Aurora System

RZ Ecosystem Partner Solution

Aurora System PCB Verification Services

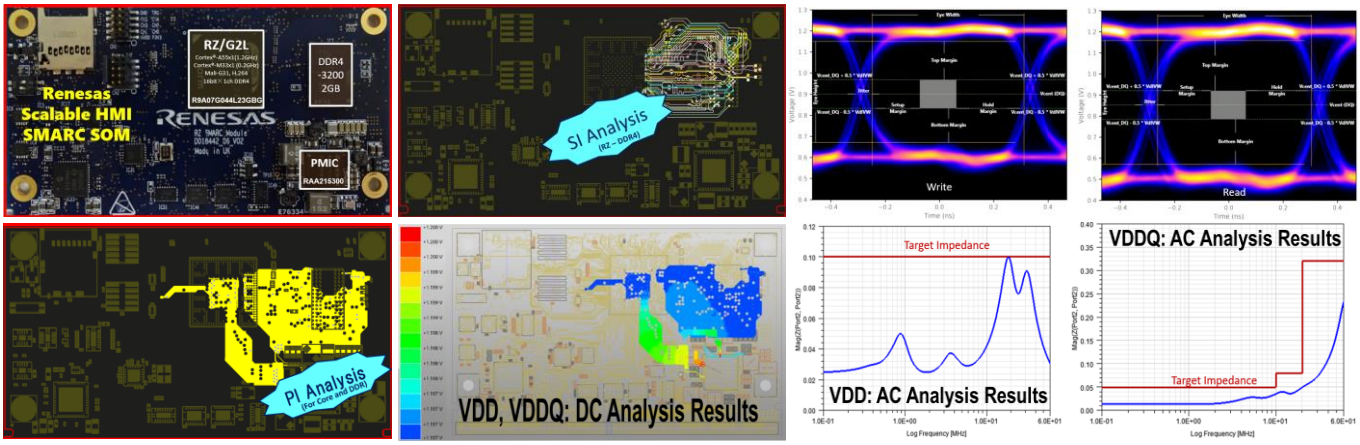
Solution Summary

Based on Aurora's proprietary SI/PI verification platform that incorporates the industrial leading-edge simulation software, our service ensures simulation accuracy and fast turn-around time for the RZ Family of MPUs in which some RZ MPUs have high-speed parallel memory interfaces(DDR4/LPDDR4). Aurora's Signal Integrity (SI) simulation services ensure your PCB design meets the RZ PCB verification guide as well as each interface's specifications. Aurora's Power Integrity (PI) simulation services veri.fy your PCB design meets based on the RZ power verification guide.

Features/Benefits

- High-Speed Parallel Interface Analysis – DDR3/DDR4/DDR5/LPDDR4/LPDDR5/ONFI
- High-Speed Serial Interface Analysis – PCI Express/HDMI/MIPI/USB/Ethernet etc
- Low-Speed General Purpose I/F Analysis – I2C/SPI/I2S etc
- Power Integrity Analysis – AC/DC/Transient Analysis, Decap Optimization
- Thermal Analysis / EMI Analysis

Diagrams/Graphics



Target Markets and Applications

- IoT applications
- Consumer electronics
- Artificial intelligence
- Computing infrastructure
- Industrial controls
- Smart buildings
- HMI
- Communication

https://www.aurora-system.com/en/

2024.12

Aurora System

Aurora System Inc.

- **Company Information**
  - Established : 2016
  - Headquarter: San Jose, CA, USA
  - Development Office : USA, China
  - Sales, Support Office: USA, Japan, China Taiwan, Singapore

- **Aurora System Business**
  - LSI, Package, PCB Co-simulation Service, Consulting Service, Verification Platform Development
    - High-Speed Parallel Interface Signal Integrity Analysis(DDR3/4/5, LPDDR4/4X/5)
    - High-Speed Serial Interface Signal Integrity Analysis (PCIe, MIPI, HDMI, USB, ...)
    - General I/O Signal Integrity Analysis (I2C, I2S, I3C, ...)
    - Power Integrity Analysis (AC/DC/Transient Analysis)
    - Thermal / EMI Analysis

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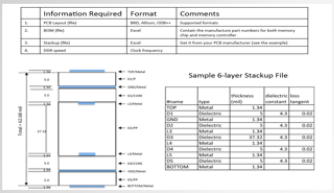
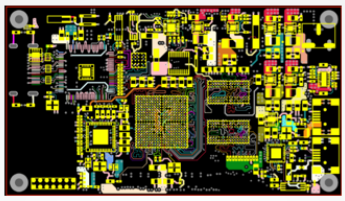
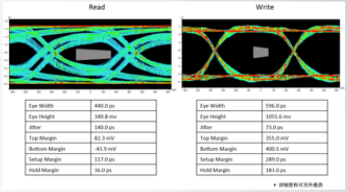
Simulation Service Process







Customer Submit Design Data to Aurora

- Support most of PCB and package design format (Cadence, Mentor, Altium, ANSYS, ...)
- BOM and stack-up
- IBIS, IBIA-AMI, SPICE, Package..

Aurora Perform Simulation And Verification Analysis

- DDR: DDR3/4/5, LPDDR4/5/4x/5x
- SerDes: PCIe, MIPI, HDMI, USB
- GPIO: I_2C, SPI, SPMI, I_2S, ...
- PDN PI analysis, Optimization
- Extract SI/PI package model

Return Verification Report To Customer

- SI report
  - Impedance, Delay, Skew, Eyediagram
- PI report
  - DC/AC analysis, broadband model
- Package model
  - RLCG and broadband model

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