

Stratom provides our clients with a unique set of engineering and operations services continually striving to deliver the value and best-in-class service our customers expect and deserve. With an expert set of resources we assist our clients with product realization, new product development and introduction, outsourcing, and lifecycle management.

We understand the relationships, requirements, and challenges in the differing environments of the OEM, Startup, and Contract Manufacturer, providing flexible and experienced resources to assist in:

- New Product Development and Introduction
- Engineering Design and Sustaining Services
- Outsourcing, Offshoring & Product Transfers
- Supply Chain Management
- Order Fulfillment & Assemble to Order
- Customization and Configuration
- Lifecycle Management

Stratom improves your bottom line by:

- Providing leveraged resources to accelerate your time to market
- Positioning your operations for volume production
- Accelerating your product release cycle time

## Engineering Services

Stratom provides a highly leveraged team of resources with an extensive amount of engineering and operations experience in product development and release.

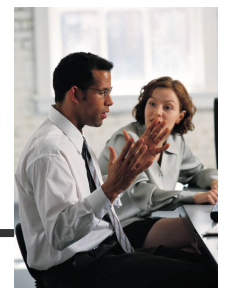
- Mechanical and Electrical Design
- Product Enclosure Design
- Circuit and PCBA Design
- Software Development
- Real-time Embedded Firmware
- Device Driver Development
- Unit Test Development
- Tooling Development
- Process Engineering
- Supplier Quality
- Sustaining / Reengineering
- Data Storage
- Hardware Appliances
- Fibre Channel Directors / Routers
- Telecommunications
- Government / Defense

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## Outsourcing Offshoring

Stratom has the knowledge and experience needed to help you outsource or offshore your product development, processes or manufacturing both domestically or to low cost regions. We have assisted in the transfer of processes and products within the United States and Asia, and understand the interrelationships of the Original Equipment Manufacturer (OEM), Original Design Manufacturer (ODM) and Electronic Manufacturing Services (EMS) providers.



## Product Realization

Stratom provides the technical expertise to assist our clients in bringing their products to market. We provide an immediate and flexible resource multiplier when and where you need it most:

- Meeting or exceeding product development milestones
- Hardware and software development
- Packaging and enclosure design
- Test and tooling development
- Process development
- Supplier Quality Management

We fill the gap between R&D and production by helping you insure your product is ready for volume manufacturing.

- NPI Process
- Phase Management and Transition
- Organizational Structure
- Milestone Definition
- Roles and Responsibilities
- Tracking & Management Methods
- Prototype Development

Providing assistance and expertise throughout all stages of the product lifecycle.

- Offshoring Development
- Sourcing Decisions
- Supply Chain Management
- Agile Product Lifecycle Management

## Program Management

Stratom gives you the timely advantage you need to achieve your critical objectives. Whether you need help developing and introducing new products, outsourcing or transferring your operations, offshoring your product development, or driving business improvements, Stratom is there to help you with effective program and project management. Stratom can provide resources to run a specific project or provide a Program Management Office (PMO) to help oversee numerous projects.

## Customization and Order Fulfillment

Stratom provides the expertise to solve the difficult problems associated with the order fulfillment and servicing of highly customized and configurable products through:

- Determination of customization requirements which drive the design and fulfillment process / customization philosophy and training
- Design review for mass customization and configuration from the architectural and concept phase through production
- Logistics development for customization and order fulfillment
- Definition of customer configuration matrixes and pricing models
- Order fulfillment control and business systems methodologies
- Assemble to Order / Build to Order / Configure to Order



[www.stratom.com](http://www.stratom.com)

Stratom provides a vast array of engineering services to assist its clients in product development and release, both domestically and in low cost regions. Our flexible engagement model allows customers to utilize Stratom's engineering services to assist in any or all phases of product concept, definition and prototype development, and production release. Our team of professionals has numerous years of experience in mechanical and electrical design, software development, product introduction, process development and production engineering spanning multiple industries including data storage, telecommunications, hi-tech electronics, and defense.

