

YOUR SOFTWARE, YOUR CONCEPT, OUR DESIGN/BUILD TEAM – YOUR PERFECT FIT SOLUTION

At NextComputing, we custom design/build hardware system solutions for software developers (ISVs) and service providers with optimized performance and fast time to market.

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We have years of experience in designing, deploying and managing under configuration control complete custom appliances to turn your software solution into a performance optimized, purpose built appliance or product family offering some or all of the following services depending on your needs.



SOFTWARE BINARY PERFORMANCE OPTIMIZATION SERVICES

Your software binary, your solution or your service, and our tuning for the best possible use case results. NextComputing has years of experience helping software publishers, developers, and open source integrators obtain better application and workflow performance through our optimization services to maximize workflow performance results within a configuration managed purpose built appliance running your binary software application.

How does this work?

- We discuss and review the systems requirements as you have defined them for your application including the operating system. Then we discuss what you believe may be the bottlenecks.
- We review and discuss what type of purpose build appliance form factor you may want from our portfolio of portable systems, deployable short depth rack system, small form factor Edge workstations, or an off-the-shelf rack server chassis such as SuperMicro. We then help select the system components equivalent but better from a performance perspective to replicate a purpose built version for your requirements within the form factor(s) your case demands.
- Our OS, system and software team experts then analyze your binary applications, how they perform under your workflow and requirements on your current system configuration, and evaluate how we can maximize its performance. We do this by identifying system bottlenecks from memory bandwidth, processor utilization, GPU coprocessing, RAID settings/optimizations, disk I-O,



PCI Express I-O, network I-O, BIOS, and operating system utilization based on Linux, Windows or OVAs/virtualization. We then implement an improved solution.

- We will recommend, implement, and test these configuration controlled optimizations, settings and hardware tuning to maximize the performance of your application and provide recommendations.
- As part of an ongoing relationship, our team will work at regular intervals with your software team to suggest code or configuration modifications, as well as hardware component roadmap updates, as part of your continuous performance improvement and cost optimization while managing this under configuration control.
- Additionally, we offer ISO imaging services that include functional verification of ongoing driver and OS patch release versions to ensure interoperability with your application and I-O cards as part of the design-build-deliver process of your applicationdriven, purpose-built appliance.



DESIGN YOUR CUSTOM CHASSIS OR INTEGRATE AN OFF-THE-SHELF CHASSIS

- Our mechanical design and 3D modeling capabilities, including injection mold plastic parts, enable a collaborative, custom designed chassis.
- We have a strong expertise in professional-grade, small form-factor appliances for audio, video, and data recording and processing.
- If a custom designed chassis is not the best fit due to business case or volume, we can help select the best off-the-shelf chassis such as an Intel NUC or a SuperMicro rack. We would then implement, integrate, test and modify or add to create the best fit solution including branding and additional bezels.
- We also will integrate some of our modular standard product lines (such as Nucleus short depth racks) along with off-the-shelf components into a custom deployable mobile rack with optional customized I-O and mounting. In particular, we specialize in 360VR, audio visual recording/streaming use cases in the AV industry, event production, and government deployment with a focus on reducing size and weight.



SYSTEMS ENGINEERING SERVICES

- Combined with our software performance optimization services, our systems engineering team will help determine the best possible processors (Intel or AMD), chipsets, motherboard form factors, memory, GPU cards, RAID controllers, SSDs and other I-O to ensure you have optimal performance and a cost-reduced system architecture.
- Our specialty is performance optimized I-O (video and network data), recording/streaming, high performance processing and co-processing in small packages





ROADMAP AND EOL MANAGEMENT

- All of your appliances will be managed under configuration control (form, fit and function)
- Configuration management updates collaboratively
- EOL management and roadmap replacement and updates.
- Every serial number tracked by configuration control revision, options and component serial numbers

ENVIRONMENTAL ENGINEERING SERVICES

- To complement our systems engineering services, we will tune the best combination of thermal profile/cooling with reduced acoustics using combinations of efficient air cooling and/or customized liquid cooling.
- For portable or small form factor and deployable appliances, we have years of expertise in installing individual elements of the system to ensure everything remains secure and optionally do vibration and drop testing
- We design and fabricate shipping boxes and packaging, optional soft bags, and customized inserts for hard cases.
- We offer safety and emissions certifications, either quoted up front or amortized over the first run of appliance builds.





