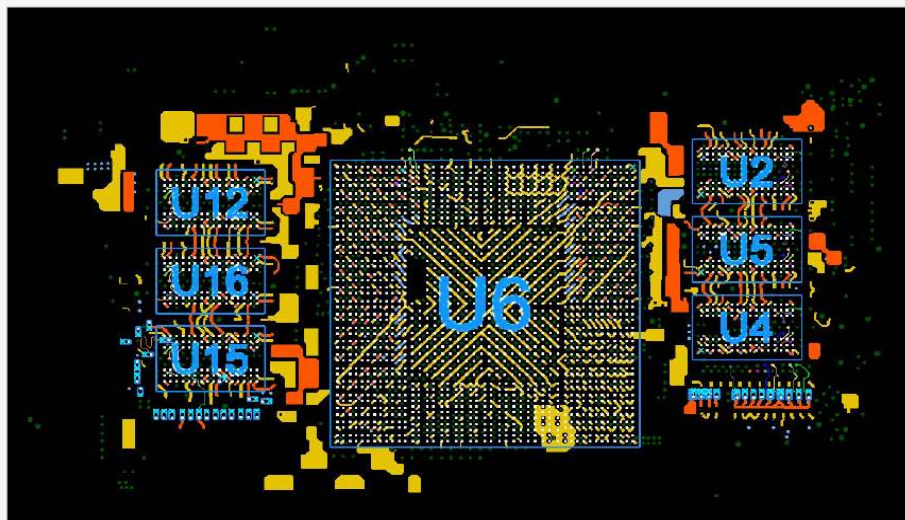




## Overview

EMWave is a fully integrated, power integrity (PI) and signal integrity (SI) analysis tool for electronic packaging and printed circuit board (PCB) design. By the means of three-dimensional (3-D) modeling and finite-element method (FEM) analysis, EMWave can perform 3-D, full-wave model extraction and power and signal integrity analysis, which includes DC (static), AC (frequency domain) and transient (dynamic) analysis.

By using EMWave to import the physical database of a design from various CAD tools, display the imported layout graphically and list its material parameters, the designer can modify the package/PCB design. EMWave discretizes the 3-D physical model and then solves Maxwell's equations to extract resistive SPICE models or broadband S-parameters from the discretized geometries by FEM method.



