



Alliance Systems Call Recording Platforms

With the constant struggle to make your business succeed in this ever-changing competitive landscape, you need a supplier and equipment manufacturer to build profitable next-generation solutions. As an original design manufacturer with proven capabilities and a global reach, Alliance Systems is committed to helping our customers shorten time to market and speed time to revenue.

By combining best-of-breed technologies, testing and integration services, we deliver fully-certified call recording solutions that work right out of the box. Alliance's custom developed high-density systems support the maximum number of call recording boards, increasing your recording capacity per system and improving your bottom line.

Alliance delivers end-to-end value to our customers through original and contract design services, manufacturing and assembly services, value-added global logistics, and support and implementation services. Our services enable you to succeed at your core business.

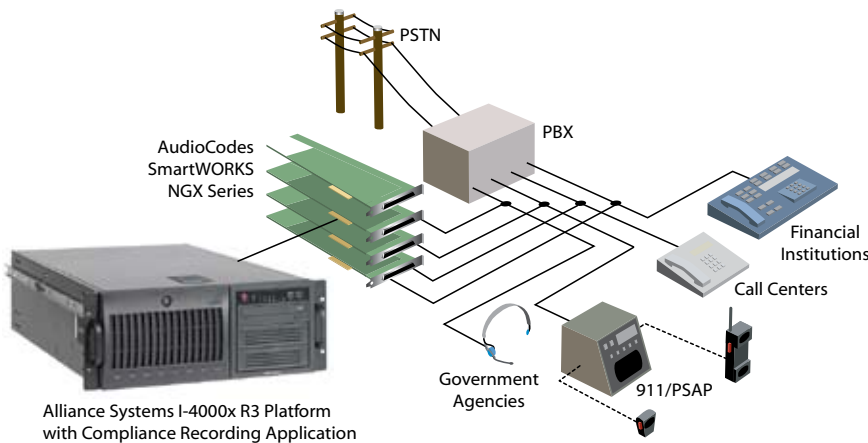
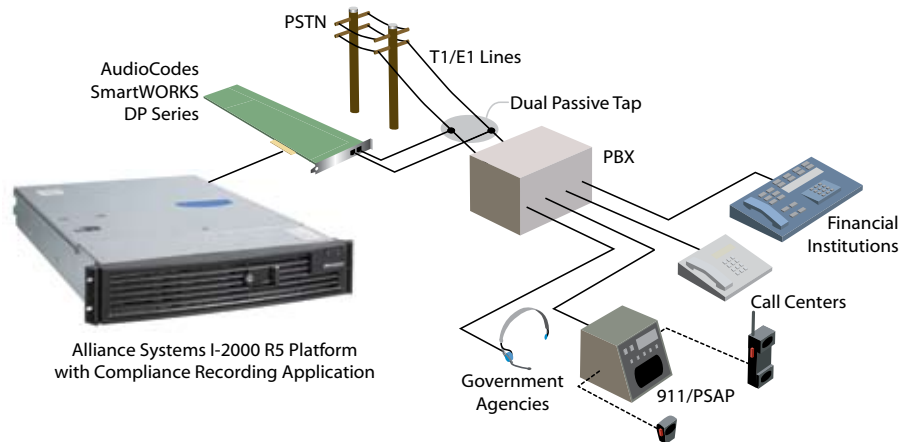
Built for Call Recording Applications

Alliance Systems is the world's leading supplier of call recording platforms for Independent Software Vendors (ISVs) and Original Equipment Manufacturers (OEMs) supplying voice communication solutions to call centers, financial institutions, and telemarketing agencies. Alliance Systems' call recording platforms are built for next-generation performance management, quality monitoring, and compliance recording, offering the highest density for station-side tapping and line or trunk-tapping available in the market. With high-performance, maximum storage, and superior redundant power and cooling, these fully-integrated platforms, expansion units, and storage solutions are custom tailored to meet the needs of the call recording market.

As an end-to-end solutions provider, our consultants can optimize your call recording solution by architecting the right hardware to complement your business strategies and quality management practices. Alliance Systems can provide OEM branding services, global logistics, installation and deployment services, software delivery, and customer support to enable you to focus on your core business.

