REGIONAL JET COMMUNICATION SYSTEM

Commercial Aviation

- *Project Management*
- *Mechanical Engineering*
- *Systems Engineering*
- *Electrical Engineering*
- *Software Engineering*

PASSENGER ADDRESS & CABIN INTERPHONE CONTROLLER AND AUTOMATED TEST STATION

APPROACH

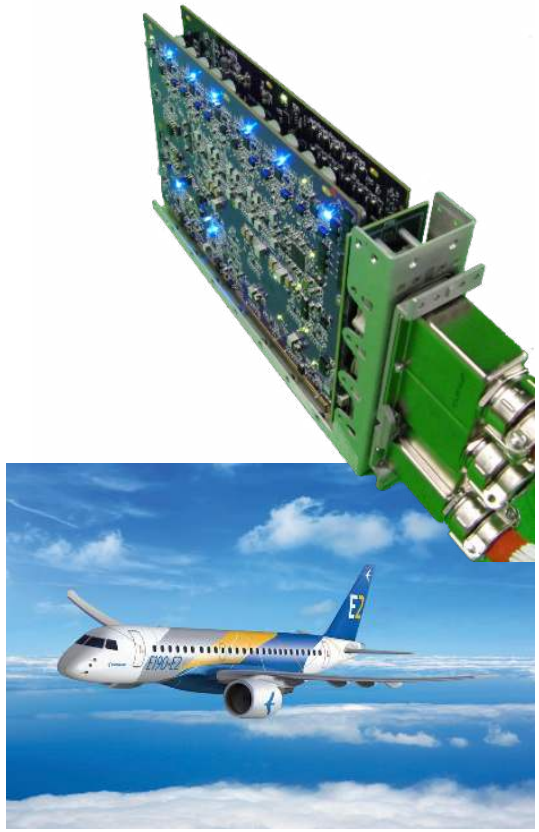
- Developed dual-DSP system with flight computer communication interface (ARINC 429)
- Optimized design for maximum power output and thermal management
- Integrated built-in-test (BIT) for real-time hardware monitoring
- Designed and built an automated test station (ATS) to run functional verification tests in 10 minutes vs. over nine hours for the previous generation
- Performed all HALT/HASS and DO-160 testing

RESULTS

- The product met all client requirements and passed all verification tests (lightning, splash, vibration, shock/vibe, thermal, and EMC/EMI)
- Automated test station deployed in production to dramatically reduce test time and increase throughput

KEY TOOLS & TECHNOLOGIES

- Integrated thermal and structural design features into each PCBA
- Controlled fourteen audio amplifiers for multiple aircraft zones
- Concurrently developed automated test station for use in qualification and recurring production



ALTEN TECHNOLOGY