

The 10 GbE feature is designed to support attachment to a multimode fiber 10 Gbps Ethernet LAN or Ethernet switch that is capable of 10 Gbps. The port can be defined as a spanned channel and can be shared among LPARs within and across logical channel subsystems.

The OSA-Express5S 10 GbE SR feature supports the use of an industry standard small form factor LC Duplex connector. Ensure that the attaching or downstream device includes an SR transceiver. The sending and receiving transceivers must be the same (SR to SR).

The OSA-Express5S 10 GbE SR feature does not support auto-negotiation to any other speed and runs in full duplex mode only.

A 50 or a 62.5  $\mu$ m multimode fiber optic cable that ends with an LC Duplex connector is required for connecting each port on this feature to the selected device.

### ***OSA-Express5S Gigabit Ethernet LX (FC 0413)***

The OSA-Express5S GbE LX feature includes one PCIe adapter and two ports. The two ports share a channel path identifier (CHPID type OSD exclusively). The ports support attachment to a 1 Gbps Ethernet LAN. Each port can be defined as a spanned channel and can be shared among LPARs and across logical channel subsystems.

The OSA-Express5S GbE LX feature supports the use of an LC Duplex connector. Ensure that the attaching or downstream device has an LX transceiver. The sending and receiving transceivers must be the same (LX to LX).

A 9  $\mu$ m single-mode fiber optic cable that ends with an LC Duplex connector is required for connecting each port on this feature to the selected device. If multimode fiber optic cables are being reused, a pair of Mode Conditioning Patch cables is required, with one cable for each end of the link.

### ***OSA-Express5S Gigabit Ethernet SX (FC 0414)***

The OSA-Express5S GbE SX feature includes one PCIe adapter and two ports. The two ports share a channel path identifier (CHPID type OSD exclusively). The ports support attachment to a 1 Gbps Ethernet LAN. Each port can be defined as a spanned channel and can be shared among LPARs and across logical channel subsystems.

The OSA-Express5S GbE SX feature supports the use of an LC Duplex connector. Ensure that the attaching or downstream device has an SX transceiver. The sending and receiving transceivers must be the same (SX to SX).

A multi-mode fiber optic cable that ends with an LC Duplex connector is required for connecting each port on this feature to the selected device.

### ***OSA-Express5S 1000BASE-T Ethernet feature (FC 0417)***

Feature code 0417 occupies one slot in the PCIe I/O drawer. It has two ports that connect to a 1000 Mbps (1 Gbps) or 100 Mbps Ethernet LAN. Each port has an SFP with an RJ-45 receptacle for cabling to an Ethernet switch. The RJ-45 receptacle is required to be attached by using an EIA/TIA Category 5 or Category 6 UTP cable with a maximum length of 100 m (328 ft). The SFP allows a concurrent repair or replace action.

The OSA-Express5S 1000BASE-T Ethernet feature supports auto-negotiation when attached to an Ethernet router or switch. If you allow the LAN speed and duplex mode to default to auto-negotiation, the OSA-Express port and the attached router or switch auto-negotiate the LAN speed and duplex mode settings between them. They then connect at the highest common performance speed and duplex mode of interoperation.