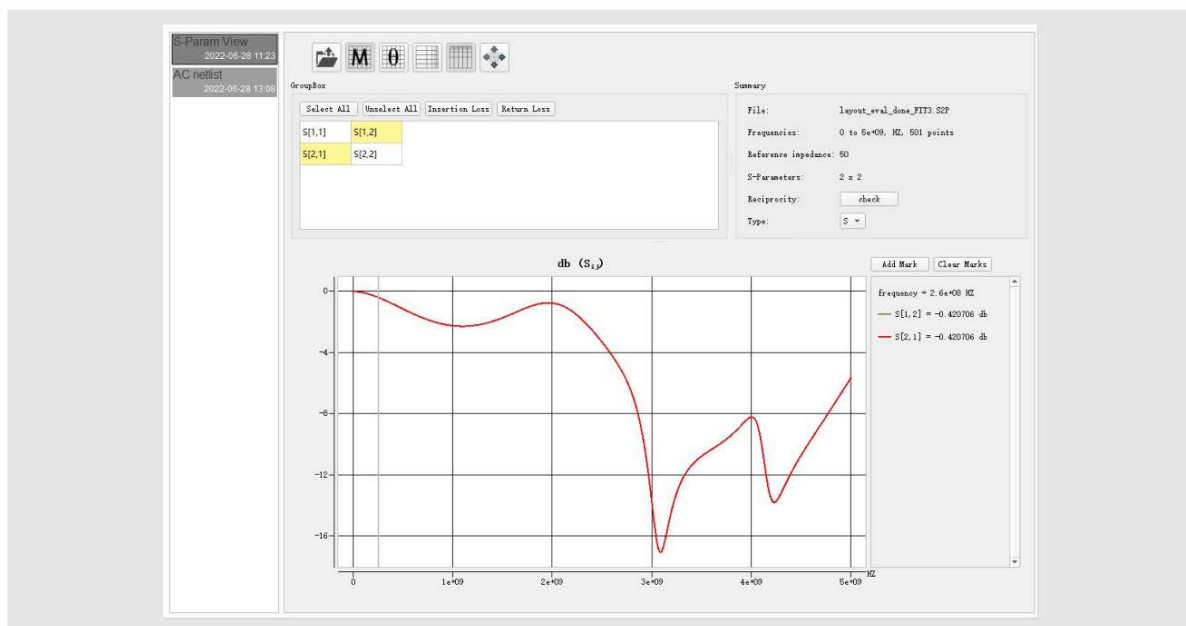


## Main Function

- 3-D, full-wave network extraction, power and signal integrity analysis.
- IC/package/PCB co-analysis with seamless integration of Chip Power Model (CPM) and other sub-circuit based models.
- Built-in S parameter post-process tool.
- DC (static IR-drop), AC and transient (dynamic IR-drop) analysis.
- Fitted circuit model conversion from S-parameters.
- Current density, resistance check, impedance analysis.

## Supported Design Input

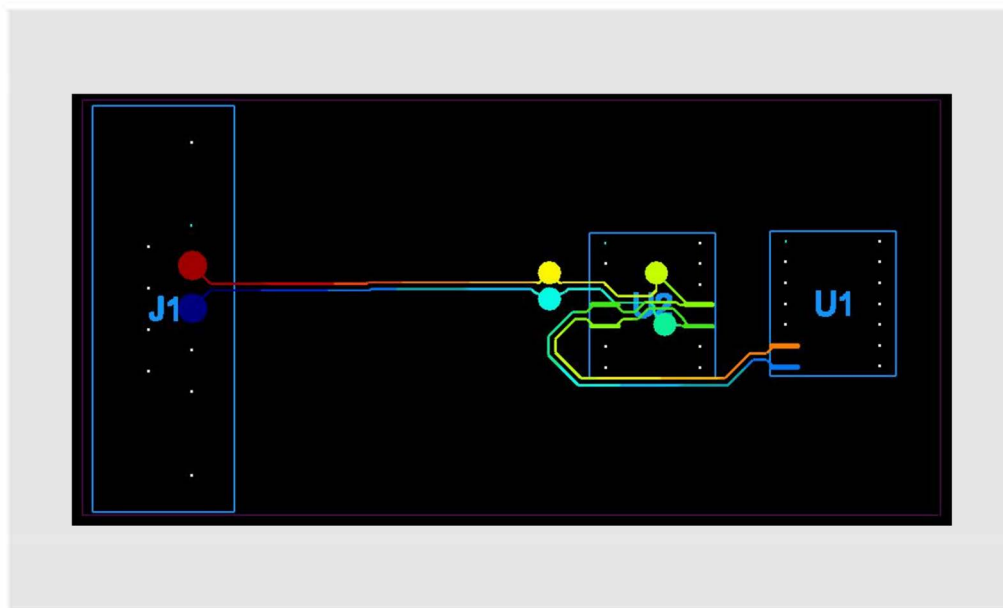
- Cadence APD, SiP, Allegro
- Zuken RIF, CR-5000
- AutoCAD DXF
- Mentor Graphics Board Station, PADS, Expedition
- Mentor ODB++
- Leadframe
- Cadence APD, SiP, Allegro





## Outputs

- Touchstone S, Y, Z parameters
- Static IR-drop analysis map
- Resistance SPICE model
- Current density map
- Time-domain dynamic voltage-drop analysis



## About Julin

Founded in March 2019, Julin is a provider of auxiliary software for electronic system and integrated circuit design, committed to create full-process system-level EDA products to support leading companies with simulation platform and meet the needs of cutting-edge industry in electronic system and integrated circuit design with super high-accuracy, high-speed and large-capacity solutions.

### **Julin Technology Co., Ltd.**

Address: Building 7, 3 Floor, Shengrong Road 88 lane,  
Pudong New District, Shanghai, China

Emails: [sales@julin-tech.com](mailto:sales@julin-tech.com)

For more information, please visit us online at  
[www.julin-tech.com](http://www.julin-tech.com)