Sirius Wireless Partners with S2C on Wi-Fi6/BT RF IP Verification System for Finer Chip Design
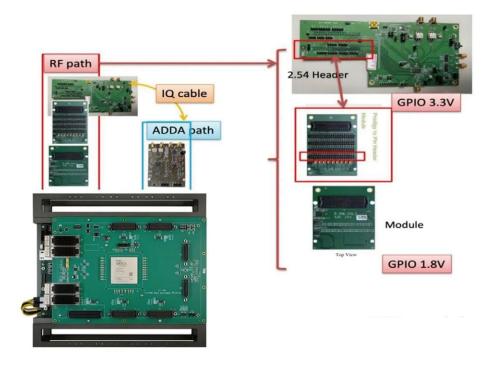
Sirius Wireless, a provider of RF IP solutions, collaborated with FPGA prototyping solutions expert S2C to develop its Wi-Fi6/BT RF IP Verification System, aiming to improve work efficiency and reduce time-to-market for their clients.

The emergence of Wi-Fi6, a wireless connection technology (WCT), has unleashed unexpected potential, particularly in the IoT and intelligent hardware markets. Compared to Wi-Fi5, Wi-Fi6 enables 40% faster data transmission speeds, increased device connectivity, and improved battery life, making it widely adopted in IoT devices. Due to the specialized RF IP technology behind Wi-Fi6, only a few companies can provide such technology with Sirius being one of them.

Leveraging S2C Prodigy S7-9P Logic System, Sirius Wireless designed the Wi-Fi6/BT RF IP Verification System with AD/DA and the RF front-end AFE as separate modules. The company then used Prodigy Prototype Ready IP which are ready-to-use daughter cards and accessories from S2C, to interface with digital MAC. This design approach reduces the complexity of verification design by allowing the modules to be individually debugged. In addition, the system can serve as a demonstration platform prior to tape-out to showcase the various RF performance indicators, including throughput, reception sensitivity, and EVM.

S2C FPGA prototyping solutions greatly benefit customers in accelerating their time-to-market by shortening the entire chip verification cycle. S2C customers can conduct end-to-end verification easily by leveraging the abundant I/O connectors on the daughter boards. An example of such benefits is Sirius's development of its IP verification system. With this system, one of Sirius's customers on short-range wireless chip designs spent only two months to complete the pre-silicon hardware performance analysis and performance comparison test. The company thus saves over 30% in its production verification time and its customers' product introduction cycle.

"S2C has more than 20 years of experience in the market." said Zhu Songde, VP Sales of Sirius Wireless, **"Their prototyping solutions are widely recognized around the world. With S2C's complete prototype tool chain, we can speed up the deployment of prototyping environments and improve verification efficiency."**

S2C is committed to building an ecosystem with their partners. **"We realize that a thriving ecosystem is crucial to market expansion."** said Ying Chen, VP of Sales & Marketing at S2C, **"We are working with our partners to provide better services for our customers in the chip design industry. Our partnership with Sirius Wireless is a successful story of that."**