Silicon Support Solutions

- QUICK-TURN PCBA
- INTEGRATED SUPPLY CHAIN MODEL
- ADVANCED MANUFACTURING SYSTEMS
- VALUE ENGINEERING SERVICES
Vexos early involvement in the design cycle can provide customers with a product that is more cost effective and has increased manufacturability, quality, reliability, and overall life-cycle. During our involvement in the product development we'll focus on **4 key stages** (Design Phase, Procurement Strategy, Product Development and Manufacturing) throughout the product life-cycle and provide critical support and feedback to address potential issues and ensure a successful new product introduction.

Our Markham facility located near Toronto, Canada is focused on delivering **Silicon Support Solutions**. It caters to both existing customers who want a quick proof-of-concept as well as emerging companies who need prototypes of their new product. This streamlines the traditional manufacturing process by minimizing non-value-add steps while leveraging robust supply chain and manufacturing expertise.

In addition to providing fast turn-around times, Vexos provides services such as Bill of Materials validation, custom design, product testing, value analysis, value engineering, and supply chain optimization. Additionally, tight integration with new product introduction and production teams means a smooth transition from prototype to manufacturing.

**4 KEY STAGES OF THE PRODUCT LIFE-CYCLE PROCESS**

1. **DESIGN PHASE**
   - Architecture
   - Component Selection – Major (e.g. Processor)
   - Hardware / Software Partitioning
   - High Level Design
   - Schematic Design
   - ASIC/FPGA Design
   - Component Selection
   - Physical Design
   - PCB Layout
   - DFM & DFT
   - Component Selection

2. **PROCUREMENT STRATEGIES**
   - Specialty Components
     - Review
     - Long Lead Times (LLT)
     - Micro Components
     - Memory
   - Active Components
     - Drivers
     - Diodes
     - Transistors
     - Integrated Circuits
   - Passive Components
     - Piezoelectric Devices
     - Crystals
     - Resonators
     - Electromechanical

3. **PRODUCT DEVELOPMENT**
   - Sourcing Strategy
   - Printed Circuit Board
     - Layer Count
     - Materials
     - Impedance
     - HDI / Speed
     - Lamination Type
     - Micro Layer
   - PCB Fabrication
     - Stack-Up
     - Simulation
     - Performance
     - DFF / DFM

4. **MANUFACTURING**
   - Manufacturing & Test
     - Quick Turn Prototype
     - DFM/DFT Feedback
     - Device Level Testing
     - System Integration Testing
   - Customer Approval
     - Approved BOM
     - Pre Build Plan
     - Firmware Plan
     - Test Plan

We provide comprehensive value-engineering services for our customers throughout the entire Silicon Support process. These value-added services include **Engineering Change-Orders**.
EXPERTISE AT DELIVERING SILICON SUPPORT SOLUTIONS THROUGH VALUE ADDED SERVICES:

QUICK TURN PCBA
• 3,5, and 10-day offerings from MCD
• Quick turn Pricing Model

INTEGRATED SUPPLY CHAIN MODEL
• Structured Procurement timed to ensure full materials availability at PCB release and Silicon launch
• Optimize post silicon launch V & V activities

ADVANCED MANUFACTURING SYSTEMS
• Advanced Test capabilities
• Advanced Quality Systems
• Precise Configuration Management
  • Rapid ECN integration
  • Corner Build capability
• Optimize post silicon launch V & V activities

VALUE ENGINEERING (DFX) FEEDBACK
• Pre-Build
  • Reduced lead time and material costs (DFSC)
  • Improved PCB yield and cost (DFF)
  • Improved production stability and predictability (DFM)
• Post Build

ENGINEERING CHANGE ORDERS (ECO) MANAGEMENT
High Mix, High Change Requirements? No Problem
• Responsive, efficient and flexible change management
  • 24-48 hour response.
  • Controlled implementation and traceability

