WAN-PHY mode at 9.95328 Gbps on a per-port basis
- Supports maximum transmission unit (MTU) size of 9,192 bytes for host bound packets. For Junos OS 16.1R1 and later releases, the MTU size supported is 9,500 bytes.
- The ports are labeled as:
  - 10-Gigabit Ethernet ports:0/0 through 0/11
    - 1/0 through 1/11
  - 40-Gigabit Ethernet ports:
    - 2/0 through 2/2
    - 3/0 through 3/2

NOTE: On MX960 routers, all the MPC slots work with the ambient temperature of up to  $40^{\circ}$  C. However, when the chassis temperature exceeds  $40^{\circ}$  C, slots **0** and **11** can work with MPC1s, MPC2s, and the 16x10GE MPC.

### Software features

- Supports hierarchical QoS (HQoS)
- Optical diagnostics and related alarms
- Support for optical transport network (OTN) on 10-Gigabit Ethernet ports
- Configurable LAN-PHY and WAN-PHY mode options per 10-Gigabit Ethernet port
- Intelligent oversubscription services
- See "Protocols and Applications Supported by the MPC5E for MX Series Routers" on page 359
  for information about the protocols and applications that this MPC supports.

NOTE: On MX240, MX480, and MX960 routers, MPC5E powers on only if the **network-services** mode on the router is configured to either **enhanced-ip** or **enhanced-ethernet**. On MX2010 and MX2020 routers, only **enhanced-ip** is supported.

#### 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.

NOTE: QSFPP-40GE-LX4 is not NEBS compliant on the MX960 router in FPC slot 0 or FPC slot 11.

## Power requirements

- Typical: 9.68 A @ 48 V (460 W)
- · At different temperatures:

55° C: 607 W 40° C: 541 W 25° C: 511 W

#### **LEDs**

#### OK/FAIL LED. one bicolor:

- Steady green—MPC is functioning normally.
- Blinking green—MPC is transitioning online or offline.
- Red-MPC has failed.

10-Gigabit Ethernet LINK LED, one green per port:

- Green—Link is up.
- · Off-Link is down or disabled.

40-Gigabit Ethernet LINK LED, one bicolor per port:

- · Green-Link is up.
- Yellow-Link is disabled.
- Off-Link is down.

# Related Documentation

- MX Series MPC Overview on page 11
- MPCs Supported by MX Series Routers on page 12
- MPC5E on MX Series Routers Overview
- 10-Gigabit Ethernet OTN Options Configuration Overview