

New DaRule is a like a gospel of DRC-design rule checks for technocrats, it is prepared with excellent practical innovative approaches that have been proven and time tested with leading industry experts.

"Controlling Complex Conducted and Radiated Emissions and Cross Talk with Innovative and Practical Approaches". Also called, how to Achieve Electromagnetic Compatibility with Innovative and Practical Guidelines.



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## 1.0 OVERVIEW

The purpose of this document is to emphasize the significance of EMI / EMC control techniques. The approach will be to discuss most / all of the options of controlling EMI by excellent design techniques, and then a practical and creative approach should be selected. In case of EMI sensitive designs such as radio/TV receivers, audio and video amplifiers all specific design guide lines will be required to be adhered to, since the nature of the product, it uses RF and IF amplifiers.

Designing for low EMI from the start of a project results in much easier and less expensive solution than attempting to fix (or Band aid) EMI problems after a design has reached the testing phase of development. Consequently, following a few guide lines in some cases for printed circuit board (PCB) design at the beginning of a project can help to control the systems' EMI while adding little or no cost to the system and also saving tremendous amount of project's cycle time.

## 1.1 LIST OF ACRONYMS

Acronym (s)	Description
A/m	Amperes per meter
AC	Alternating Current
AM	Amplitude Modulation
ANSI	American National Standards Institute
CE	Conducted Emissions
CPU	Central Processing Unit
CS	Conducted Susceptibility
CW	Continuous Wave
dB	Decibel
dBuA	Decibels of Micro-Amperes
dBuV/m	Decibels of Micro-Volts per Meter
DC	Direct Current
E/O	Electrical-to-Optical
ESD	Electrostatic Discharge
DRC	Design Rule checks
EEE, E3	Electromagnetic Environmental Effects
EMC	Electromagnetic Compatibility
EMI	Electromagnetic Interference
ESD	Electrostatic Discharge
ETSI	European Telecommunications Standards Institute
EUT	Equipment Under Test
FCC	Federal Communication Commission
GHz	Giga-Hertz

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