Compliance Recording

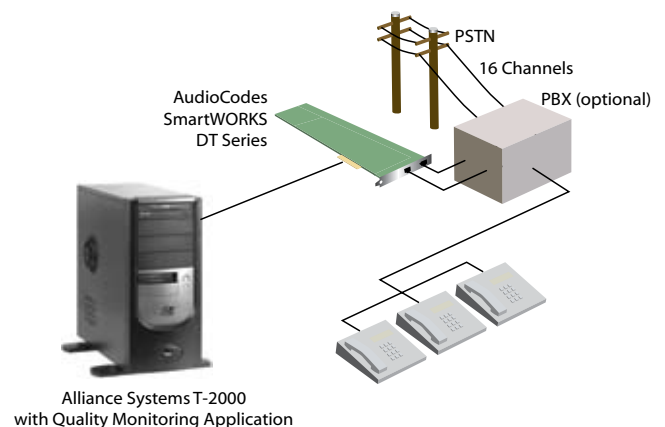
For solutions like 911, brokerage firms, long-distance switchover transactions, and other recording for legal purposes, 100% of all call and/or transactions are recorded for compliance regulations. Full recording requires specialized hardware and processing power to monitor and record all ports and enough storage to record each call and transaction. Typical systems for compliance recording require maximum recording board density and storage capacity inside the system as well as using external storage arrays.



Compliance recording can be achieved in two ways, using line or trunk tapping before the PBX and station-side tapping after the PBX as shown in the diagram above and to the left. Trunk tapping is achieved by tapping directly into T1/E1 lines; up to 12 T1/E1 trunk taps can be achieved in one Alliance Systems server. Station-side tapping is achieved by tapping into station lines from the PBX to the devices. Using AudioCodes® SmartWORKS™ LD or NGX series cards (formerly Ai-Logix), you can achieve up to 384 station-side taps depending on the Alliance Systems platform you choose.

Quality Monitoring

Selective recording is used for quality monitoring and performance analytics and requires much less resources than 100% recording. These solutions do not need to record and store each call and/or transaction. Systems set up for selective recording require just enough hardware to store and quickly retrieve certain number of calls and transactions on short-term medium; typically long-term storage is not required. Using truck-tapping PCI-X cards inside an Alliance Systems server, service observe can be achieved with or without a PBX by tapping into the line. However with a PBX, one T1/E1 channel in the PBX is used and can be quite an expensive solution. Without a PBX, the server provides all the call functions including recording.



Alliance Call Recording Platforms

Our call recording platforms are highly-reliable Intel® based systems designed to meet the growing demand of the communications industry. Alliance call recording solutions bring together best-in-class servers and expansion technology that feature the maximum number of PCI-X slots for recording boards, redundant power and cooling, all integrated and fully tested for demanding mission-critical applications. Leveraging Alliance's expertise in platform solutions, we help application vendors optimize their business opportunities through reduced development time and resources, enhanced profitability, and faster time to market.

Depending on your recording solution, if you are scaling from a few trunk taps for service observe to over three hundred station taps for compliance recording, Alliance platforms provide the right fit with room for growth. NEBS compliance and certification systems and storage arrays are also available if required.

Platform	PCI-X Cards	Trunk Taps	Station Taps	T1/E1 Spans
I-2000 R5 Server	3 Full Height, Full Length	6	96	12
I-4000x R3 Server	5 Full Height, Full Length	10	120	20
I-6000 R2 Server	16 Full Height, Full Length	12	384	64
T-2000 Tower Server	4 Full Height, Full Length	8	96	16
E-4000 Expansion Unit	12 Full Height, Full Length	12	288	48
E-6000 Expansion Unit	16 Full Height, Full Length	12	384	64

Alliance I-2000 R5 2U Platform.

Built for processor-intensive mission-critical applications, the I-2000 R5 features the power and performance of Intel's latest dual, dual-core Xeon 5100 series processing technology and 32 GB fully-buffered memory. The I-2000 R5 has three PCI-X slots for telephony cards, and six SATA or SAS drives for 4.5 TB of raw storage in a flexible and serviceable 2U rack-optimized chassis. With maximum server uptime, sufficient power and cooling, tool-less access to all major components, and a plethora of management capabilities, the I-2000 R5 is an ideal solution for most small-scale call recording applications.



Alliance I-4000x R3 2U Platform. Alliance's flagship product for the call recording market, built on the same dual-core processing technology as the I-2000 R5, features five PCI-X slots and eight SATA or SAS drives for maximum storage of 6 TB of raw storage in one system. The I-4000x R3 delivers the best combination of dual-core, dual-processing performance, high availability, and telephony card integration for mid-range call recording applications. With support for five full-length, full-height telephony cards, the system is capable of supporting up to 10 T1/E1 trunk taps or 120 station-tapped lines. Since telephony cards require more power and cooling, you can be assured that the I-4000x R3 will hold up to these demanding requirements.



