



Visual System Simulator Success Story

S5 Wireless increases wireless design productivity using VSS

Customer Background

S5 Wireless is a leading provider of wireless technology, pioneering products and infrastructure to change the dynamics of wireless communications for the tracking and monitoring of remote and mobile devices. S5 Wireless provides a new low cost, long battery life capability for wide area location, tracking, and telemetry services. Applications include asset tracking, security, personnel tracking and monitoring, pet tracking, military applications (blue force tracking, asset tracking, security, monitoring), and a host of other applications for a variety of monitoring and tracking needs.

The Design Challenge

I am designing radio architectures and need to visualize and simulate implementation details of the architectures using different modulations. I need to evaluate system performance with real-world impairments including DSP limitations and non-ideal circuit implementation. I must also quantify the

performance impacts of channel interference, noise, jitter, etc. to optimize the design, so I need to be able to simulate these effects in order to optimize my design.

AWR Solution

Prior to adopting AWR's Visual System Simulator software, I was building FPGAs and testing them in the lab, trying to integrate RF/analog/digital on hardware test benches, and simulating with disparate tools that were not integrated. With VSS, I have an excellent RF tool combination in an open design environment that enables me to quickly and accurately co-simulate circuit performance at the system level. VSS has helped me deliver higher quality products while at the same time significantly cutting my design time.

Customer:

S5 Wireless

Application:

**Wireless location tracking
and telemetry systems**

AWR Products:

Visual System Simulator™ (VSS)



"VSS has increased my productivity by providing more accurate results while at the same time cutting design cycle time. The software offers an intuitive design flow that has allowed me to quickly evaluate modulation schemes and radio/RF/DSP architectures, and has helped us optimize our system engineering design flow."

Sy Prestwich

Vice President & Co-founder, Chief Scientist

S5 Wireless

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