Flextronics Austin Site Overview
Flextronics Austin, Texas, USA – Site Overview

Manufacturing Offering
• Design Services
• PCBA and Test
• Optical Mfg/Test
• DF & Logistics

Site Product and Capability Examples

<table>
<thead>
<tr>
<th>Telecom/Carrer Network Eq.</th>
<th>Wireless Communications</th>
<th>Servers and Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical Subassembly and Splicing</td>
<td>Low to High Complexity PCBAs</td>
<td></td>
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</tbody>
</table>

Site Details | AUSTIN

<table>
<thead>
<tr>
<th>Address</th>
<th>12455 Research Blvd., Austin, TX 78759</th>
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</thead>
<tbody>
<tr>
<td>Notable Customers</td>
<td>Cisco, EMC, ALU, Sonus, Shoretel</td>
</tr>
<tr>
<td>Markets</td>
<td>Networking and Communication, PCs and Servers, Storage/Storage Networking</td>
</tr>
<tr>
<td>Manufacturing:</td>
<td>High Complexity NPI / Prototyping Services; Aerospace and Defense Networking &amp; Optical Americas COE ; Large form factor board/sub-assy, &gt;60K oppy's / board, Hyper-BGA, CCGA high performance</td>
</tr>
<tr>
<td>Site Capabilities</td>
<td>ASIC/Component Technologies; Class 1000 Clean Room for optical assy/ test; Metrology &amp; F/A lab/ capabilities; D&amp;E Design &amp; Test Development; LV/HM, High Complexity, Launch, Stabilization, Flexibility, BTO/CTO</td>
</tr>
<tr>
<td>Logistics</td>
<td>21 mi (34 km) to Airport</td>
</tr>
<tr>
<td>150 mi. (242 km) to Houston</td>
<td>160 mi (257 km) to Dallas</td>
</tr>
<tr>
<td>Certifications</td>
<td>ISO 9001; ISO 14001; ESD20.20, AS9100, TL9000</td>
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Austin Site’s Integrated Full Service Offering

**Product Continuum Approach**

*Enabling value engineering services across product life cycle*

- **Design.**
  - NPI Phase Gate / Launch Process
    - Process/Test Development
    - Concurrent Engineering
    - Pkg/PWB/Component F/A
    - DFM/DFT reports

- **Build.**
  - LV/HM High Complexity Prod/Test
    - Stabilization/Launch & support LCR
    - Acquisition Integration
    - Clean Room Optics / RF Experience
    - Complex BTO / CTO Direct Fulfillment
    - “Best in Class” ROP / Global Hubbing

- **Ship.**
  - Repair / Refurbishment
    - RCFA
    - Reverse Logistics
    - Logistics / Warehousing
    - World Wide COE

- **Service.**

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**Certifications**

- ISO 9001; ISO 14001; ESD20.20, AS9100, TL9000

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*FLEXTRONICS*
## Flextronics Austin
Product Innovation Center

### Address
12455 Research Blvd., Austin, TX 78759

### NPI Operations
Multi-Shifts Running Daily

### Lines
SMT lines / Flexible tools for Backend Processes / Secure BB Areas

### Markets
Networking and Communication, PCs and Servers, Storage/Storage Networking

### Key Deliverables (Using Best Practices)
- Single Focus for NPI Specific Needs: Speed, Flexibility, 1st-Off Quality
- Development of New Technologies and Processes
- Act as a partner during Design Verification and Enhancement
- Develop the assembly and test processes based on Flextronics DFx Expertise
- Transfer the product and processes to any Flextronics facility in the world using FPLC Methodology

### NPI Service Focus
- Comprehensive NPI Services covering the full NPI and Product Launch Life Cycle
  - Small Lot Sizes
  - Quick Turn Deliveries – 5 day standard with Flying Probe, 2D and 5Dx-Ray
  - DFM/DFT Analysis Team and Feedback => Proven Closure Rates
  - 100% Fail Mode Closure: Test => Component => Design => Process... Leverage a Dedicated Supplier Quality Eng
- Diverse Customer / Market Segment Base
**A “Factory within a Factory” for NPI Services**

- Fully Dedicated NPI lines, Customer Focus Teams with Dedicated Technical PMs and Materials Support
- Secure, Controlled-access areas to protect our customers’ new product IP
Flextronics Austin
Product Innovation Center

Site Product and Capability Examples

High IO Connectors

Advanced Packaging

LFF/High Complexity PCBAs

Miniaturization

Consumer Products

Telecom/Carrier Network

Optical Networking
**Comprehensive Services covering the full NPI and Product Launch Life Cycle, including:**

**Early Engineering and NPI Activities**
- Technology Assessment & Qualification
- Collaborative Design Services
- Tight linkage with Flextronics’ Design teams
- Identify and Plan for Vertical Integration services
- Process, Test, and Component/Materials Strategy
- Design Industrialization and DFx
- Process and Test Development
- Rapid Prototyping
- Advanced Failure Analysis
- Product Phase Gate Management
- Risk Minimization and Mitigation
- Pilot and Qualification Focus
- Time-to-market metrics and validation

**Global Product Launch /Product Transfer Support**
- Complex NPI Project Management
- Product Launch Planning
- Leadership and Coordination for Flextronics Resources
- Use Phase Gate/FPLC management system to ensure timely execution and successful product launch

**Flextronics Austin**
Product Innovation Center
Quick Facts:

Full range of Process/Technology Development, Prototype, Pre-Pilot, and Product Launch build activities

Builds:
- Min Kit Size: 1
- Max Kit Size: > 1200 (capable of supporting production ramp)
- Median Kit Size: 20-25 pcs

New Product Launches:
- to Americas Production sites
  - 6 Customer Platforms - w/Multiple Products
- to Asia Production sites
  - 7 Product Platforms - w/Multiple Products
Flextronics Austin
NPI Center to new Product Innovation Center (PIC)

✓ A large and fully dedicated NPI Center to support Customer Development and Product Launch needs
✓ Advanced technology and process development support onsite—with ability to leverage other capabilities within Flextronics worldwide
✓ Comprehensive DFx, Test Development, and other Engineering services provided during the NPI Phase
✓ A dedicated NPI Materials Planning and Procurement team to provide quick acquisition of Materials
✓ A dedicated NPI technical program manager and NPI CFT to support rapid churn, changes, and responsive communication and reporting requirements
✓ A process for managing the development phases from Concept to Production Ramp (FPLC / Phase Gate)
Austin Product Innovation Center

Factory Updates

August 2014
Investing in our NPI capability across the most complex PCBA's and Systems to increase Value-Add and Time-to-Market for our strategic partners
Enhancing NPI Capability

• New PCBA Lines
• Advanced Optical and Structural Testing
• Mechanical & Process Engineering Labs
• Advanced Test Lab - with new instrumentation
• Flexible System Assembly Cells
• Technology Characterization Lab
High Confidentiality – Security Capability

- High Security Processes & Controls
- Line Security 'On-Demand'
- Automated Flexible Wall Partitions/Window shades
- Separate entrances w/ Biometric access
- Ability to 'Lock-Down' Build-by-Build
  - SMT Only
  - Back-end Only
  - Full Line (Thru Test)
Customer Collaboration Rooms / Factory Modernization

- Customer / Engineering Collaboration Rooms
- Product Display Room
- Large Screen Displays for Meetings and Communication
- New ESD Compliance Systems
- Cosmetic Upgrades
Flextronics Austin -- Factory Floor Tour Preparation

Photographs prohibited without authorization

Stay with Flextronics guide and remain on tour path – Do not enter ESD designated areas
Thank you