



# System Performance

## Cell Transfer Delay

This section describes Cell Transfer Delay (CTD) on the MGX 8250.

## Switch Fabric Latency

CTD on switching fabric + PXM1 OC-3 UNI Virtual Service Module (VSM) is on the order of 16-18 usec.

## High-Speed Frame Service Modules Switchover Timing Rates

The Hot Standby feature reduces High-Speed FRSM switchover traffic loss to < 250 milliseconds (see Table 8-1). The average traffic loss on FRSM-CT3 cards with 4000 connections is less than 250 milliseconds. This compares to about 8 minutes of lost traffic without Hot Standby.

The Service Module failures were simulated by

- Resetting the card
- Removing and reinserting the card

The CIR was set to 100000 bps on one of the channels, this setting resulted in > 100 frames/secondans ensured that some traffic loss could be observed. The traffic was physically looped back through the FRSM-CT3 cards.

**Table 8-1 Traffic Loss with and without Hot Standby**

Number of Connections	Traffic Loss without Hot Standby	Traffic Loss with Hot Standby
4	31 sec	0.250 sec
2000	240 sec	0.250 sec
4000	473 sec	0.250 sec

# Number of Connections Supported

The maximum number of connections supported by the different cards on the MGX 8250 are detailed in [Table 8-2](#).

**Table 8-2 MGX 8250 Supported Connections**

Service Modules	Maximum Number of HW Connections Supported
PXM1-2T3E3	32K
PXM1-4-155	32K
PXM1-1-622	32K
AX-FRSM-8T1/E1	1K (*)
AX-FRSM-2CT3	4K
AX-FRSM-2T3E3	2K
AX-FRSM-HS1/B	200
AX-FRSM-HS2	2K
AX-AUSM/B-8T1/E1	1K
AX-CESM-8T1/E1	192 (8T1) or 248 (8E1)
AX-CESM-T3E3	1
MGX-VISM-8T1/E1	240
MGX-RPM	4K

(\*) = the number of connections supported per port if LMI is enabled.

.Strata LMI: 560

.Annex A, Annex D for UNI and NNI: 898

.If Strata LMI is enabled for all ports, the total number of connections that can be configured is 1120, for other LMI it is 1996.