

Top Ten Reasons to Implement Caspian Edge Storage Blades with 10Gb ATCA Chassis

The Challenge of More & Less

NEPs (Network Equipment Providers) and Telcos are locked in a constant struggle to support *more* subscribers, services and bandwidth with *less* staff, capital and operating costs. Astute Networks® Caspian R1100 Edge Storage Blades support the latest ATCA option 9 Chassis that bring the next generation of 10Gb ATCA solutions to NEPs and Telcos. This provides the platform and tools they need to meet the challenges of subscriber growth and applications such as HRL/VRL, VoD, SMS, IPTV and IMS (IP Multimedia Subsystem).

ATCA 10Gb Chassis

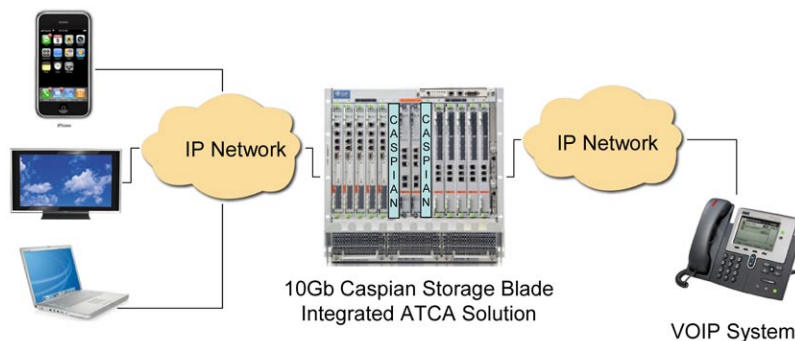
The ATCA option 9 Chassis was created to bring the scalability and performance of 10Gb infrastructure to ATCA systems. 10Gb ATCA chassis' provides a high performance platform to support growing ATCA CPU and applications performance. The growth of multi-core and multi-chip ATCA server blades increases the need for speed. Traditionally, a 16 blade chassis will support 12 CPU blades with one chip slot, and a single core CPU or 12 CPUs (12x1) per chassis. New server blades with dual chip slots and quad core CPUs can support up to 96 (12x2x4) CPUs in the same space. This enables NEPs and Telcos to support a broader spectrum of price/performance levels in a single chassis. This CPU growth is a key driver of the need for 10Gb switching and storage interfaces.

The Caspian R1100 Edge Storage Blade

Astute Networks' R1100 Storage Blade is the first 10Gb iSCSI storage blade solution for ATCA. The R1100 is the right solution for the explosive CPU demands of the 10Gb ATCA chassis. It is the only storage solution that leverages the simplicity and central management of ATCA and brings the full power of 10Gb to shared storage inside the chassis to reduce storage cost per subscriber and support the needs of next generation applications. Astute Networks' patent pending 10Gb ASIC technology provides the performance, availability, serviceability and scalability to support the most demanding and data intensive applications including HRL/VRL, SMS, IPTV, IMS, VoD and more.

Top Ten Reasons to Move to 10Gb ATCA and Caspian Edge Storage Blades

- ◇ More Subscribers/Rack
- ◇ More Revenue/Rack
- ◇ More Performance and CPUs/Chassis
- ◇ More Bandwidth
- ◇ More SMS & IMS Applications
- ◇ Less Cost/Subscriber
- ◇ Less Acquisition Costs
- ◇ Less Management Overhead
- ◇ Less Power/Rack
- ◇ Less Operating Costs



