



# ALL OUTDOOR RADIO – MICROWAVE MOBILE WIRELESS BACKHAUL



## HIGHLIGHTS

LTTTS Engineered a next-generation Mobile Wireless Backhaul solution.

- // Single Box All Outdoor - Pole Mount solution : Zero Foot Print
- // . Fanless Design – Green Solution
- // Integrated L2 Switch
- // GbE and Optical Interfaces

## CHALLENGE

- // Timing closure with 93% utilization
- // Fitting the logic in one single device

## SOLUTION

- // We optimized the placement using placement constraint & timing constraint.
- // By using resource optimization techniques in synthesis tool, we were able to reduce utilization from 105% to 93% without compromising on features

## SCOPE – FPGA

- // Module level Design and top level integration
- // Feature addition/changes and bug fixes
- // RTL coding in VHDL
- // Test bench and Test cases
- // Integration of 3rd party Ips
- // Chip level/module level verification
- // Lint, CDC, Synthesis
- // Timing Analysis and Timing Closure
- // Bit file generation
- // FPGA validation plan and setup

## SCOPE – HARDWARE & FIRMWARE

- // Hardware Specification & Architecture Design.
- // Hardware Board Design & Development
- // Firmware BSP and Diagnostics
- // Design Analyses – SI, Thermal
- // Mechanical Design Integration
- // Support for Prototype Production & System Integration
- // Custom Process Definition