

# **Project Example**

## **Avionics Robust Ethernet Switch**

#### Customer

Key player in the market delivering complex and diverse engineering solutions for defense, security and aerospace customers in over 100 countries.



#### **Customer Objectives**

- > Software integration of an Ethernet switch in the next generation avionics system.
- > Limited use case available, no clear feature content.
- > Solution must work on frozen hardware design and existing Board Support Package (BSP).
- > Aerospace grade solution: robust and no opportunity for upgrades or extension of features.
- > Reporting and monitoring required.
- > Time restricted delivery schedule.

### AimValley Solution

The complete design makes use of the AimValley Network Software Stack - AimOS.

- > AimOS-Ethernet based solution internal CPU.
- > AimOS-Ethernet drivers ported to existing hardware and BSP.
- > Late hardware provision by customer, use of Broadcom reference design boards.
- > Introduced RoboOS improvements to AimOS Rob; improving robustness required for aerospace-grade solution.
- > Integration and testing on customer hardware.

#### **Key Technologies**

- > Broadcom@ Switch Support
- > Broadcom@ Robo-OS
- > <u>AimOS-Ethernet</u>
- **Expert-Built Software**

#### **Results and Added Value**



At least 20% faster time-to-market, thanks to AimValley having developed the building blocks of AimOS. 20% Cost reduction based on hours of development saved.



\* Successful

AimValley was able to help the customer to recover from the failed attempt by a previous design house.

**Partnership** 

Development in close collaboration up to integration of product.

**Innovation** 

Adapted standard solution to meet Aerospacegrade requirements. Adding monitoring functions to the smart managed software.