Ten Benefits of More and Less

- 1. More Subscribers** – The move to 10Gb ATCA enables more subscribers in the same foot print. Servers with 10Gb ATCA offer the highest performing CPUs and demands the highest performing storage to support these solutions. The combination of the 10Gb ATCA servers and the R1100 Storage Blade will enable up to 50% more subscriber sessions in the same chassis.
- 2. More Revenue/Rack** – More subscribers in the same chassis means more revenue per rack. When you combine the R1100 Storage Blade with 10Gb ATCA Servers, subscriber sessions increase, SMS messages increase, IMS applications are supported and revenues grow.
- 3. More Performance/CPU** - R1100 Storage Blades enable each server to share the 10Gb fabric to increase the number of transactions per server and drive greater revenue per rack. Other storage solutions can limit the performance of multi-core/multi threaded CPUs. The trend toward multi-core CPUs offers the promise of greater ROI, but only if they have a storage partner, like Astute Networks, to meet the high performance demand.
- 4. More Bandwidth** – The jump to 10Gb provides the necessary bandwidth for content rich applications. Astute Networks has developed a tightly integrated 10Gb server and storage solution to drive next generation applications.
- 5. More SMS & IMS** – The 10Gb ATCA multi-core CPUs are at the center of growing SMS and IMS services. They need to be able to support the increased bandwidth demands of IMS, the increased transaction traffic of SMS and provide the scalability to grow and support IPTV and other media-rich on demand services. The R1100 Storage Blade provides scalability up to 96 disks, high performance with dual 10Gb ports and data protection with advanced mirroring and storage virtualization services required for these revenue generating applications.
- 6. Less Cost/Subscriber** – It cost less to support subscribers with the increased 10Gb bandwidth and Caspian R1100 Edge Storage Blade. Moving from external to internal storage blades enables more servers per rack and lowers the cost of storage. These savings and increased subscribers in the same footprint significantly reduce the cost/ subscriber by 50%
- 7. Less Acquisition Costs** – The move to 10Gb ATCA provides the performance required to make internal storage blades the next step in Telco solutions. Transitioning from external RAID to internal storage blades removes the need to add FC HBAs, external RAID Chassis, FC cables, rails and larger power systems.
- 8. Less Management Overhead** – The move from external RAID to ATCA storage blades allows for a simple SNMP management model. Internal storage blades can be configured with fewer shared RAID groups across servers, unlike FC which due to connectivity limitations forces administrators to create and manage excess storage pools. Finally, the R1100 Storage Blade's ability to provide remote boot services allow server blades to run in a "stateless" mode to improve OS and application deployment flexibility.
- 9. Less Power & Cooling** – External FC RAID can require up to six external chassis to support up to 24 servers. These extra RAID chassis can consume up to 4500W vs. 1200W for six Caspian storage blades. In addition, the R1100 Storage Blade's iSCSI boot features enable server blades to run with out disk drives to lower power consumption.
- 10. Less Operating Costs** – The use of Caspian Edge Storage blades in ATCA chassis reduces management costs; installation cost (six blades vs. six Chassis, HBA and Cables), power and cooling costs by eliminating external RAID. The move to internal storage blades additionally reduces ongoing field service and FRU carrying costs vs. external RAID. Astute Networks' Caspian Edge Storage Blade is the first 10Gb iSCSI storage solution for ATCA. It is designed to provide high performance, high availability storage that lowers storage cost/server. Since the R1100 is an ATCA storage solution, it is designed to be easy to install, manage, support, configure and deploy.

The Caspian R1100 Edge Storage Blade is the first 10Gb iSCSI storage solution for ATCA. It is designed to provide high performance, high availability storage that lowers storage cost per server. Since the R1100 is an ATCA storage solution, it is designed to be easy to install, manage, support, configure and deploy.

Astute Networks is the leading provider of bladed storage solutions designed to handle the most demanding applications served to the edge of the network. Whether you are delivering Telco, military C4I applications or video surveillance, the Astute Networks' Edge Storage Architecture (ESA) provides a storage platform that builds-in high performance, high reliability, rack densities and deployment simplicities required to execute on the edge.

Astute Networks, Inc.

Corporate Headquarters

16516 Via Esprillo, Suite 200
San Diego, CA 92127
858.673.7700

© 2008, Astutenetworks®, Inc. All rights reserved. Astute Networks is a registered trademark of Astute Networks, Inc. Specifications subject to change without notice. SN013 Rev4, 060208.

Website:
www.astutenetworks.com

Information:
edgestorage@astutenetworks.com