- ► Connectivity options
  - – IBM z14™ servers can be connected to an extensive range of interfaces, such as FICON/FCP for SAN connectivity, 10 Gigabit Ethernet, Gigabit Ethernet, and 1000BASE-T Ethernet for LAN connectivity, zHyperLink Express for storage connectivity (low latency compare to FICON).
  - – For CPC to CPC connections, IBM z14™ servers use Integrated Coupling Adapter (ICA SR), CE LR, or Parallel Sysplex InfiniBand (IFB).
  - – The 25GbE RoCE Express2, 10GbE RoCE Express2, and the 10GbE RoCE Express features provides high-speed memory-to-memory data exchange to a remote CPC by using the Shared Memory Communications over RDMA (SMC-R) protocol for TCP (socket-based) communications.
- ► Concurrent I/O upgrade

  You can concurrently add I/O features to IBM z14™ servers if unused I/O slot positions are available.
- ► Concurrent PCIe I/O drawer upgrade

  More PCIe I/O drawers can be installed concurrently if free frame slots for the PCIe I/O drawers are available.
- ► Dynamic I/O configuration

  Dynamic I/O configuration supports the dynamic addition, removal, or modification of the channel path, control units, and I/O devices without a planned outage.
- ► Pluggable optics:
  - – The FICON Express16S+ FICON Express16S and FICON Express8S, OSA-Express7S, OSA-Express6S, OSA-Express5S, RoCE Express2, and RoCE Express features have Small Form-Factor Pluggable (SFP) optics.[1] These optics allow each channel to be individually serviced in a fiberoptic module failure. The traffic on the other channels on the same feature can continue to flow if a channel requires servicing.
  - – For zHyperLink Express, it uses the cable with MTP connector and the cable goes to a CXP connection to the adapter. The CXP optics are provided with the adapter.
- ► Concurrent I/O card maintenance

  Every I/O card that is plugged in an I/O drawer or PCIe I/O drawer supports concurrent card replacement during a repair action.

4.2.2 Supported I/O features

The following I/O features are supported:

- ► Up to 320 FICON Express16S+ channels (up to 160 on M01)
- ► Up to 320 FICON Express16S channels (up to 160 on M01)
- ► Up to 320 FICON Express8S channels (up to 160 on M01)
- ► Up to 48 OSA-Express7S 25GbE SR ports
- ► Up to 96 OSA-Express6S ports
- ► Up to 96 OSA-Express5S ports
- ► Up to 16 zEDC Express features
- ► Up to eight 25GbE RoCE Express2 features

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[1] OSA-Express4S, 5S and 6S 1000BASE-T features do not have optics (copper only; RJ45 connectors).