MANUFACTURING
• Manufacturing, Procurement, Planning and Scheduling functions using same tools/software as regular stream production
  • Provides Operations with full visibility
  • Flexibility and Responsiveness
• Progress Reporting
  • Build Status
  • Inventory Status
  • Performance Status
  • Multiple SKU Capability
  • Multiple programs run simultaneously
  • Technical Expertise

CREATING A SUPPLY CHAIN SOLUTION THAT GOES BEYOND “OFF THE SHELF”

DEMAND MANAGEMENT
Effective demand management optimizes Advanced Planning & Scheduling, Capacity Planning and Inventory Management to have reduced liability for the customers.

OUR PEOPLE
• Customer focused Program Coordinator (PC)
• Customer focused Supply Chain Managers
• Central team to support systems, tools and processes

OUR PROCESSES
• VEXOS MPS demand change process
• Demand simulation and constraint analysis toolset
• Demand change impact statements
• Inventory and supply base liabilities dashboard

PROCUREMENT STRATEGIES
• Experienced and focused commodity management team

GLOBAL SOURCING ACTIVITIES
• NPI sourcing & component life cycle management
• Supplier negotiations, terms and AVL awards management
• Implementation of OEM customer controlled awards & terms
• Supply localization for USA, Canada and China product requirements
• Balanced approach to use of distribution and direct procurement

CRITICAL SUPPLY MANAGEMENT
• Critical support role for supplier allocation management
• Supplier escalation to support critical supply issues

CUSTOMER VALUE-ADD
• Support for customer supply chain initiatives
• VEXOS monthly market update
• VEXOS preferred supplier listing (PSL)

COMPONENT ENGINEERING & SUPPLY QUALITY
• NPI support, RoHS compliance & BOM scrubs
• Supplier quality management support
Locations

USA

LAGRANGE, OHIO, USA
MANUFACTURING FACILITY
110 Commerce Drive, LaGrange, OH 44050, USA
+1 440-284-2500

CANADA

MARKHAM, ONTARIO, CANADA
MANUFACTURING FACILITY
195 Royal Crest Court, Markham, Ontario, Canada L3R 9X6
+1 905-479-6203

EUROPE

Malmö, Sweden
EUROPEAN SALES OFFICE
WTC Building, Skeppsgatan 19, SE-211 11 Malmö, Sweden
+46 705 48 26 59

ASIA

DONGGUAN, CHINA
MANUFACTURING FACILITY
Block A, Plainvim Industrial Park, Dongkeng Avenue, Dongkeng Town
Dongguan City, Guangdong, PRC, 523455
+86 769 8101 5368

HCM CITY, VIETNAM
MANUFACTURING FACILITY
Floor 4th, Standard factory B, Tan Thuan street, Tan Thuan EPZ, Tan Thuan Dong ward, District 7, Ho Chi Minh City, 72909, Vietnam
+84 28 3636 2939

HONG KONG
ASIA LOGISTICS
Flat A, 11/F Wing Tai Centre, 12 Hing Yip Street
Kwun Tong, Kowloon, Hong Kong
+852 2304 7900

Markets We Serve

- Communications
- Industrial
- Medical
- Smart Grid
- Security
- Automotive
- Computing
- Aviation Defense Space
- HVAC

Dependable Quality

Vexos achieves the highest quality levels by utilizing the latest equipment, processes, quality standards and certifications across the organization; to enable a flawless launch of each individual program.

- Rigorous selection of sub-contractors or partner factories
- Performance evaluation and monitoring through regular audits of the factories
- Continuous training for personnel at all levels
- Document control to safeguard your data and release of technical documents
- Sample approval process including production part approval process (PPAP)

Certifications

- ISO 9001:2015
- ISO 13485:2016
- ISO 14001:2015
- FDA registered
- OHSAS 18001:2007
- RoHS and Non-RoHS
- IATF 16949:2016
- CGP certification

vexos.com | 855-711-3227