PRODUCTION SERVICES

- Turnkey application builds inclusive of your software install, configuration and full regression testing
- Optional branding of BIOS screens, OS background screens, and appliance logos via silkscreen
- Private label packing slips
- · Turnkey appliance drop shipment options to your resellers or customers
- Consignment services, build to stock, drop ship to releases the same day
- Logistics services for service providers to refresh systems returned from a service engagement, re-image, re-test, update and restock for the next service release
- Shipment tracking and customs management for international shipments



CREATIVE BUSINESS MODELS

- We focus on small, medium run volume business cases, generally under 2000 per year and as small as 50 per year.
- · We are very effective at fast time-to-market design/build process
- Tooling, certification costs can be amortized over an initial production run to minimize any up front NRE costs.
- Manage your cash flows and produce profits right from the start business models can be structured with no up-front costs, only billable when we ship your appliances or even extended terms for consignment hold for credit qualified customers.





REPAIR AND CUSTOMER ENGINEERING SUPPORT SERVICES

- Customer engineering services to help provide 2nd level support for your application within the appliance
- US based facility for full appliance service/repair including software image update and testing
- · Our facility can be your virtual repair service facility



SERVICES FOR ALL STANDARD AND CUSTOM NEXTCOMPUTING PRODUCTS



LOGISTICS AND POOL MANAGEMENT

We offer appliance pool management services for service providers who rent or do temporary customer engagements as a service, or ISV and appliance companies who have a demo pool of systems they loan to customers for POCs or field sales teams for demos. We can help you reduce costs so you can focus on your customer engagements.



INTEGRATION SERVICES

NextComputing can take on the overhead and complexity of integrating and delivering your turnkey product, including software installation, integrating 3rd party devices like I/O boards, and appliance testing - replicating your own procedures to ensure we're delivering it as exact as you would. Outsourcing all the integration to us allows you to focus on improving and sell your product.





COMMON ARCHITECTURE

We have designed all our products using a modular, enterprise-class architecture that allows us to easily deploy your application on multiple types of systems that share common elements. With our modular design approach you can avoid time-consuming re-testing on new hardware platforms, letting you quickly introduce new products to market.



CONFIGURATION MANAGEMENT

Our configuration management services enable us to track every detail of your configuration. From the exact BIOS revision, to the models of hard drives, expansion board locations, even software image loads; you can feel confident that your product is delivered consistently to your customers. This also allows us to manage the longevity of your products by keeping up to date with the latest technology changes.



BRANDING

Present your brand by designing a unique look for each of your systems. Custom paint colors, silkscreen logos, and stitched carrying cases are just the beginning. We are always open to working with you on new ideas for differentiating your brand. We also offer these services in lower volume than most companies, allowing you to put your best foot forward without breaking the bank.



PRODUCT CUSTOMIZATION

When you work with NextComputing, you're not confined to the hardware and configurations you see on our website. Whether it involves new components, a modified chassis, or something else entirely, bring all your ideas to the table and we can work together to create just what you need.









APPLICATION SUPPORT

We know complex interactions between custom software and hardware can be a time consuming, expensive use of your valuable resources. Working with NextComputing you have a true partner to help you with optimizing and troubleshooting your appliance. This starts with your first prototype system and can extend for years to come as you deploy systems to customers and update your software and hardware.

TESTING

As a provider of unique hardware, we understand your customers may need them in unique environments. Whatever your needs, we have the means to test your solution to make sure it meets your standards for operating temperature, shock and vibration, or performance benchmarking.

CERTIFICATION

As your hardware provider, we also handle the certifications you need in order to ship your product worldwide. Because we understand our hardware, we can accelerate the certification process, whether it's safety, emissions, or other standards, passing on that savings to you.

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