Carrier Class Solutions

Communications and Technology Expertise that Accelerates Time-to-Value
Turning Innovative Ideas into Market-Leading Realities

Consumer demand for seamless, converged communications is driving carriers and service providers to develop new, more integrated services and solutions. These market pressures combined with increased competition are accelerating the need for standards-based solutions built to deploy applications at lower costs. NEI meets this demand with carrier-grade NEBS servers, ATCA platforms and storage subsystems that are fully integrated and tested to reduce time-to-market and maximize ROI for carriers, service providers and telecom equipment manufacturers (TEMs).

Whether you are building a session controller solution; developing a telephony server with several TDM, voice, and network interfaces; or deploying IMS on ATCA; NEI’s carrier-grade servers offer flexibility through a wide range of performance, scalability and availability options. All of NEI’s carrier-grade platforms are built for next-generation, mission-critical communications.

NEI has a solid understanding of technology requirements for carrier communications and services. By partnering with industry leaders, we are able to design “Best-in-Class” solutions that meet stringent carrier requirements in ATCA, NEBS, DC power and frame integration. In addition, our partnerships enhance our solutions so we can provide greater flexibility and deployment options not available from other vendors.

Partnering to Deliver Best-in-Class Solutions
Engaging with a Full-Service Partner

NEI’s flexible engagement model enables you to select from a comprehensive set of services designed to augment your technology and deployment teams. From project inception NEI provides design and engineering services that meet stringent industry and international compliance regulations. Our integrated services and solutions encompass the entire lifecycle and are supported by a disciplined approach to program management that enables flawless delivery of completed solutions.

When a standard platform cannot serve as the basis for a solution, we design systems to your exact specifications. And when your solution requires specialized services like frame integration, thermal testing or custom branding, our experienced team is ready to execute. Our strong supply chain, extensive quality assurance capabilities and flexible production facilities allow us to support customers who sell hundreds to tens of thousands of platforms each year. By tightly controlling the engineering and manufacturing process, NEI ensures that every platform meets exact specifications and streamlines volume production.

With the ability to forward stock equipment in many locations around the globe, NEI improves response time and reduces outages. NEI logistics solutions leverage our expertise in distribution, transportation, trade compliance and return management. Regardless of the time of day, support is available to answer your questions.

Maximize Your Time-to-Value with ADVANTAGE Services™

ADVANTAGE Design
Engineering, testing and certification including green system and rack designs, DC power, lower power and cooling

ADVANTAGE Frame Integration
ATCA and NEBS frame-level design, integration and certification

ADVANTAGE Logistics
Fulfillment, evaluation pool and inventory management; forward stocking and global shipping

ADVANTAGE Branding
Custom product branding and packaging

ADVANTAGE Direct
Sales and shipment directly to the channel and end users; software on consignment and POS reports for license tracking

ADVANTAGE Support
Additional technical support from NEI personnel

ADVANTAGE Maintenance
Extended warranty and on-site advanced replacement services
Long Life NEBS Systems

NEI’s N-Series carrier-grade rack mount servers are NEBS Level 3 certified products delivered in a small, 20-inch deep footprint. These NEBS servers deliver the most up-to-date performance and reliability while ensuring an estimated lifecycle of nearly five years. With the ability to install high-end telephony cards, NEI’s NEBS servers allow you to deliver communications solutions and services at a lower cost while speeding time-to-market and maximizing ROI.

Flexible Platforms in a Small Footprint
NEI’s C-Series of highly customizable, NEBS-compliant platforms were designed for a small footprint to enable back-to-back rack mounting, maximize space and increase rack density. With the ability to choose between front or rear I/O, AC or DC power, one or two hard drives, single or redundant power and an optional LCD you can custom-tailor these platforms to meet exact specifications.

Ultra-Dense Expansion Systems
NEI’s uniquely designed NEBS-compliant expansion systems extend a server’s PCI bus to support solutions that require multiple PCI/PCI-X expansion cards. They are designed to fill the void created by servers that feature higher processing power, but lack the physical dimensions, PCI-X slots, power and cooling to support multiple high-end telephony boards. With hot-swap redundant power and cooling, NEI’s expansion systems provide all the features required to support today’s communication solutions.

Storage Subsystems
Carrier-grade storage subsystems provide external NEBS-certified SAN storage optimized to deliver up to 60 TB capacity with a variety of RAID levels. These fully tested storage platforms provide an excellent integration path for data storage and disaster recovery for your mission-critical security, storage, networking and communications applications.

Need DC Power but not NEBS?
NEI offers a variety of platforms geared for rugged environments. These flexible and serviceable rack-optimized chassis are designed for performance-intensive, space-constrained, storage-demanding environments. If you require DC power, consider deploying a DC powered server for various communications applications adjoining the central office.

SN-2500
This 2U NEBS certified SAN storage subsystem provides 12 TB of raw storage per unit; combines 8 FC units for 32.4 TB or 5 SATA units for 60 TB of capacity.
Economical and Flexible MicroTCA Systems

Enabling the interchangeability of components with ATCA, MicroTCA is fast becoming the architecture of choice for carrier-grade wireless and access communications applications. NEI’s MicroTCA platforms are a cost-effective and smaller form factor alternative to ATCA platforms—and they are ideal for lower capacity applications with less stringent performance and availability requirements.

The U-Series platforms supply fully redundant power, cooling and Micro Controller Hubs (MCHs). Additionally, this flexible, horizontal design allows for a variety of AMC configurations.

