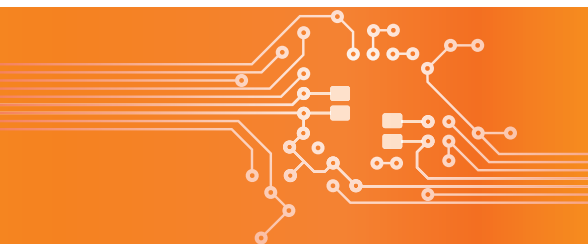




Success Story

www.optenni.com



Company Name

Amphenol SAA

Contact

Zlatoljub Milosavljevic, R&D Manager

Application

Antennas

Company Profile

Amphenol SAA is the leading designer and manufacturer of antenna products used on mobile terminals with high performance, miniaturization and quality at a low cost. The company designs, manufactures and markets stubby antennas, internal antennas, retractable antennas and more, used for mobile phones, Bluetooth, WLAN, PDA, GPS, telematics, M2M & other wireless communication systems.

More Info

www.amphenol-saa.com

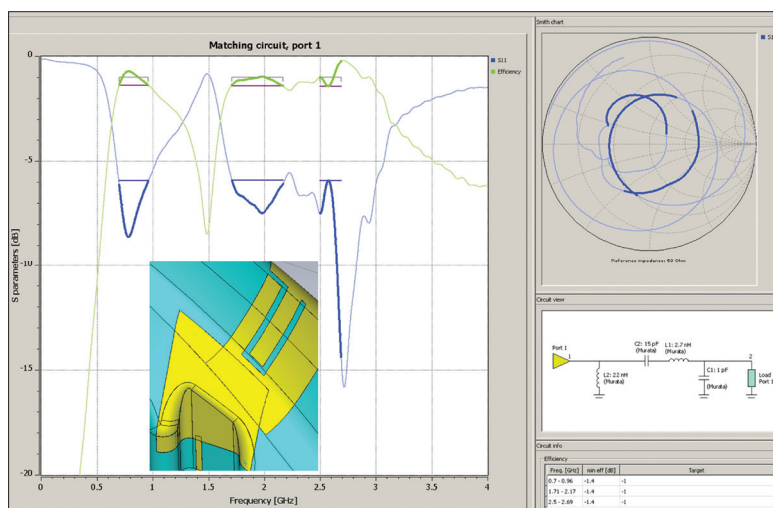
Amphenol SAA Designs Optimum Matching Circuits With Optenni Lab

The Design Task

Amphenol SAA uses Optenni Lab™ for designing matching circuits of antennas for different wireless applications such as smartphones, tablets, laptops, M2M and vehicle applications. One of the main design challenges is to design a very broadband antenna with typically small antenna volumes. This is especially pronounced nowadays in LTE/MIMO applications. Global LTE coverage with 10+ bands to cover with a single-feed antenna creates a challenge for an optimum antenna matching with minimum insertion loss.

The Optenni Solution

Optenni Lab allows us to create matching circuits with minimum number of components and minimizing added insertion loss, resulting in maximum antenna efficiency. This is especially important for very challenging antenna impedances. Key to the successful design is the use of realistic component libraries as well as good optimization algorithms. We also found additional features like bandwidth potential and electromagnetic isolation really valuable in characterizing the unmatched antennas. Optenni's customer support is very knowledgeable with prompt replies.



Multi-resonant antennas often have complex geometries to cover multiple LTE bands. Optenni Lab provides optimized matching circuits using realistic component models from many vendors. Small mechanical changes can be compensated for by reoptimizing the matching circuit.

“Optenni Lab is helping us to create optimum matching circuits, allowing less component adjustments in the prototyping phase and faster time to market for the final product.”

Zlatoljub Milosavljevic, R&D Manager, Amphenol SAA