

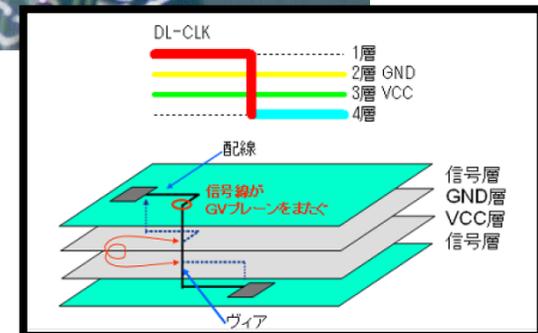
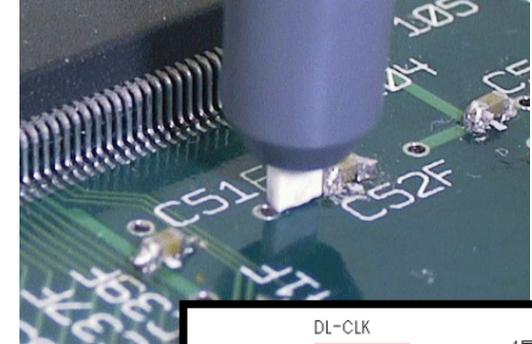
「EMISStream*」 Overview

Eliminate possible EMI issues at the initial PCB design stage

EMISStream is an EMI Design Rule Check and Plane Resonance Analysis tool that can suppress undesirable EMI generated from PCB at the initial design stage. Effective and high-speed analysis using NEC's various patents improve PCB design quality.

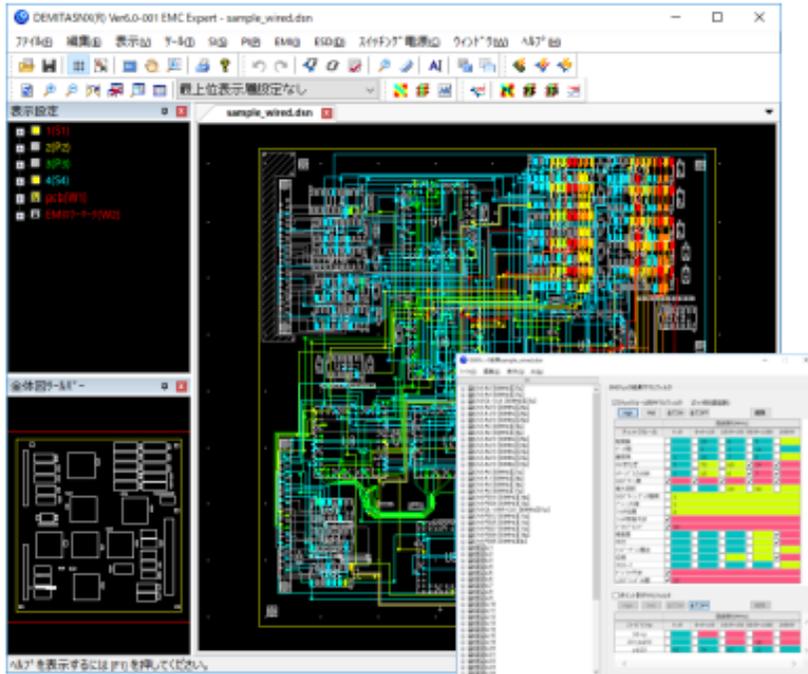
- ◆ No EMI expert knowledge needed
- ◆ Rule checker scans the whole PCB at once
- ◆ Thresholds are set with efficient default values through research results obtained by NEC laboratory
- ◆ Effective and high-speed analysis improve design quality

*EMISStream which Japanese version is called DEMITASNX



「EMISream」 Overview (Main features)

EMI Rule Check

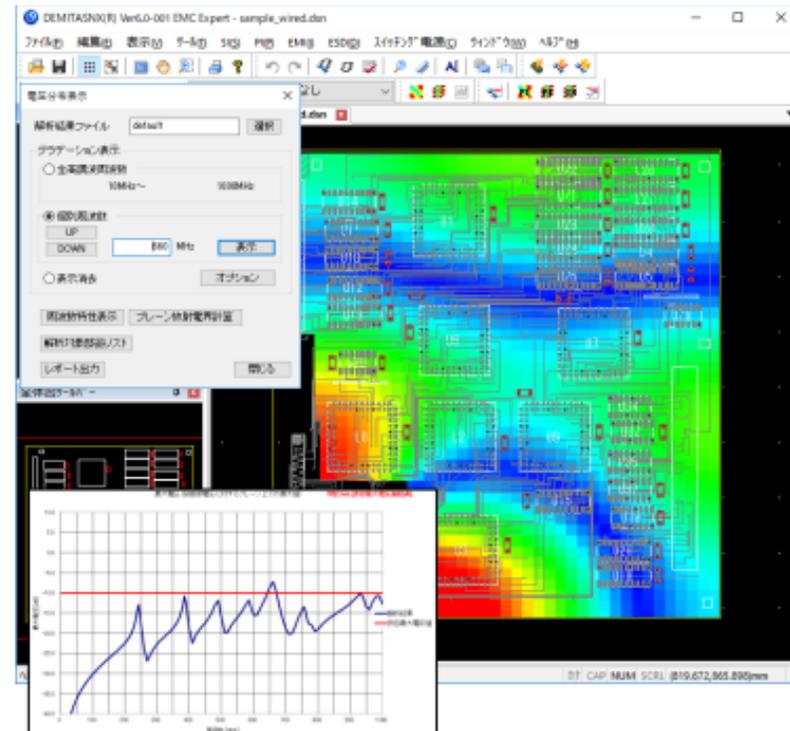


- Detect trace and component placement where generate EMI traces
- Advice on how to fix the problem



