

# EMC Services

## Description

In addition to our software and hardware engineering services, StreamUnlimited is offering its full EMC facilities and expertise to external customers.

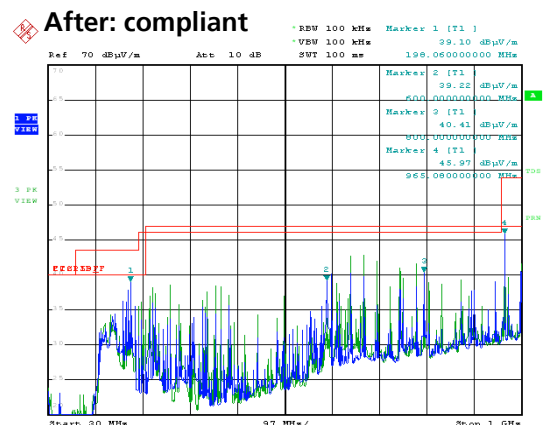
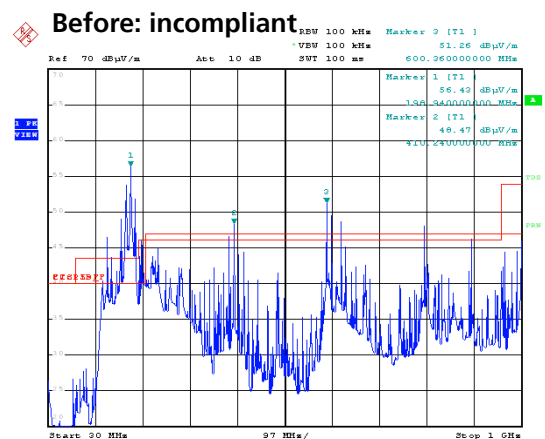


## Our EMC Services

- EMC consultancy also at customer's location.
- Product architecture - EMC review: Identify potential EMC issues already in the early stage of development; Define solutions upfront to avoid costly and time consuming debugging.
- Product/board development support: Define ground and supply topology and decoupling, optimize layer stackup and routing of high speed buses to achieve compliance and fulfill technical specification at lowest cost.
- EMC debugging: Analysis and fixing of issues
- Pre-approbation measurements to ensure that formal approbation is passed smoothly and with short throughput time at low budget costs
- Product certifications in cooperation with notified bodies/external test houses
- Product lifecycle support: Ensure that legal and quality requirements are fulfilled during product lifecycle, check impact of process variations or design changes.

## Measurements of products and modules

- active radiation: free field (3m) and conducted radiation
- passive radiation: susceptibility to external electrical fields
- ESD (electrostatic discharge) measurements, mains interruption and spikes
- self pollution (internal disturbance of modules, e.g. analog or digital radio or TV parts)
- GSM immunity
- Wi-Fi (WLAN) compliance measurements



# EMC Services (cont.)

## Supported standards

- Active and passive radiation standards
  - Audio and Video: EN 55013, EN 55020
  - Internal EMC (self pollution) - self - and customer - defined methods and limits
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- Information Technology Equipment: EN 55022, EN 55024
  - Industrial/Scientific/Medical: EN 55011 and collateral standards
  - Household appliances and similar devices: EN 55014-1, EN 55014-2
  - Electrical lighting and similar equipment: EN 55015
  - Automotive (vehicles): CISPR 12, ISO 11451, ISO 11452, (partial or substitutional methods), CISPR 25, ISO 10605
  - Generic equipment: EN 50081, EN 50082
  - Wireless cards and equipment: ETSI norms
  - For all equipment:
    - Mains harmonics, voltage fluctuations and flicker
    - Equipment for USA and Canada: FCC 15

## Our Test-Equipment and Test-Harnesses

- Dedicated measurement setups and equipment for all above mentioned standards
- 20m<sup>2</sup> pre-compliance absorber chamber for radiated and immunity measurements
- 5x2.5m<sup>2</sup> shielded room for various legal measurements
- Equipment up to 7 GHz for ETSI wireless module and product measurements
- Special (quick) substitution probes for pre-compliance measurements
- Automated measurements and reporting (GPIB equipment, LabVIEW, etc.)



## Further information

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