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General Simulation Information

Num Servers Per TOR:	4	Num Sender Hosts:	28	Load Factor:	%0.0
Num TORs:	8	Num Receiver Hosts:	1	Start Time:	0s
Server Link Speed:	10Gb/s	Workload Type:	FACEBOOK	Stop Time:	9.5s
Fabric Link Speed:	40Gb/s	InterArrival Dist:	facebook_scaled	Warmup Time:	0ms
Fabric Link Delay	0.0us	SW Turn-around Time:	0.5us	NIC Send ThinkTime:	0.5us
Edge Link Delay	0.0us	Switch Fix Delay:	0.25us	TransportScheme:	PseudoIdeal

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Homa Packets Traffic Rates

Homa Packet Type	AvgRate (Mb/s)	CumRate (Mb/s)	MinRate (Mb/s)	MaxRate (Mb/s)
SX NICs Req. SxRate:	0.00	0.00	0.00	0.00
SX NICs Unshed. SxRate:	292.95	8202.55	285.07	304.31
SX NICs Sched. SxRate:	0.00	0.00	0.00	0.00
RX NICs Grant SxRate:	0.00	0.00	0.00	0.00

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Traffic Characteristic (Rates, Bytes, and DutyCycle)

Measurement Point	AvgRate (Gb/s)	CumRate (Gb/s)	MinRate (Gb/s)	MaxRate (Gb/s)	CumBytes (MB)	Avg Duty Cycle(%)	Min Duty Cycle(%)	Max Duty Cycle(%)
SX Apps Send:	0.21	5.91	0.20	0.22	147.69			
SX NICs Send:	0.29	8.20	0.29	0.30	205.07	3.02	2.94	3.14
All NICs Send:	0.26	8.20	0.00	0.30	205.07	2.65	0.00	3.14
TORs Down Recv:	0.26	8.20	0.00	0.30	205.07	2.65	0.00	3.14
TORs Up Send:	1.03	8.20	0.00	1.18	205.07	2.65	0.00	3.04
TORs Up Recv:	1.03	8.20	0.00	8.20	205.07	2.65	0.00	21.16
TORs Down Send:	0.26	8.20	0.00	8.20	205.07	2.65	0.00	84.65
ALL NICs Recv:	0.26	8.20	0.00	8.20	205.07	2.65	0.00	84.65
RX NICs Recv:	8.20	8.20	8.20	8.20	205.07	84.65	84.65	84.65
RX Apps Recv:	5.91	5.91	5.91	5.91	147.69			

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Queue Length (Stats Collected At Pkt Arrivals)

Queue Location	Mean (Pkts)	StdDev (Pkts)	Mean (KB)	StdDev (KB)	Empty %	OnePkt %	Min (Pkts)	Min (KB)	Max (Pkts)	Max (KB)
SX Transports	1.00	0.00	0.18	0.44	nan	nan	1.00	0.00	1.00	35.23
SX NICs	0.08	0.45	0.08	0.57	94.12	4.62	0.00	0.00	24.00	35.60
All NICs	0.08	0.45	0.08	0.57	94.12	4.62	0.00	0.00	24.00	35.60
SX TORs Up	0.05	0.23	0.02	0.12	95.61	4.04	0.00	0.00	5.00	2.97
All TORs Up	0.05	0.23	0.02	0.12	95.61	4.04	0.00	0.00	5.00	2.97
RX TORs Down	5.35	4.83	3.98	5.26	11.05	11.13	0.00	0.00	44.00	55.76
All TORs Down	5.35	4.83	3.98	5.26	11.05	11.13	0.00	0.00	44.00	55.76

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Queue Wait Time Stats

Packet Type: Request

Queue Location	mean (us)	mean (%)	stddev (us)	min (us)	median (us)	75%ile (us)	99%ile (us)	max (us)	count
Host NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
TORs upward NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Aggr Switch NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
TORs downward NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Total:	0.00	0.00							

