



# CUBE CIRCUITS PVT LTD

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Corporate Profile



# About us

Cube Circuits provides Turnkey Design Services to ATE Load Boards, Probe cards , PIB, DIB, MEMS Boards and Burn in Boards. We have Worked in all major ATE Platform and Application boards.

Cube Circuits is committed to maintain customer satisfaction, trust and integrity by delivering best quality and Design services in accordance with industry compliances, Best practices and continuous process improvement.



# Quality Policy

- To fulfill or exceed Customer needs and expectations by delivering a quality product in a dependable and timely manner
- To develop and maintain the commitment to continual improvement and communicate our goals and objectives to every employee
- To encourage a working environment where training and tools are provided for all work to proceed well-organized fashion
- To furnish a system of policies which are periodically reviewed to ensure the ability of all groups to perform their work proficiently



# Design Quality

- IPC Member and Certified Designer
- Dedicated ATE and Application Board Designs team
- Customized tool to reduce the design time
- Component creations as per IPC Standards
- Dedicated Design and Quality control Team
- More than 15 Years of Experience Team
- More than 1000 Design successfully Delivered
- Internal review with Team Lead & Project manager before delivery
- Designs must pass the Internal Quality control check list in all aspects
- Mails will be Properly recorded to avoid miscommunications
- Design instructions will be recorded and followed in every stage
- All the clarifications will be updated in ECO
- Project Review in every stage of design





# Design Services

- Load board and Probe cards
- DUT Interface Board (DIB) and Probe Interface Board (PIB)
- Burn in Boards
- RF boards
- High Speed Digital, Analog and Mixed-signal boards
- Prototype Boards and Evaluation Boards
- Design of Backplanes, Motherboards, and Daughter Boards
- Reverse Engineering
- Design migration from one EDA platform to another
- PCB Manufacturing and Assembly Services



# Skills and Competencies

- Turnkey Design services for Class I Class II Class III Designs
- Well Experienced in all EDA tools
- Fine Pitch BGA (0.4mm), High Pin count BGA Designs
- DSP and FPGA design
- RF Designs
- HDI Designs
- Blind and Buried via technology
- Controlled Impedance
- Designs Designing to the latest Standards for DFM, DFT and ICT
- Close coupling of Differential Pair with Edge coupling and broad side coupling
- Propagation delay matched designs



# Technologies Expertise

- PCI, PCIe
- High Speed USB
- HDMI
- SPI-4
- SATA
- LVDS, RSDS
- DDR2,DDR3,QDR
- Rambus RDRAM



# Test Boards Expertise



- VLCT
- Spread
- RASP



- I-Flex
- Micro flex
- Ultra flex
- Eagle
- Tiger
- J750
- Catalyst



- 94000
- 93000
- 83000
- T5377
- T5335P
- T5365P
- T5586
- T2000



- ASL
- D10
- Quartet
- Fusion
- Sapphire
- Diamondx



- Maverick
- Universal ST
- Magnum
- Magnum II





# EDA Tool Expertise

## Layout Tools

- Allegro
- Expedition PCB
- Altium
- Pads Layout
- Cadvance
- P-CAD

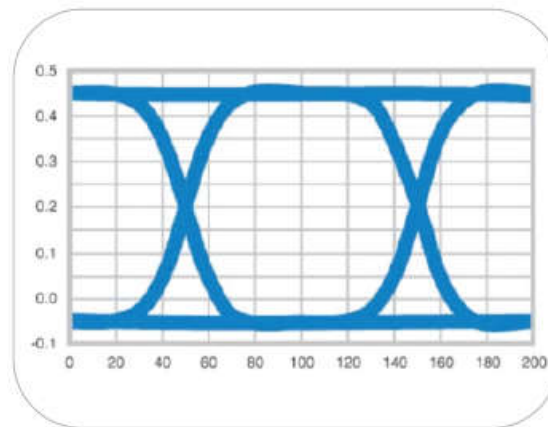
## Schematic Tools

- Orcad CIS
- Concept HDL
- Design Capture
- Pads Logic
- DX Designer

# Board Simulations

Cube circuits specializes in Board Analysis for all types of High Speed and mixed signal Designs. As IC's faster switching designs affect from signal degradation, including over/undershoot, ringing, glitching, crosstalk, and timing problems

Analysis enables engineers to accurately analyze the signals to eliminate signal integrity issues, Thermal and EMI/EMC problems early stage of the design we are doing comprehensive pre and post-layout analysis of high speed Designs and providing the accurate solutions





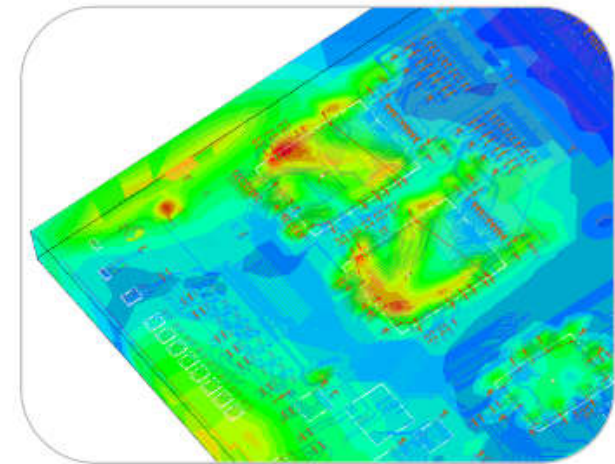
# Signal Integrity Analysis

- Pre Layout and Post layout Analysis
- IBIS model performance range exhibited by the Slow, Typical, and Fast versions
- Validating the logic level, Drive strengths, Termination techniques
- Eye Diagram Analysis
- Timing Analysis Characteristic impedance
- Propagation delays
- Skin-effect and Dielectric Loss
- Interface Compatibility Analysis
- Cross-talk Analysis
- DDRx, PCIe, SerDes Interfaces

# PI/Thermal and EMI/EMC Analysis

## Power and Thermal Analysis

- Plane Noise and IR/DC Drop analysis
- Decoupling Analysis
- Heat sink and cooling Solutions
- Heat transfer mechanisms analysis



## EMI/EMC Analysis

- Frequency V/S dB plot for different standards (FCC, CISPR, VCCI or User specific)
- RE/CE analysis to find out how much the product is emitting
- RI/CI analysis to find out how much the product can withstand external radiation



# Reach Us

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