

Characteristics of the EMStream EMI Check

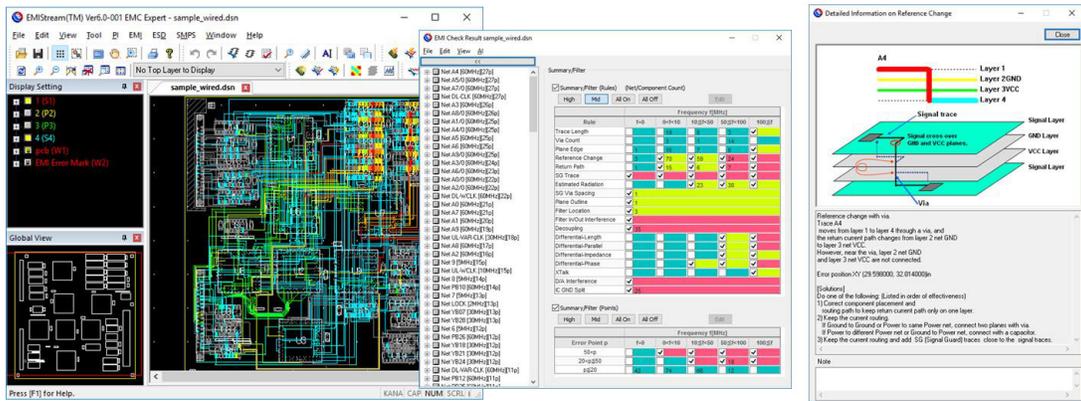
EMStream EMI Design Rule Check enables you to front-load EMI countermeasures in the design phase. Using the EMI Check can reduce work-hours, eliminate human error, and improve design quality.

NEC's design expertise and research results come as standard.

The EMI Check has 15 design rules verified by NEC Laboratory and local and overseas university researchers with a logical background. There are six design rules for checking the trace, five for checking the return current paths, and four for checking the power plane. They cover the design rules required for high-end PCB. The necessary parameters and thresholds for the Design Rule Check are set with efficient default values through product development experience and research results. This means you can use it immediately without the need for specialized EMC preconfiguration.

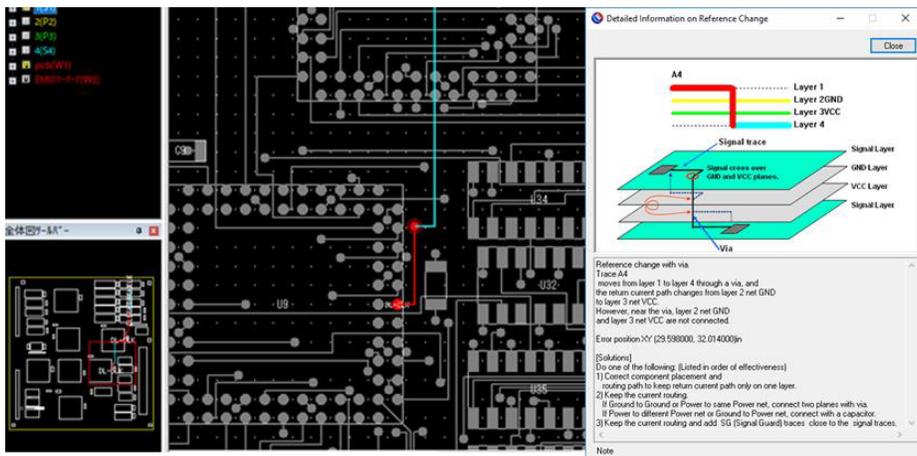
Check Items (15 Rules)

Trace Check	Return Current Path Discontinuity Check	Power Plane Check
1. Trace Length	1. Reference Change	1. Grounding Vias Along Plane Outline
2. Via Count	2. Return Current Path Discontinuity	2. Decoupling Capacitor
3. Estimated Radiation	3. Traces Near Plane Edge	3. Digital/Analog Interference Check
4. Differential Signal	4. SG Trace	4. IC Ground Split Check
5. XTalk	5. SG Via Spacing	



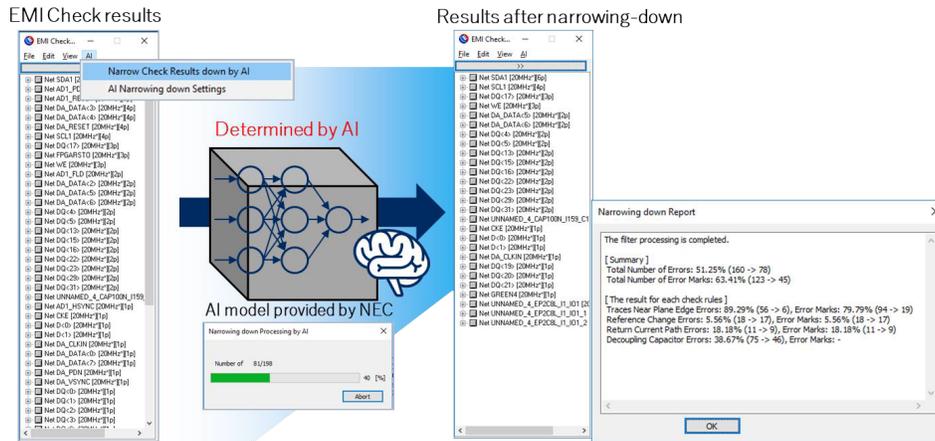
Simple, User-friendly Operability

As for EMI Check results, errors are highlighted/zoomed. At the same time, descriptions of the errors and advice on preventing them make it easy to recognize defect points. Correcting the layout according to the provided advice makes it easy to prevent EMI.



The AI function, which has learned EMC consultants' specialist knowledge, also enables you to narrow down to the most important errors. This enables error screening and countermeasures equivalent to those employed by EMC experts.

Integrate the design review know-how of the EMC Expert into AI
Narrowing EMI check results down only to be significant errors using AI



- The number of errors reduces by **75%** (Review time: **75% cut**).
- Design quality can be improved because the dependence on humans can be reduced.

Effects of introduction

Case of reducing radiation noise as well as the cost and evaluation period.



EMI Countermeasure cost decreased to 1/10

Evaluation Term reduced from 10 days to 3 days

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