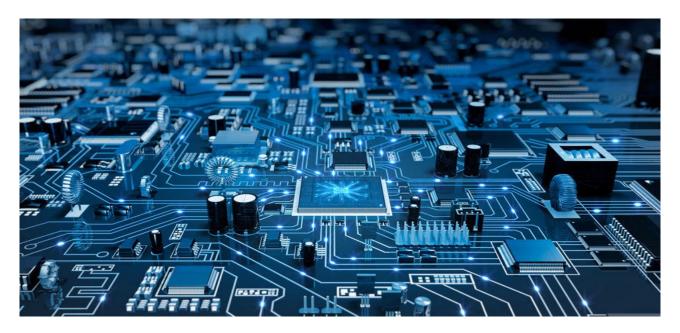


# Software Development Expertise Brief



The AimValley Software Development Team consists of over 30 experts, geared up to engineer software for systems that are extremely reliable, using state-of-the-art development tools.

The team's field of expertise includes real-time embedded systems, low-level drivers, operating systems, communication protocols, user applications and networking applications.

## **Software Expertise**

- Network Software Stack -AimOS
- Inter Processor
   Communication Solutions
   using Ethernet, USB and
   several proprietary media.
- TCP/IP and OSI stack experience; OSPF, ISIS, partition repair and hardware assisted routing.
- Services: DHCP, Radius
- Layer 2 Ethernet Switching: VLAN, LAG, QoS, PTP, gPTP, RSTP, IGMP snooping.
- Pluggable Management Framework based on embedded SOL database
- CMISE, TL1, SNMP embedded web server using HTML and XML/XSL, SSH and proprietary interfaces.

# **Tooling Examples**

- Host and cross compilers; embedded C/C++, DSL for code generation.
- Profiling: Gcov, Valgrind
- Static code analyzers: Coverity
- Pen testing: Gdb, JTAG debuggers, Lauterbach
- Automation: Jenkins, Behave, makepp, make
- Open Source: Security,
   Vulnerability and Operations
   Risk: Black Duck



# **Domain Specific Languages**

- Mkregmap: generation of hardwaresoftware interfaces.
- Machino: generating state machines
- Fault Framework: object oriented framework for easy fault correlation
- ALI: XML-based management interfaces
- WebUI: auto generated web interface
- Rest API: auto generated web interface







# Software Development Expertise Brief

# Why AimValley?

AimValley is a reliable provider of Edge technology since 2003, delivering solutions for:

- High speed data processing applications
- Complex FPGA-based accelerated systems
- High speed, low power hardware equipment
- Robust embedded software
- Early adopter of Acceleration Technology

## **Joint Development**

Achieving your goals requires you to constantly adapt to new technologies. Based on your requirements, we design solutions and ways to jointly implement them.

#### **Tailor-made Solutions**

We collaborate with you to deliver your desired solution (complete product or only part of the development).

## **Fast-Track Development**

Taking advantage of re-usable designs and IP enables us to develop your solution on a fast track.

#### **Innovative Solutions**

AimValley is continuously looking for alternative and optimized ways of designing high-tech products. We have an extensive patent library.

### **Phased Approach**

Our design process is structured to successfully take your product from concept to production and flexible enough to allow you to leverage any of our services on a standalone basis.

#### Certification

AimValley is experienced in certifying products or systems, such as EMC/ESD, CB and CE.

#### **Life Cycle Management**

We offer life cycle management for the design and/or the product. This includes maintenance and component obsolescence management.

#### **Quality Focus**

- Outstanding track record of on-time delivery
- Best in Class Designs Time, Budget & Quality
- ISO9001, ISO140001, Ecovadis Platinum CSR