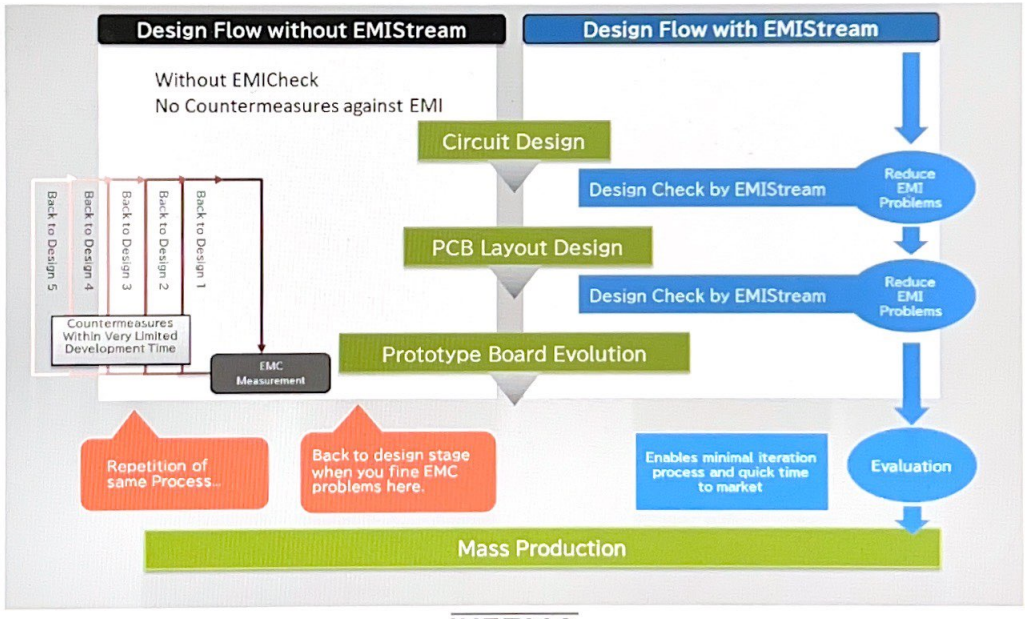
Advantages of EMIStream

1. Reducing Iteration Process

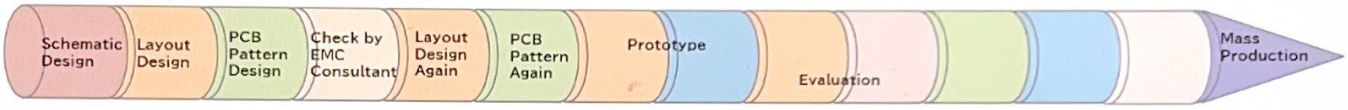


Sample Effects

Effect-1: Cost Saving

Cost effective approach by reducing iteration processes for design/test phase and the number of components for EMI suppression.

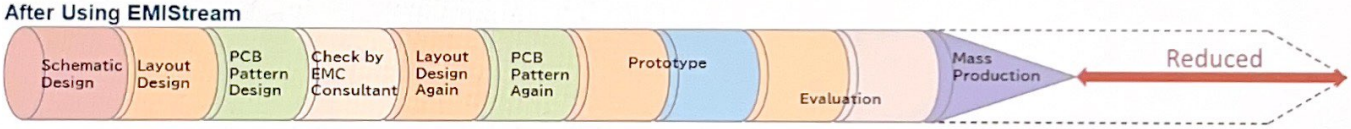
Before Using EMIStream



Once every 3 weeks, repeat 2 or 3 times (approx. 150,000 USD)

Time of re-routing design
2 to 3 weeks + Prototype creation
Costly solution by chassis, filter
Abt. 30 filters / 1 board (approx. 5 USD) Shipping Products: 1,000 sets × 8 boards = approx. 40,000 USD

After Using EMIStream



Site test	One time only ($50K)	Down by apprx. $100K
Time of re-routing design	Few days + Prototype creation	Down by several $Mil.
Costly solution by chassis, filter	Reduced the number of filter	Down by apprx. $40K