Intel's Dual-Core Advantage

The new dual-core Intel Xeon and Pentium D processor systems deliver leading performance and capability along with lower energy consumption, reducing costs and improving density for call recording applications. Lower power consumption means lower total heat in the system for increased capacity and higher performance for call recording boards.

Servers utilizing these new processors are the best choice for virtualization, enabling applications to become more efficient and more responsive, and providing best-in-class reliability for your call recording applications.

Energy-Efficient Performance

- Delivering three times the performance of single-core processor servers
- Rack optimized, new 80W and below dual-core processors boost power efficiency by three and a half times

Virtualization

- Broadest virtualization and OS support today, ability to run 64- and 32-bit applications on the same server, gives you ultimate flexibility to adapt to changing business needs
- More headroom for virtualization with up to 80% more performance than previous dual-core Xeon's
 - Unique server performance innovations deliver up to four times memory capacity
 - Advanced platform capability reduces CPU overhead by up to 40%, boosting application response
 - Confidently consolidate more applications on Intel based servers featuring best-in-class reliability

Reliability

- Best-in-class reliability features, backed by the proven track record of the most widely deployed servers
- Proactively protect data and improve security through advanced redundancy and error checking

Call Recording Boards

Alliance Systems call recording platforms combine with best-in-class call recording boards from AudioCodes Blade Business Line (formerly Ai-Logix), to meet your requirements for a complete, fully-integrated hardware solution. Alliance Systems has tested and certified AudioCodes' boards in our platforms to meet the demanding requirements of call recording applications.

AudioCodes' SmartWORKS family of call recording cards supports standard PBX connectivity as well as VoIP PBXs. These cards provide tapping functionality before the PBX for trunk-tapping and behind the PBX for station-side tapping.

All SmartWORKS products have a full complement of on-board voice resources tightly integrated with telephony interfaces. The telephony interfaces supported include high impedance analog, digital trunk, and digital PBX telephone sets as well as interfaces for terminating analog and digital trunks. See a snapshot of the Alliance certified boards:

Alliance Certified AudioCodes Boards

Board Applications

IPX	Recording for IP-PBXs
NGX	Recording for Proprietary PBXs
DP	Passive Recording for T1/E1 Trunks
DT	Recording Trunks for Service Observe
LD	Recording Analog Lines for Compliance
VR	Increases Resources of Legacy Boards

Alliance Call Recording Platforms

Alliance I-6000 R2 6U Platform. This ultra-dense, highly-scalable platform delivers the features required to deploy high-end call recording applications not available from other vendors, in a scalable 6U rack-mount form factor. Leveraging dual Intel Xeon processors with Extended 64-bit Memory Technology, Hyper-Threading Technology, and dual-channel DDR2 memory, the I-6000 R2 is a top-of-the-line server that delivers high performance, high-availability, and system reliability in an open-standards based, passive-backplane platform.



Storage capabilities include six hot-swap SATA, SCSI, or SAS drives for total raw storage of 4.5 TB. With 16 PCI-X slots, the I-6000 R2 supports 16 full-length, full-height telephony cards and provides 1050W redundant power and three hot-swap cooling fans for ultra-dense, ultra-high performance call recording applications.

Alliance T-2000 Tower. Alliance's multi-purpose T-2000 tower server delivers Intel Pentium D dual-core performance, Extended 64-bit Memory Technology, and Hyper-Threading technology with superior quality and reliability. Designed with a Thermal Advantaged Cooling enclosure as well as one intake and one exhaust fan, you are ensured optimal temperature control. With four PCI-X slots and up to 3 TB of raw storage, the T-2000 is an ideal server choice for low-density call recording applications. Packaged in a configurable ATX mid-tower design, The T-2000 is built for high performance and versatility.



Alliance Call Recording Expansion Units

When you absolutely must have a tier-one supplier, like HP, Alliance has a solution for you. By combining the highest performance tier-one servers and Alliance Systems high-availability expansion chassis, call recording applications reach their maximum capability per combined system. Using Alliance's power sequencing technology, the server combined with the expansion unit functions as single system.

Alliance E-4000 4U Expansion Unit. Alliance's uniquely designed NEBS-compliant 4U expansion unit connects to the call recording server through a PCI-Express adapter and bridges to PCI-X slots for connecting up to 12 call recording boards. With hot-swap redundant power and cooling, this Alliance designed expansion unit provides all the features required to support today's high-end telephony boards.

