



Research Progress on Radios Implemented with Reconfigurable Computing

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Objective of the Project

- Design and build a high speed radio testbed using *configurable computing modules* and advanced receiver architectures
 - Improved capacity
 - Flexibility of platform
 - Increases in processing power of platform
- Demonstrate smart antennas at the handset
- Create a hardware/software test bed to prove networking concepts



Overview of the Presentation

- Software Radio Using Reconfigurable Computing
 - Introduction to Reconfigurable Computing
 - Example Application: Multiuser Detection
 - Architecture for a General Purpose Configurable Radio
 - Evolution of the Configurable Computing Platform and Configurable Radio
- Smart Antennas at the Handset
 - Project goals
 - Measurements
 - Hardware development