High-Availability ATCA Systems

Carriers and service providers are implementing ATCA architecture for next-generation communications applications due to the inherent benefits of standardization, scalability and 5-nines (99.999%) availability.

Our high-availability ATCA platforms are designed to meet the growing demand of the communications industry’s triple and quadruple play technologies. We provide dual star or full mesh topologies, node-based switching for board communications and centralized management with IPMB. Multiple small-to-large ATCA form factors are available to meet your specific needs.

NEI has proven leadership in the ATCA space and has become the integrator of choice for industry-leading organizations. As an executive member on the PICMG 3.x standards committee, we are at the forefront of the ATCA movement.

U-3000

Full-height, tool-less, hot swap AMC slots available as either 10 single-wide or two single-wide and four double-wide configurations.

Best-in-Class Design Strategy

Our approach to custom solutions focuses on combining best-in-class technology with our design and integration services to deliver superior solutions that meet each customer’s specific needs. Our broad range of partners ensures a comprehensive offering and a significant pool of engineering resources to collaborate on each solution. And our commitment to the technology guarantees a strong product roadmap. Our full portfolio of ATCA and MicroTCA building blocks encompasses all the necessary components to create a complete platform, and extensive testing ensures interoperability between components, saving you both time and money.

A-13000

This 13U rack mount ATCA system packs 14 tool-less hot swap slots; two for dedicated fabric switch blades wired for either full mesh or dual star.
Solution Partners

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<th>Switch</th>
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<td>Line Cards</td>
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ATCA Blades and MicroTCA Cards
NEI offers a variety of certified ATCA board products, AMC/PMC cards and other products for ATCA platforms.

Single Board Computers
NEI has several certified SBCs featuring low-voltage to dual-core technologies. Many have direct connection for AMC/PMC cards and feature PCI-Express technology that delivers higher bandwidth and fewer I/O bottlenecks.

Gigabit Ethernet Switches
Each NEI ATCA platform contains premium redundant Gigabit Ethernet switch blades geared for high-traffic communications applications that require managed IP routing and open standards switch management.

Storage Products
NEI storage offerings include ATCA storage blades, external arrays and AMC and PMC cards that enable the storage interface from the SBC to the external arrays.

Packet Processing Products
Packet processing and interfaces provide superior connection and transmission speeds to traditional infrastructure equipment.

VoIP Communications Products
ATCA VoIP media gateways and media processing blades offload the media processing from the SBCs and are ideal for deploying advanced, high-density, high-availability voice over packet systems.

AMC and PMC Products
NEI works with partners to provide customized enabling technologies in AMC and PMC form factors such as processors, storage connectivity and legacy interface connectivity.

The products shown here only represent a sample of our portfolio. We offer a variety of other carrier-grade and enterprise communications platforms ranging from customized 1U units to complete 14U ATCA systems. For a complete list and detailed product information, visit [www.nei.com](http://www.nei.com).
Frame-Level Design and Integration

NEI provides frame-level design and integration for customers who need additional integration services, including NEBS Level 3 compliance; rack-level design; and rack assembly, integration and testing.

NEI optimizes the rack space for thermal profiles, cooling and configurations to ensure that you maximize space utilization and allow for proper ventilation between systems. As part of our mechanical build phase, NEI:

- Assembles the rack and integrates the servers
- Routes and identifies cables for each system
- Tests the entire integrated rack for performance and functionality

We perform thermal testing on individual or multiple systems and fully integrated rack enclosures both for design validation and production screening. Thermal testing for multiple systems and integrated racks can be performed in a heat room from 70° to 105° F (21° to 40° C). Fewer systems can be tested in a thermal chamber at temperature profile ranges from -67° to 131° F (-55° to +55° C). Once the rack is integrated and tested, NEI ships the fully integrated frame in custom packaging that complies with GR-63 standards for arrival at any site, ready for operation.

ISO 9001:2000 and TL9000 Certified

NEI is certified in ISO 9001:2000 quality standards to ensure the consistent production and timely delivery of our goods and services. A third-party audit process guarantees that NEI takes an organized and consistent approach to all internal processes. Additionally, NEI is TL9000-registered for the telecommunications quality management system in the design, development, production, delivery, installation and maintenance of our products and services.

NEI focuses on serving the communication infrastructure needs of TEMs, OEMs and service providers. Our ability to deliver open-standards design services, manufacturing, global logistics and global support allows you to quickly deploy industry-proven technology and leverage the investment in these technologies for your applications. Consultative sales professionals and field application engineers work with our technology partners to assist in designing the best solution to meet your requirements.
About NEI

NEI was founded as Network Engines in 1997 and went public in 2000. In 2007, we acquired Alliance Systems, Inc., a leading provider of server platforms for telecommunications and enterprise communications solutions. Anticipating the need to establish a new corporate identity for the newly combined company, management rebranded the company as NEI in 2008 to create a clear corporate identity.

Headquartered in Canton, Massachusetts, NEI trades on the NASDAQ exchange under the symbol NENG. NEI network solutions are made to ease and enhance the deployment, manageability and security of IT infrastructure applications. With a heritage of providing product and service technologies tailored to support the entire lifecycle of its customers’ platforms, NEI has become the platform partner of choice for OEMs, ISVs and software integrators worldwide. For more information about NEI’s products and services, visit www.nei.com.

Visit our website for:
- Descriptions of our solutions for carrier communications, enterprise communications, storage and security
- Detailed information on our platforms
- Data sheets and white papers