## Design Engineering

- Mechanical Design
  - Sheet metal
  - Machining
  - Die casting
  - Plating and anodizing
  - Plastic injection molding
  - Fabricated metal products
  - Structural metal fabrication
- Electrical Design
  - Processor / DSP / microcontroller
  - FPGA & CPLD
  - RFID
  - Circuit design
  - PCBA design
  - SCSI / Ethernet / Fibre-Channel
  - Serial interface
  - Analog and digital electronics
  - Test and tooling development
  - Component integration and test
- Software Development
  - Real-time Embedded Firmware
  - Device Drivers
  - System Test Development
  - Test application development
  - Test data collection and database architecture
- System design and development
- Electro-mechanical assemblies
- Component specifications
- Assembly and fabrication tooling
- Concept studies/engineering analysis

## Industry Experience

- Hi-Tech Electronics
- Disk drive and tape drive
- Data Storage / RAID
- Fibre Channel Directors / Routers
- Semiconductors
- Robotics
- Hardware / Network Appliances
- Telecommunications
- Electronics Manufacturing Services
- Government / Defense

## Manufacturing / Process / Quality

- Supplier Quality Engineering
- Quality Management
- Process development
- Headcount planning
- Capacity planning
- Advanced Manufacturing Engineering
- Prototype and production line layout
- Plant layout
- Test and tooling development
- Fabrication and installation of production equipment
- Prototype services
- Capability studies
- Yield improvement
- Work instruction development
- Quality control
- JIT / Demand Flow
- SPC / Statistical Process Control
- DFX analysis

## Documentation

- Agile Product Lifecycle Management
- Work instruction development
- Standard operating procedures
- Engineering Change Orders
- Drafting

## Software Tools

- Mechanical Design
  - SolidWorks
  - AutoCAD / AutoCAD LT
- Electrical and Software Design
  - Verilog and VHDL for Xilinx and Altera
  - PSPICE and LTSPICE
  - OrCAD schematic capture and layout
  - Microsoft Visual C++
- Analytical
  - MathCAD
  - Matlab

Stratom provides the knowledge and experience needed to help you offshore or outsource your product development, processes, or manufacturing both domestically or to an overseas low cost region.

Companies of all sizes have moved towards an outsourced design and contract manufacturing or electronic manufacturing services (EMS) environment. No longer is outsourcing just for larger companies looking for lower development and manufacturing costs, many startup companies are moving in this direction to help with cash flow and reduced overhead expenses. The sets of services available can range from outsourced product development, strategic commodity contract manufacturing, to complete turnkey design, assembly, and order fulfillment services.

Stratom has the expertise to help you make the right decisions throughout your sourcing process and the development of your supply chain. We will assist you in every step as you transition to your design or manufacturing partner. We will bring a substantial savings to your company through our ability to accelerate your transition to a lower cost environment.

We have managed numerous transfers of products and processes from both the Original Equipment Manufacture (OEM) side and the EMS side of the business. This gives Stratom a unique insight into how both sides of the partnership interact and a solid understanding of the demands and requirements needed to make a transition successful in the shortest possible time.

Stratom has assisted companies move to an outsourcing and offshore model across the full spectrum of the industry

- Fortune 500 to startups
- Tier 1 EMS providers to Tier 3 contract manufactures
- United States to Asia

Stratom provides the resources to run and execute a specific outsourcing project, or a management office to help oversee numerous projects. We provide expertise in all aspects of the program to include:

- Organization and Management
- Supply Chain Development and Management
- Contracts and Negotiation
- Fulfillment Strategy
- Risk Identification and Mitigation
- Transfer Accelerations
- Business Systems / Data Collection
- Qualification Planning
- Customer Acceptance
- Manufacturing Process and Production

Outsourcing is no easy task. There are many variables in the equation that determine price, quality, and on time delivery of the end product. Our experience can help you to more quickly obtain substantial savings to your overall product costs while providing the experience, risk identification and mitigation that you need to ensure that your mission critical operations stay up and running.