Alliance E-6000 6U Expansion Unit. Built for ultra-dense call recording applications, the E-6000 supports 16 PCI-X boards in the expansion unit. Based on the same Alliance E-4000 expansion technology, the E-6000 links to host server via PCI-Express and provides next-generation performance and technology with support for today's boards. Call centers demand high-density recording solutions that provide high-availability, flexibility, and scalability; Alliance Systems' call recording servers and expansion units provide just that.



Alliance VoIP Call Recording Platforms

For voice over IP or software-based recording applications that do not require a high slot count, consider Alliance Systems high-performance, high-availability, rack-dense servers.

Alliance I-1200 R2 1U Platform. This all new dual-power supply 1U platform, brings power and reliability to a whole new level. Packed with the power and performance of Intel's latest dual, dual-core Xeon 5100 series processing technology and with redundant power supplies, this system outperforms anything on the market for VoIP or software-based call recording

applications. The I-1200 is designed for increased uptime and tool free serviceability. With eight hot-swap SATA or SAS 2.5-inch drives, you can configure various RAID configurations with 1.6 TB of raw storage.



Storage Options

Call recording applications can require a tremendous amount of storage especially for compliance recording. Most of Alliance platforms supply 3 to 6 TB of raw storage inside the systems. When applications require more storage, our SAN solution can scale from 9 TB per unit to 36 TB total with four clustered units. Below is a summary of Alliance Systems storage available per system and in external storage arrays, all certified for call recording applications. NEBS-certified storage arrays are also available if required.

Platform	Hard Drives	Maximum Storage*
I-2000 R5 Server	6 SATA or 6 SAS	4.5 TB Raw
I-4000x R3 Server	8 SATA or 8 SAS	6 TB Raw
I-6000 R2 Server	6 SATA/SCSI or 6 SAS	4.5 TB Raw
T-2000 Tower Server	4 SATA or 4 SCSI	3 TB Raw
I-1200 R2 Server	8 SATA or 8 SAS	1.6 TB Raw; Uses 2.5-inch Drives
S-2000 Storage Array	12 SATA; Connects via iSCSI	9 TB Raw; 36 TB Raw for 4 Units

* Based on 750 GB SATA drives or 200 GB SATA 2.5-inch drives depending on the drive size

S-2000 Storage Array. The Alliance Systems' S-2000 storage system provides the ideal platform for call and transaction storage as well as backup and recovery for system data. The S-2000 is an easy-to-use, affordable SAN storage system with intuitive, interactive tools that help you easily manage your company's fast-expanding data. The system occupies only 2U of rack space and includes 12 hot-swappable drive bays for up to 9 TB of native capacity per unit. Four S-2000 systems can be clustered together for additional capacity.

The S-2000 can be populated with SATA 1.5 Gbps or 3.0 Gbps drives between 250 GB to 750 GB to meet call recording storage demands. The array enables dynamic growth of data volumes, features an automated snapshot suite, and allows for data replication across multiple locations, giving you high level of data protection. With an Intel Xeon processor, 9 TB of raw storage, iSCSI connectivity, and fully tested by Alliance engineers in a communications environment, the S-2000 provides a robust, flexible, scalable storage solution.



Call Recording Boards

AudioCodes SmartWORKS call recording products offer a large selection of voice CODECS including G.723.1, G.729A, and MS GSM. The IPX provides packet filtering and media forwarding for IP-PBXs in your call recording solution; the IPX provides complete event triggering, and call state reporting for many of the industry leading IP-PBXs.



SmartWORKS NGX is an all-in-one resource for call and transaction logging behind a proprietary PBX with 8-24 port digital station tap. Every key pressed, call taken, and telephone action performed by an agent is automatically decoded and sent to the recording application.



For passive monitoring and recording of T1/E1 trunks in high-density environments, the SmartWORKS DP is a perfect fit. The DP's robust call recording features combined with ISDN call control, eliminates the need for other resources on the system.

For voice-driven monitoring and recording of T1/E1 trunks and service observation, the SmartWORKS DT provides trunk termination and call control on digital T1/E1 networks; but for voice-driven monitoring/recording of analog lines and complete line supervision, select the SmartWORKS LD 4, 8, 16, or 24-port passive/active all-in-one telephony card.

SmartWORKS VR gives developers the flexibility to trigger call recording however they wish, write to multiple CODECs, mix (or sum) voice data, perform voice processing, and much more.



