



## Power Supplies – Not always so ‘Simple’

For many products an external, commercial, off the shelf power “brick” type power supply will suffice. For high reliability applications and where very specific features are required, power supply should be designed as integral part of the product or integrated into the product enclosure and consider the following:

- What is the overall power required?
- How many different voltages are required and at what maximum power levels?
- How stable is the input power?
- Does the application require ‘no resets’ and therefore, perhaps ‘ride through’ capability?
- Are dual redundancy power supplies required and if so, do they need to be hot swappable?
- What space is allocated for the power supply?
- Does the design call for a single power supply or a distributed power supply (multiple voltage conversions across multiple boards)?
- How critical and susceptible is the application to noise?
- Is telemetry for the state of power supply required to support organized shut down or to alert monitoring applications?
- What overall specifications must be met; CE, UL, FCC p14, NEBS-3, others?
- Is power derived from an upstream power supply that has limitations? (example: USB 2.0, PoE, plug-in module, or Smart SFP).
- What level of derating is needed to ensure proper operation over temperature range and to meet reliability and availability aspects.

AimValley has designed power supplies in consideration of all sorts of variants. It should also be noted that very often power supplies must be created as an integral part of the application including the distribution of the various voltages, grounds, and shielding throughout the entire system.

## 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