

ELECTROMAGNETIC COMPATIBILITY / PRODUCT SAFETY

EMC-compliant printed-circuit-board design (On-Board EMC)

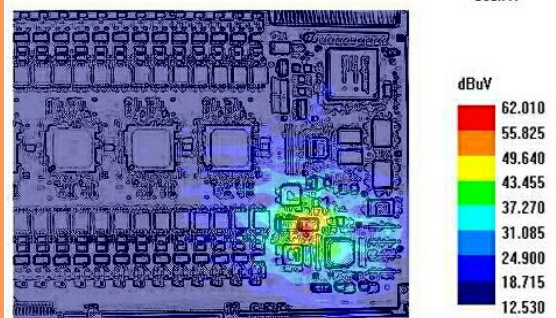
An EMC compliant printed-circuit-board layout saves both time and money – for redesigns, filtering and shielding. An EMC-design checklist is just the first step. Computer Simulations together with specific measurements on the prototype board enable a design to cost.

Design to cost

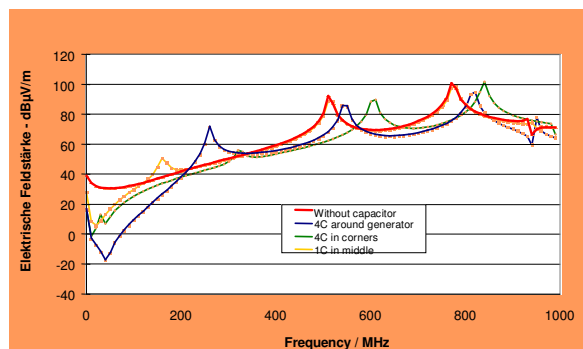
- Comparison of the effectiveness of different EMC strategies
- Development of more cost-effective EMC procedures

Layout optimization

- Simulation and optimization of critical coupling paths
- Examination and optimization of the grounding concept
- Pre-compliance measurements
 - E and H – near field surface scans
 - Radiated emission at a distance of 3 m
 - Strip-Line Emission and Immunity Measurements
 - Interference voltage
 - Power Ground Noise
 - Comparison with predecessor boards



Surface scan of the magnetic field, $f=141$ MHz



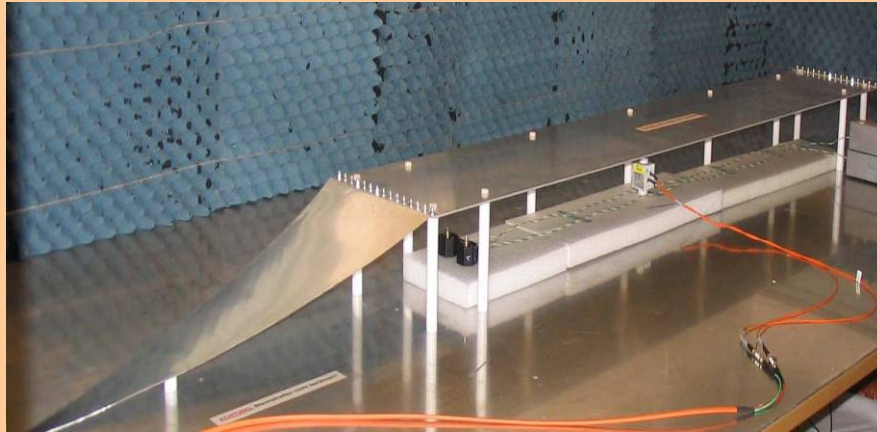
Parameter study on effect of decoupling capacitors

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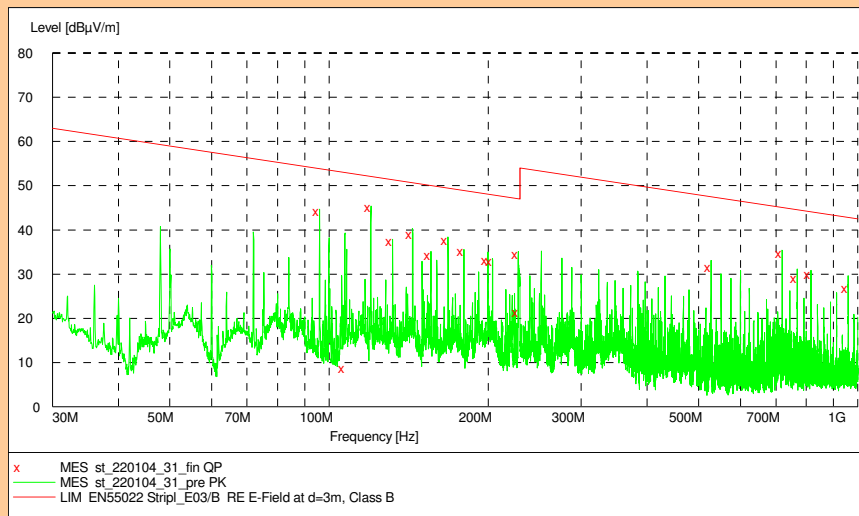
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EMC-qualified layout for printed circuit boards (On-Board EMC)



Strip-Line Immunity test



Stripline Emission Measurements