ISO 9001:2000 and TL 9000 Certified

Alliance Systems is certified in ISO 9001:2000 quality standards to ensure the consistent production and timely delivery of its goods and services. A third party completed the ISO 9001:2000 audit process and found Alliance Systems to be in compliance with the defined system and guarantees that Alliance takes an organized and consistent approach to all internal processes.

Additionally, Alliance Systems is TL 9000 registered for the telecommunications quality management system in the design, development, production, delivery, installation, and maintenance of its products and services.

Thermal Testing

Alliance Systems has the ability to perform thermal testing on individual or multiple systems and fully-integrated rack enclosures both for design validation and production screening.

Fewer systems can be tested in a thermal chamber at temperature profile ranges from -67° to 131° F (-55° to +55° C). Thermal testing for multiple systems and fully-integrated racks is performed in a heat room from 70° to 105° F (21° to 40° C).

Alliance Systems thermal testing ensures systems are able to meet the strictest requirements in contact center and service provider deployments.

Regulatory Testing

Alliance Systems complies with the following regulatory testing requirements:

- UL and CUL
- CE (safety and emissions)
- FCC
- CB (European Union) via TUV
- VCCI (Japan)

Alliance Systems Services

Design & Engineering

Alliance Systems provides an extensive range of value-added design and engineering services for contact centers, OEMs, and ISVs needing high reliability, Intel based servers and storage solutions. Through its Dallas Design Center, Alliance provides a full range of outsourced design manufacturing services. Alliance's engineers, technicians, and field application engineers design high-reliability solutions based on Intel architecture and roadmaps. Through adherence to ISO 9001 and TL 9000 processes, customers are assured of quality designed systems that meet stringent industry and international compliance regulations.

Alliance Systems partners with you at each phase of the product development cycle from concept to production launch. Our flexible engagement models allow customers to utilize Alliance's engineering services for complete, turnkey product development, or for a specific contract design project. Our integrated services and solutions encompass the entire product lifecycle and are supported by a disciplined approach to program management that enables the delivery of quality products – on time, defect free, and at the right cost. Our design engineers have a deep and broad skill set that enables a quick start to any design project. With extensive technical experience across multiple industries and product families, our team of design engineers brings innovative, quality, and cost-focused solutions to our customers.

Manufacturing & Assembly

We are committed to being flexible and responsive in working towards common goals with our customers. We strive to be the leader in technology, quality, customer service, and delivering to our customers' expectations. Our build-to-order and configure-to-order services manufacture products according to the needs of the individual customer. We integrate the hardware and software and provide testing and reliability analysis to make sure it works right out of the box.



Alliance Systems works with OEMs and ISVs to deliver manufacturing solutions that meet your specific needs. To ensure products are designed, configured, and tested before they ship, each system is carefully assembled and tested thoroughly to meet customers' specifications. Once configured, each system goes through extensive burn-in testing and quality assurance for the accuracy and completeness of each assembly. All inspections and test processes are fully documented and are ISO 9001 and TL 9000 registered.

Alliance has the ability to scale to meet customers' needs and can deliver both large- and small-run productions of high-reliability servers. Engineers and technicians are trained to assemble a wide range of systems from single processor servers to complex dual-core, dual processing high-availability servers.

Global Logistics

Alliance offers one-stop logistics solutions to customers by leveraging its expertise in distribution, transportation, trade compliance, and returns management. The objective of our supply chain management services is to synchronize the requirements of our customers with the flow of materials from suppliers to achieve cost-effective, high-quality customer service.

The global reach of Alliance customers is supported by its multi-continental shipping depots. With four international locations including the Philippines, UK, the Netherlands, and South Africa; shipping products around the world is easily accomplished. Another seven locations (and five planned locations) throughout the United States maintain ample supply of parts for four-hour onsite repair and replacement services.

Global Support

Alliance provides a full range of support services to make implementing and maintaining solutions simple. We take a collaborative approach to developing end-to-end support solutions that cost-effectively support your business goals today and tomorrow. Whether you need 24x7x365 hardware support, software support, or managed care, our experienced professionals can shorten your time to results. All our servers are backed by a two-year warranty with advanced or extended warranty upgrade programs available.

Alliance provides basic level support for everything we sell that includes business hours support and depot level repair. Alliance Systems Global Support maintains an ISO 9001:2000 and TL 9000 registered quality management system. All incidents are categorized as critical, major, minor, or informational. Our support team resolves problems reliably and efficiently. Our automated case management tools improve communication for faster troubleshooting, problem diagnosis, and correction.

