

Saving using TST blade Server, compare with an intel 1U chassis
in a typical Data Center with 20,000 servers.

Power Saving and Greenhouse gas reduction if using TST Blade		
System Power Consumption (Watt) *	290	275
	70% efficient intel SR1500	86% efficient TST
Actual Watt/unit (Watt)	377	313.5
Watt lose to heat	87	38.5
20000 server power lost to heat (KW)	1740	770
24hour operation that lose to heat (KW)	41760	18480
yearly operation just lose to heat (KW)	15242400	6745200
% of just AC power saving from the wall	0	55.75%
Yearly cost to heat	\$1,356,573.60	\$600,322.80
Yearly saving by Blade (KW)	0	8497200
Yearly saving on cooling/HVAC** (KW)	0	8497200
Total Saving (KW)	0	16994400
Total Saving in Dollar ***	0	\$1,512,502
lbs of CO2 save (pound)****	0	12864760.8
your total greenhouse gas reduction (metric Tons)	0	5847.6
This is equivalent to one of the following *****		saved with TST
Passengers car not driven for one year	0	1366
Gallons of gasoline	0	846723
Barrels of oil	0	17348
Acres of pine storing carbon for one year	0	1695
Acres of forest preserved form deforestation	0	52
Propane cyliners used for home barbeques	0	310818
Tons of waste recycled instead of landfilled	0	2572
*Assume 16Gb FBDIMM, 1x 130W Quad core CPU, 2x 2.5" HDD and 5 cooling fans consume 290W of power, TST blade use 2 cooling fans only, assume each fan is 5W, can reduce another 15W of power, ie, 275W only		
**Assume 1KW of heat generate need 1KW of to cooling power to cool down		
***Energy cost savings are based national average of 8.90 cents per kWh for the commercial sector. SEC		
****Environmental Savings use U.S. average of 1.514 lbs Carbon Dioxide per kWh delivered.		
*****CO2 equivalencies based on data from the U.S. Climate Technology Cooperation Gateway. www.usctcgateway.net/tool/index.cfm		

Space Saving for 20000 server	Other Vendor	TST
Number of server can put into a 42U cabinet	42.00	105.00
Number of Cabinet needed for 20000 server	476.19	190.48
Number of Cabinet saved	0.00	285.71
Total Cost (Dollar)*	\$571,428.57	\$228,571.43
Total Saving in Dollar. Cabinet	0	\$342,857.14
Total Saving in Dollar, Slide Rail	0	\$800,000.00
Yearly saving on renting space***	0	\$5,142,857.14
1st Year Operation Saving		\$6,285,714.29
* Assume each cabinet cost is \$1200		
** Assume typical Slide rail cost at \$40 each		
*** Assume each cabinet space renting cost is \$1500 per month per cabinet		