Today's product development cycle is continually shrinking. To stay competitive, companies must continually reduce their product development and release time. Stratom provides a collaborative and integrated approach to the product introduction process and provides the framework for the "operational execution" of the product development cycle.

With a focus on the people, process, management, and execution of the new product introduction cycle, Stratom accelerates our customers product launch through our custom developed process. This process improves key metrics including time-to-market, time-to-volume, and accelerated product release.

To improve overall time-to-market, we use a collaborative approach to product release. We strive to understand the many variables needed to minimize the time it takes to move a product from the design phase into volume production. We believe the ability to reduce cycle time throughout the release process is critical to bringing about improvement.

Our approach is to focus on the process, people, and management activities that are critical to the development and release process within an organization. The first variable is what are the steps to accomplish, in what order, and during what timeframe to ensure all critical forces of the cycle are synchronized – supply chain, outsourcing, supplier quality, engineering, customization and order fulfillment methodologies, product quality, and production. The second variable is the people – proper structure, right skill sets, correct roles. The third variable is the strategic management principles that bring about faster product release.

The final phase is execution - if you cannot execute, the rest just does not matter.

Today's consumers expect uniquely configured products available within an ever collapsing lead time window. This trend is moving leading companies into a new paradigm of operations and product fulfillment strategies where variety and customization are the norm. This operational strategy is being implemented across all aspects of consumer goods including clothing, travel, high-end electronic equipment, software, and personal computers.

To remain competitive, companies must adapt their processes and products to be able to quickly and efficiently design, produce, and fulfill products to meet these customer expectations.

**Configure to Order, Build to Order, Assemble to Order, Mass Customization, Highly Configurable, Order Fulfillment** – all of these are associated with this shift and bring different solutions to the problem depending upon the clients needs.

Stratom helps you develop and implement the best products and model based upon you and your customer's specific needs. We provide the expertise to help you solve the difficult problems associated with variety and customization:

- Determination of customization requirements which drive the design and fulfillment process / customization philosophy and training
- What method(s) are best for your company
- Design reviews for customization and configuration from the architectural and concept phase through production
- Supply Chain Management and Development
- Manufacturing and Test Strategies
- Definition of customer configuration matrixes and pricing models
- Order fulfillment control and business systems methodologies

Stratom provides the timely advantage you need to achieve your critical goals. Whether you need assistance executing your corporate objectives, outsourcing your operations, streamlining your supply chain, or expanding / consolidating your operations, Stratom will provide expert resources to run your projects in a timely and cost-effective manner.

We bring focus and clarity to projects by building a solid foundation through planning which allows for the effective implementation and execution of your strategic objectives.

We provide expertise in all aspects of the project to include:

- Selection and Definition
- Organization and Management
- Planning
- Budgeting and Cost Estimation
- Scheduling
- Resource Allocation
- Risk Management
- Monitoring and Control
- Project Termination

We believe that project management is a core skill set that forms the foundation of the other services offered by Stratom and is the most effective ways to drive execution and strategic development.

As your business landscape changes and evolves, your operations and supply chain must change as well. This change often requires transitions in your internal manufacturing locations, outsourcing your operations, or changing your supply base and logistics. Stratom has helped numerous companies develop, manage, and execute the optimized solution.

Stratom's focus is unique in that we help to drive and manage the execution of your transition. We do not just provide the what, we provide the how. Stratom helps you develop the most effective solution, then jumps in and helps implement the solution.

We provide the program management and the experienced hands to get the job done. By executing on the plan we drive improvement.

Stratom resources have helped companies:

- Move from one Third Part Logistics (3PL) provider to another
- Transition the supply chain to lower cost regions for material cost reduction
- Transition the build and order fulfillment of products into an outsourced manufacturing environment
- Setup new manufacturing operations
- Move facilities and manufacturing location

Our expertise will help you to quickly implement your operational changes, allowing you to quickly obtain your strategic and financial objectives. We provide the experience, risk identification and mitigation, and program management necessary to insure that your transitions are seamless to your operational activities.



Better Technology. Better Results.



ARROW ELECTRONICS, INC.



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The Premier EMS Company®



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