

# Leakage Suppression and Noise Filtering Techniques for LCD Monitors

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## ABSTRACT

The request for high quality multimedia products of recent customers is higher and higher, for LCD TVs are all over the place. Though digital multimedia can provide better audio and image quality than analog does, it also confronts the problems of interference of radiations and anti-interference. Digital multimedia instruments, in particular, controlled by digitalized signal, which is entirely proceeding by low power and low voltage integrated circuit, have worse abilities to fight against interference. Auto-shutdown, reboot, mosaic and non-image by the noise in the environment are easily caused. Moreover, it influences the functions of peripheral products. Take home used wireless phones and DVD players for examples, they often confront interference when they are too close to LCD TVs. Above all, whole courses of preventing LCD Display/TV electromagnetic compatibility (EMC), methods to prevent the filter from electromagnetic interference (EMI), approaches to debug electromagnetic compatibility, as well as real researched samples of debugging and preventing electromagnetic compatibility are introduced in the paper. At last, effective measured strategies and designed techniques to debug electromagnetic interference, which could be refer to future development of LCD Display/TV products, are illustrated by LCD Displays/TVs made in our company. If the strategies to prevent electromagnetic compatibility are well organized incipiently, LCD Display/TV products can pass electromagnetic compatibility identification as soon as possible and strive for the best time to enter the market.

Keywords : LCD TV ; EMC(electromagnetic compatibility) ; EMI(electromagnetic interference)

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