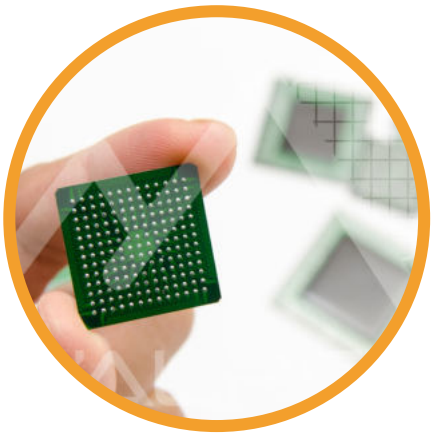
IC'ALPS | APPLICATION

ASIC/SoC FEASIBILITY STUDY

The lowest risk path to success

Your challenge



As CEO, COO, BU Manager or Project Manager you have to secure the **ROI** of your internal development projects.

An **ASIC** - Application Specific Integrated Circuit - exclusive and specifically tailored to your application might be a helpful whether you are looking for **miniaturization** of your product, extended **battery** life, **protection** of your know-how, reduction of components **costs**, or **technological advantage** over competition.

Your initial **cost-benefit** analysis has provided positive contextual elements about the contribution of an ASIC to your competitiveness. But, custom integrated circuit design is not your core expertise.

To move forward with ASIC integration, do you need:

- Experts' advices on the architecture of your electronic subsystem?
- An evaluation of the performances of an integrated circuit specifically designed to fulfill your system requirements?
- A detailed specification of your ASIC?
- An assessment of costs and timeline for development, industrialization and production of your custom ASIC?

Our solution

IC'Alps' core business is analog and mixed-signal ASIC development & supply. We develop ASIC solutions mainly for the medical, industrial, mil/aero, and oil & gas markets, compliant with ISO 9001, ISO 13485, EN 9100 requirements.

In the frame of a feasibility study, we provide you with all the **TECHNICAL**, **ECONOMIC**, and **TIME** related elements required to evaluate the viability of your **ASIC design/supply project**.

Scope

Each company and each project is different but we have developed a **flexible approach** towards feasibility study:

- Focusing on architecture definition of the ASIC and simulation of critical performances
- Providing a detailled ASIC specification or a specification of one or more critical functions
- Including industrialization and production forecast of your ASIC

How does it work?

1st step, UNDERSTANDING AND CONSOLIDATION

IC'Alps will take a deep dive in understanding your electronic system:

- Contraints at BoM level
- Use cases
- Operating modes
- Integration of functions into the ASIC
- Interfaces required at system level
- PCB schematics

Our project team will also assess the current state of technical development based on a review of existing literature.

With this first step, IC'Alps consolidates **your expressed needs** and we reach a mutual agreement on the **expected results** of the feasibilty study.

2nd step, OUR TECHNICAL PROPOSAL

IC'Alps will assess different **scenarios** of circuit **integration** (for example HW/SW partitioning, functions partitioning in several ASICs, ...), each with their pros and cons.

Our project team will also build and simulate a model of the critical functions in your electronic system for a first level assessment of the **performances**.

Depending on the scope of the feasibility study, and after cost, risks and schedule analysis, IC'Alps can also recommend the suitable **supply chain** for production of your ASIC.

Results

We customize a Team for your project, to provide you within a 1 to 3 months time frame, a la carte **report**:

- Project timescale
- ASIC architecture proposal and reachable performances
- Estimate of silicon area and power consumption
- Risks and opportunities assessment
- List of project deliverables and milestones
- Suggested supply chain
- ASIC development costs up to industrialization

Feasibility Study

BENEFITS

Our process for feasibility study coupled with our in-depth knowledge of ASIC technology offer you the lowest risk path to success

- Provide valuable information to your Management Board for a go/no-go decision
- Simplify your communication with your technical Teams and Partners through better visibility of project costs, timescale and milestones
- Get the best RoI from your product with experts advice to select the best ASIC performances versus cost trade-off
- Identify new design opportunities
- Enhance the success rate of your ASIC project by evaluating multiple project parameters