Packet Type: Unshed. Data

Queue Location	mean (us)	mean (%)	stddev (us)	min (us)	median (us)	75%ile (us)	99%ile (us)	max (us)	count
Host NICs:	0.06	4.98	0.45	0.00	0.00	0.00	1.03	30.05	819678
TORs upward NICs:	0.00	0.32	0.02	0.00	0.00	0.00	0.14	0.61	819678
Aggr Switch NICs:	0.01	1.28	0.05	0.00	0.00	0.00	0.23	1.99	819678
TORs downward NICs:	1.07	93.42	6.82	0.00	0.00	0.00	14.47	688.96	819678
Total	1.14	100.00							

Packet Type: Grant

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Queue Location      mean      mean      stddev   min      median   75%ile   99%ile   max      count
                   (us)      (%)      (us)     (us)     (us)     (us)     (us)     (us)     (us)
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Host NICs:          0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs upward NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
Aggr Switch NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs downward NICs: 0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
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Total:              0.00      0.00
    
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Packet Type: Sched. Data

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Queue Location      mean      mean      stddev   min      median   75%ile   99%ile   max      count
                   (us)      (%)      (us)     (us)     (us)     (us)     (us)     (us)     (us)
-----
Host NICs:          0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs upward NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
Aggr Switch NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs downward NICs: 0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
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Total               0.00      0.00
    
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packet Type: All Pkts

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Queue Location      mean      mean      stddev   min      median   75%ile   99%ile   max      count
                   (us)      (%)      (us)     (us)     (us)     (us)     (us)     (us)     (us)
-----
SX Host NICs:       0.06      4.98      0.45     0.00     0.00     0.00     1.03     30.05    819706
SX TORs UP NICs:   0.00      0.32      0.02     0.00     0.00     0.00     0.14     0.61     819685
Aggr Switch NICs:  0.01      1.28      -nan     0.00     0.00     0.00     0.23     1.99     819686
RX TORs Down NICs: 1.07      93.42     6.82     0.00     0.00     0.00     14.47    688.96  819679
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Total               1.14      100.00
    
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|End To End Message Latency For Different Ranges of Message Sizes|

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Msg Size Range      mean      stddev   min      median   75%ile   99%ile   max      count      count
                   (us)      (us)     (us)     (us)     (us)     (us)     (us)     (us)     (%)
-----
(0, 5]              2.67      0.31     2.38     2.38     2.38     3.27     7.00     244000    30.46
(5, 10]             2.71      0.34     2.39     2.46     2.77     3.69     5.18     18947     2.37
(10, 15]            2.73      0.35     2.40     2.50     2.50     3.76     6.26     115120    14.37
(15, 100]           2.84      0.39     2.41     2.46     2.95     3.94     7.39     130974    16.35
(100, 1448]         3.82      1.67     2.55     2.55     3.66     9.75     67.54    278730    34.79
(1448, 10000]       20.36     23.04     4.81     4.81     13.41    107.29   421.61   13206     1.65
(10000, 100000]    149.41    116.19    32.82    94.46    188.92   519.54   708.47   105        0.01
(100000, Huge]     0.00      0.00     0.00     0.00     0.00     0.00     0.00     0          0.00
    
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|Total Queue Delay (ie. real\_e2e\_latency - ideal\_e2e\_latency) For Different Ranges of Message Sizes|

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Msg Size Range      mean      stddev   min      median   75%ile   99%ile   max      count      count
                   (us)      (us)     (us)     (us)     (us)     (us)     (us)     (us)     (%)
-----
(0, 5]              0.29      0.31     0.00     0.00     0.31     1.23     4.62     244000    30.46
(5, 10]             0.32      0.34     0.01     0.15     0.45     1.34     2.80     18947     2.37
(10, 15]            0.35      0.35     0.02     0.02     0.26     1.29     3.88     115120    14.37
(15, 100]           0.40      0.38     0.03     0.03     0.33     1.33     4.97     130974    16.35
(100, 1448]         0.87      1.44     0.03     0.03     0.92     6.47     63.05    278730    34.79
(1448, 10000]       14.82     22.52     0.03     0.03     12.90    103.23   413.10   13206     1.65
(10000, 100000]    133.27    114.49    20.78    91.93    137.90   505.64   689.51   105        0.01
(100000, Huge]     0.00      0.00     0.00     0.00     0.00     0.00     0.00     0          0.00
    
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