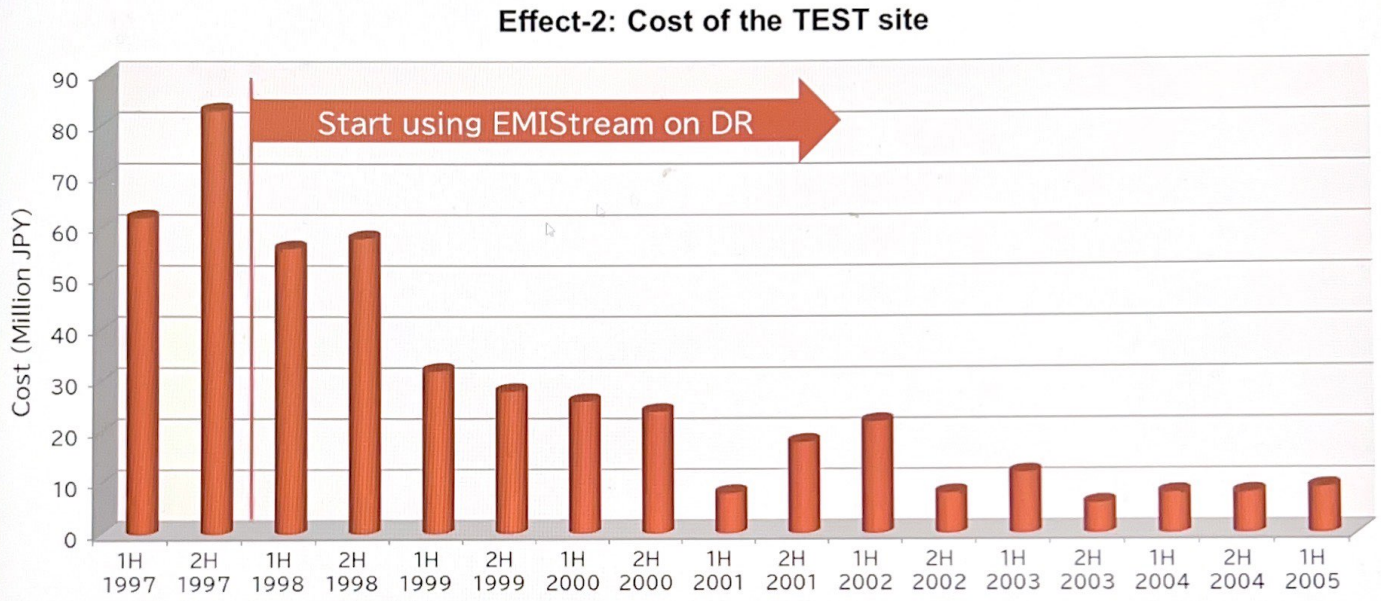
Down by **$200K total** Per One Product

ALTIUM DESIGNER

iNFOMA TEKNOLOJİ A.Ş.

EMIStream

Sample Effects



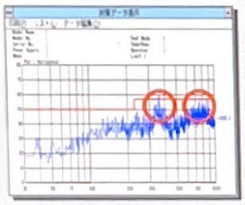
Sample Effects

Effect-3: Time Saving

Shorter evaluation and countermeasure time for EMI problems by reducing the time of prototype PCB creation

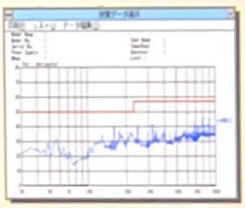
Before

- Excess 2.5dB at worst case



After

- Keep the margin



EMI Countermeasure cost decreased to 1/10

Evaluation Term 10 days → **3 days**

Background of Development

Complicated EMI Problems

Collaboration with NEC Lab. & University To Develop EMIStream!

NEC had More than 150 rule items in total.
- Investigated and Boiled Down to 15 Design Rules

Plane resonance is one of the dominant noise factors.
- Established plane resonance analysis method

EMI Design Rule Checker

Plane Resonance Analyzer