We offer additional levels of support, including services that deliver around-the-clock support and onsite support for rapid parts replacement. Because our customers provide mission-critical applications, their clients cannot afford to wait days for a repair. Our priority onsite services are now available globally in every country where we ship products. In addition, we provide professional support services from implementation to managed care services to meet your needs now and in the future.

GLOBAL REPAIR PARTS STORAGE AND MAINTENANCE LOGISTICS



Why Alliance Systems?

If your solution has unique requirements, Alliance engineers can custom design the right system for you, perform interoperability testing, and process any necessary certifications. Alliance's manufacturing team then builds your systems to meet exact specifications, including loading your applications. The systems can then be shipped around the globe or maintained in inventory in our domestic or international hubs.

With over 14 years experience delivering high-end communications servers to OEMs, ISVs, call centers, and enterprise customers, you can be assured that Alliance will back your investment and support your business needs.

Focus on Business Needs

Alliance's focus is on serving the communication infrastructure needs of contact centers, OEMs, and ISVs. Our ability to successfully 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 finding the best solutions to meet our customers' needs.

Customer Satisfaction

Commitment to quality is not a catch phrase at Alliance – it is a measurement that is taken seriously. With each order shipped and every technical support incident logged, Alliance places a quality assurance call. Each month, over 90% of new customer orders and 90% of all support calls are surveyed to ensure customer satisfaction levels are maintained.

Alliance measures criteria that include timeliness, shipping condition upon arrival, order accuracy, knowledge level of support team, and professionalism.

USA REPAIR PARTS LOGISTICS



About Alliance

Alliance Systems delivers a comprehensive set of outsourced design and manufacturing services to call centers, ISVs, and OEMs including design, manufacturing, logistics, and support. We help customers optimize their businesses by enhancing profitability and reducing time to market.

Today, Alliance focuses on delivering open-standards server solutions for the communications market throughout the world. As an Intel Communications Alliance Affiliate and through strategic partnerships with Microsoft, Cisco, HP, AudioCodes, Aculab, Eicon, Envoy, and others, Alliance provides a full range of products and services that are specifically designed to meet today's mission-critical communications applications.



- Established in 1992
- Privately held
- Base of 1,400 customers in 90 countries
- Headquartered in Plano, Texas
- Best-of-Breed Technology from Intel, Microsoft, Cisco, AudioCodes, Aculab, Eicon, Envoy, and more
- Recognized with over 25 industry awards in the last 5 years
- Highest quality in the industry, including ISO 9000 and TL 9000 registrations
- Sales and support organizations in Plano, TX; Los Angeles; San Diego; San Jose; Denver; Sacramento; Sioux Falls; Tampa; Washington DC; Atlanta; Boston; New York/New Jersey Metro; Portland, OR; Montreal, Canada; and Bad Homburg, Germany

Alliance Systems Services

Professional Services

When designing call recording solutions, business processes and quality management are key to making the solution a success. Alliance professional services engages with you to ensure technology components meet the requirements for your business strategy. With 14 years of successfully implementing telecommunications and computing solutions, we provide valuable consulting services that address processes and organizational strategy as they relate to your business.

From technology assessments, implementation and training, to support and managed services, Alliance Systems is uniquely positioned to deliver more value from your solution. Professional services complements Alliance's build-to-order flexibility to ensure we build and implement exactly what call centers, ISVs, and OEMs need. In addition, our services ensure you can easily plan for any changes and adequately test hardware and software compatibility. As an ISO 9001 and TL 9000 registered company, Alliance engineers follow well-documented processes and methodologies to make sure projects go as planned – from inception through implementation.

Complete OEM Branding Services

Alliance offers a full range of OEM services, from full-service design and custom branding to build-to-stock global logistics, allowing you to choose the level of service that best fits your needs.

Alliance can help extend an OEM's corporate identity through branding of your products for name recognition, market focus, and other considerations. These services expand from simple label creation featuring your logo placed on the bezel of a server to the design, creation, and production of a unique bezel that changes the face of the system. Slight changes in color, texture, and shape of the external system components can create a huge visual impact at your customer's site.

Once the system is designed and approved, it is important to look at the presentation of the product as it reaches your customer. The shipping container, manuals, CDs, and any other documentation that ships with the system are opportunities to extend the brand and feature the same distinctive look as the materials used to sell the system. Alliance helps customers to think outside of the box and leverage every opportunity to make an impact. And since the products ship from Alliance's facilities, the Alliance team can assume the printing, production, and housing of the collateral and materials that ship with each system.

