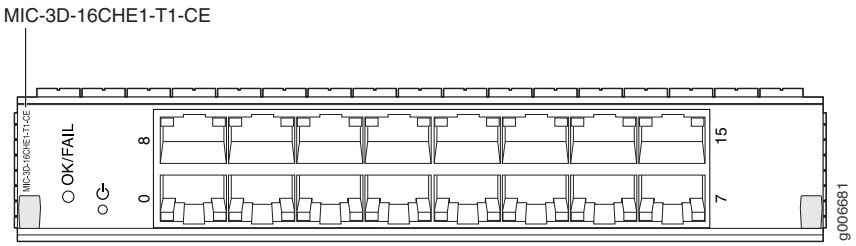
Channelized E1/T1 Circuit Emulation MIC

Figure 29: Channelized E1/T1 Circuit Emulation MIC



Software release	• Junos OS Release 12.3 and later For information on which MPCs support this MIC, see "MIC/MPC Compatibility" on page 26. For information on which MICs are supported on MX Series routers, see "MICs Supported by MX Series Routers" on page 18.

Description	• Sixteen E1 or T1 ports
	• Per-MIC E1/T1 framing
	• DS1 channelization per port:
	  • 1 DS1 channel
	  • 24 DS0 channels
	• E1 channelization per port:
	  • 1 E1 channel
	  • 32 DS0 channels
	• Internal and loop clocking
	• Power requirement: 2.21 A @ 12 V (26.55 W)
	• Weight: 1.57 lb (0.71 kg)
	• Model number: MIC-3D-16CHE1-T1-CE

Hardware features	• Ports are numbered:
	  • Top row: 8 and 15 from left to right
	  • Bottom row: 0 and 7 from left to right

Software features	• Full bit error rate test (BERT)
	• DS1 and E1 interfaces are selectable on a per-port granularity
	• Per-port framing is not supported
	• You can configure the following framing modes using the CLI:
	  ◦ T1—SF, ESF, D4/superframe, ESF (extended superframe)
	  ◦ E1—G704, G704–no-crc4, unframed
	• Local, remote, and per-port loopback diagnostics
	• Encapsulations:
	  ◦ Pseudowire Emulation Edge to Edge (PWE3) Architecture (RFC 3985)
	  ◦ Requirements for Pseudowire Emulation Edge to Edge (PWE3) (RFC 3916)
	  ◦ Structure-Agnostic Time Division Multiplexing (TDM) over Packet (SAToP) (RFC 4553)
	  ◦ Structure-Aware Time Division Multiplexed (TDM) Circuit Emulation Service over Packet-Switched Network (CESoPSN) (RFC 5086)
	  ◦ Pseudowire Emulation Edge to Edge (PWE3) Control Word for Use over an MPLS PSN (RFC 4385)
	• In-service software upgrade (Unified ISSU)

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. • RJ-48 connector
LEDs	**OK/FAIL** LED, one bicolor: • Green—MIC is functioning normally. • Red—MIC has failed. One tricolor per port: • Off—Not enabled. • Green—Online with no alarms or failures. • Yellow—Online with alarms for remote failures. • Red—Active with a local alarm; router has detected a failure.

Alarms, errors, and events	• Structure-agnostic alarms for T1 and E1 interface:
	  • Alarm indication signal (AIS)
	  • Loss of signal (LOS)
	• Structure-aware alarms for T1 and E1 interface:
	  • Loss of signal (LOS)
	  • Alarm indication signal (AIS)
	  • Loss of frame (LOF)
	  • Remote alarm indication signal (RAIS)
	• Structure-agnostic error detection for T1 and E1 interface:
	  • Errored seconds (ES)
	  • Line code violation (LCV)
	  • Line errored seconds (LES)
	  • Severely errored seconds (SES)
	  • Unavailable seconds (UAS)
	  • Loss of signal seconds (LOSS)
	• Structure-aware error detection for T1 and E1 interface:
	  • Severely errored frame (SEF)
	  • Block error event (BEE)
	  • Line code violation (LCV)
	  • Path code violation (PCV)
	  • Line errored seconds (LES)
	  • Errored seconds (ES)
	  • Severely errored seconds (SES)
	  • Severely errored frame seconds (SEFS)
	  • Bursty errored seconds (BES)
	  • Unavailable seconds (UAS)
	  • Loss of signal seconds (LOSS)
	  • Loss of framing seconds (LOFS)
	  • Far-end block error (FEBE) (E1 only)
	  • CRC errors (E1 only)