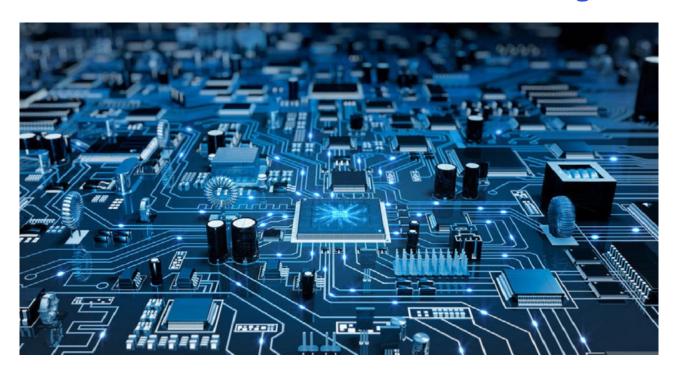


Software Needs Hardware Design Brief



Your Software Partner should also have Hardware Capabilities

When developing a new product or a new circuit board for an existing product it is often wise to use an external software development firm to create the software that will operate your new device, provide the application you expect and add the communications protocols involved in any electronic communications between the new design and the rest of the system or network.

In theory, software is software, however hiring a firm that also has experience in designing hardware products provides many advantages. Familiarity regarding embedded software code and experience in interaction with the registers and settings of Integrated Circuits is paramount. A single bit that is set wrongly can be difficult to find, especially while debugging brand-new circuit board(s) prototypes in parallel.

On the other hand, there can be a temptation to allow hardware designers to write some or all of the software or at least the low-level drivers. While being experts in their own field, there is a risk that hardware engineers develop inefficient software and create structures that are not consistent with the overall operating system architecture.

The AimValley solution designers deal with all aspects of product design from mechanical packaging, to power supplies, to hardware design, to FPGA code, to Real Time Operating System (RTOS), to firmware and embedded application software, communications, User Interface, and solution management. Having all disciplines "in house" allows the AimValley team to define and execute on the development of the optimal software architecture that delivers efficient, high reliability, manageable solutions.

AimValley has developed proprietary tools that auto-matically map FPGA regsiters to software APIs, thus eliminating copy/paste errors while facilitating synchronized register updates.



Software Needs Hardware Design 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