**Improve design quality
Shorten the review time**

Power/GND Resonance Analysis



- Visualize Plane Resonant Condition between the power/ground planes



**Verify capacitor placement
and effect at the same time**

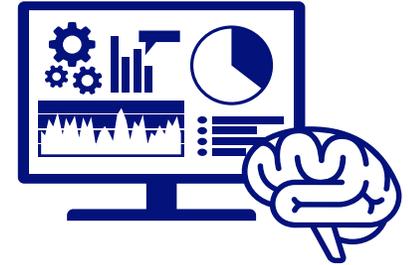
EMISStream : Overview (Additional features)



■ Narrowing EMI check results down using AI

EMI check results can be narrowed down to significant errors using AI.

- AI judgment reduces the number of errors by about 75% (review time is also reduced by 75%)
- Designs do not rely on the discretion of individual designers (reduces variation in quality)



■ Cross probing between EMI check and schematic

Allows bidirectional searching and highlighting of data by linking EMI check results to the schematic (nets, parts, and pins).

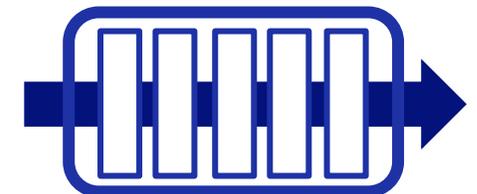
- EMI check results can be traced using the schematic diagram.



■ EMI check batch execution function

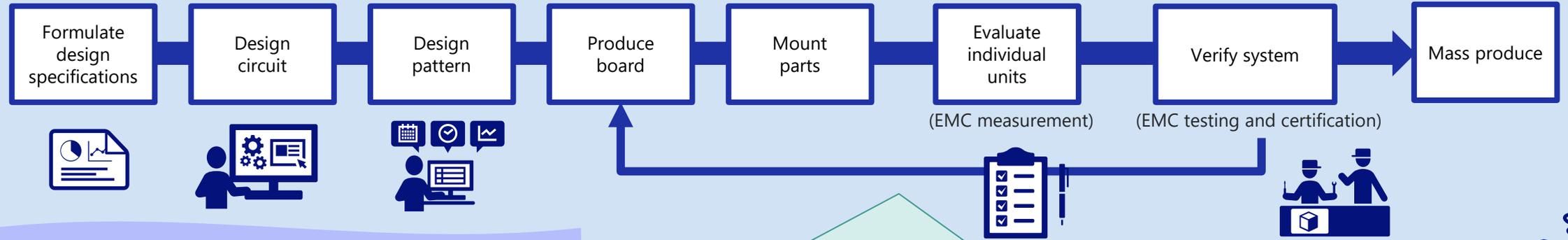
EMI checks can be executed from the command line.

Preconfiguration information is automatically completed and can be executed simply by preparing CAD data.



EMISStream : Environmental Assessment (Model case)

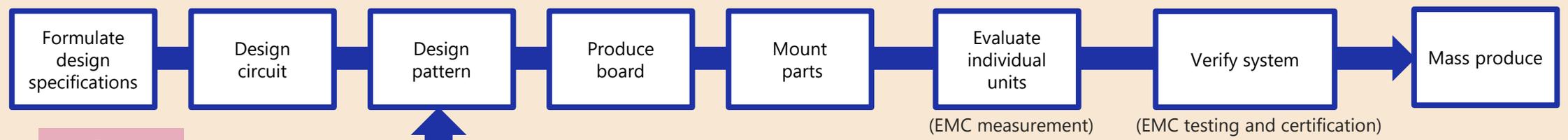
Before



- Expertise required
- Difficult to analyze the entire board
- Know-how is needed to extract analytical models

If noise countermeasures are taken after mounting the components, additional cost and time will be required for reworking this segment.

After



- EMISStream**
- **EMI check** *No specialized knowledge required* (AI-based refinement, cross-probing, batch execution functions, etc.)
 - **Power/Ground resonance analysis** *NEC research results are included as standard* (status visualization, high-speed analysis, report output, etc.)

Significantly reduce overall costs by reducing the number of components requiring EMI countermeasure, shortening evaluation and testing time, and other factors

Environmental Assessment (Percentage of CO₂ emissions reduced)

- ◆ The EMI check function allows problem areas to be identified and corrected prior to board production, reducing the number of board revisions and tests required. In addition, review time can be reduced by using artificial intelligence (AI) to make judgments based on the know-how of experienced engineers; the number of components requiring EMI countermeasures can be reduced by improving design quality; and overall costs can be reduced by shortening evaluation and testing time.

