PCB Design and Manufacturing Services

**DESCRIPTION**

Fujitsu Interconnect Technologies Limited (FICT) provides design, manufacturing, maintenance, and consulting services for printed circuit boards.

As the functionality and performance of network systems, high-end servers, and mobile communication devices improves, the demand for high-performance printed circuit boards (PCBs) is increasing. There have been continuing demands for reducing the size and number of layers in new products. Sophisticated interconnect technology has become essential for meeting these needs by improving the density and reliability of PCBs.

Fujitsu has been a technology leader in this area for a long time. FICT’s MV3 PCB technology combines sequential lamination and build-up structure. Sequential lamination is used to make high-performance, high density PCBs for mounting high pin count packages, and the build-up structure is used to achieve high density PCBs to mount narrower IO pitch packages. The MV3 technology has a small stacked-and-buried via structure to make wiring design highly flexible. Also, it requires two-thirds as many signal layers compared to a conventional board, which reduces the turn around time and production cost.

**PRODUCT OFFERINGS**

PCB Manufacturing (upto 50 layers)
- Modules (camera, PC card, VCO)
- Consumers (cell phone, PDA, video games)
- Computing (PCs, workstations, servers)
- Networking (switches, routers, storage)

Dimensions
- Up to 26" x 28" size
- Up to 0.3" thick

PCB Design Services
Simulation Services
Custom Projects:
- Layer reduction
- Footprint reduction
- Weight reduction
- Variable layers

**WHY FICT?**

Technology leader
- Design
- Processes
- Materials
- Manufacturing

Proven quality at all plants
Global presence and support
Environmentally sensitive design and manufacturing
R&D commitment
Factory expansion and renovation
Long term and reliable partner

PWB for Servers
PCB Design and Manufacturing Services

**FEATURES**

- Thin core
- Embedded placement
- Flat pattern processing
- Parallel process
- Advanced materials
- New lamination process
- High density wiring by stacked via

**BENEFITS**

- Cost reduction
- Time reduction
- Layer count reduction
- High yield
- Increased throughput
- High-speed transmission
- Size reduction

**TECHNOLOGY**

- Multivia technology
- Stacked buildup technology
- Sequentional lamination technology
- Via in Pad technology
- High Aspect Via capability
- Impedance control
- Crosstalk design in
- Improved materials

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**Multiavia Technology Roadmap**

<table>
<thead>
<tr>
<th>MV3</th>
<th>MV5</th>
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<tr>
<td><strong>Sequential build-up structure</strong></td>
<td><strong>Full stacked via structure</strong></td>
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- Wiring ratio 2
- Cost ratio 0.75
- 2,500pin BGA mounting

- Wiring ratio 3
- Cost ratio 0.5
- 4,000pin BGA mounting

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**FICT Factories approved by over 35 Customers**

**FUJITSU INTERCONNECT TECHNOLOGY**

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