

# Your ASIC/SoC Design & Supply Partner

## **Customer-driven IP & ASIC Services**

# A perfect match to complement your team



## Full turnkey ASIC / SoC development & supply

Need a trustful partner to manage the entire ASIC design & supply chain?

Integrating electronics into your nextgen product? Cloning an obsolete device? Migrating an FPGA to ASIC? Reducing system BoM? ...

IC'Alps as prime contractor will support your custom circuit project from concept exploration to production including supply chain efficient management:

- Feasibility
- Design
- Prototyping
- Industrialization
- System-level validation
- Production

Our Application team can assist you in bridging the gap between your system requirements and the ASIC.



#### **Custom IC Services**

Experienced with integrated electronics but in need of support with your design?

Our a-la-carte model is made for you.

- Application specification
- · Analog design + layout
- RTL design + UVM Verification
- Synthesis + DfT insertion
- · Floor planning + Physical design
- Timing & physical sign-off verification
- Mixed-signal verification
- System-level test
- IC Validation on silicon
- in-FPGA prototyping



#### **Custom IP Services**

Need a specific block in your circuit?

- Adaptation of an existing block
- Performance improvement
- Technology migration
- Among others...

## Get access to our ASIC specialists

Complement your team's skills by outsourcing your ASIC design



French CIR accreditation to enable the eligibility of the R&D operations carried out by IC/Alps.

## IC'Alps is a team of 100+ experienced ASIC implementation specialists

## We have the design expertise for your project

- Analog, Mixed-signal, or Digital ASIC development
- RISC-V or Arm-based circuit implementations
- Partnerships:
- TSMC DCA
- X-FAB X-Chain Partner
- ams OSRAM Preferred Partner

### With a focus on

- Ultra-low power (nanowatts)
- Power management
- Multiphase DC/DC
- Sensor/MEMS AFE interfaces
- High voltage implementations
- Low noise data conversion
- Security features
- Digital IP design & integration
- High current
- Security functions (TRNG, PUF)

Our projects combine in-house analog and digital blocks and some third party silicon-proven IPs Standard cells & IO, interfaces, power management, PLL/DLL, memory, MCU...

- Better time to market
- Lower cost compared to full inhouse design
- Reduced risk









## Our markets and applications

Your idea into an exclusive, custom-made, and differentiated chip

From our design centers in France (Grenoble and Toulouse), we support multiple projects in the following demanding markets:





Motion sensing

Surveillance

Gaz sensing

Mil/Aero

Satellite

Defense

Aeronautics

Communication

Quality monitoring



- Implantable
- Monitoring
- Ultrasound
- Drug administration
- Drug dariii lotratio
- Imaging
- Diagnostics
- Wearables



#### **Automotive**

- Autonomous driving
- Gesture recognition
- ADAS
- Lighting
- Embedded intelligence
- Battery management



IoT/IA

### /\_ •

- Home automation
- Smart city
- Environment sensing
- Connected objects



## **Identity and Security**

- Biometry
- Secure boot
- Banking
- TRNG, PUF

## **Quality Management**

IC'Alps is an European independent ASIC design house with a Quality Management System (QMS) certified according to EN 9100:2018, ISO 13485:2016, ISO 9001:2015 and Common Criteria standards. IC'Alps is also IATF-16949 compliant.

Mastering design for quality, reliability, and functional safety, you can trust IC'Alps for on-time delivery of your bespoke ASIC, right the first time, regardless of your application.

Minimize your technical and commercial risks

## What a certified QMS means for your ASIC

Long term reliability of the supply chain

Continuous improvement of internal operational processes



Traceability of design projects and first-time-right project execution



Respect of customer & regulatory expectations and on-time delivery









## **ASIC / SoC benefits**

Make your product stand out with a custom Integrated Circuit

**Custom Integrated Circuits offer** flexibility for unique customization, product differentiation, and economic advantages.



#### Miniaturization

- Electronic components integration
- Smaller Printed Circuit Board
- Reduced product weight and size



### Protection

- Full system integration
- Intellectual property and know-how protection



### **Better Autonomy**

- Less active external components
- Better power management control
- Lower power consumption



### **Economic Advantage**

- Reduced Bill of Materials (BoM)
- · Lower price per unit
- Optimized supply chain



### **Enhanced Features**

- New functionalities
- Optimization of performances
- Specific regulatory compliance



## Customer Full Ownership

- Protection of your innovation
- Dedicated Supply Chain
- ASIC/SoC rights & ownership

## Your trusted partner

From concept exploration to production



In-house ASIC implementation expertise to turn any application requirement into a custom chip or to design specific IP blocks

**Active support from** the application/ system-level with our dedicated team, starting early in the process



Flexible cooperation models to complement the expertise of our customer's teams



Global supply chain ISO 9001:2015, ISO 13485:2016, for ASIC prototyping, EN 9100:2018 certified industrialization and production

> **Common Criteria** certified for Grenoble site



IATF-16949 (Compliant)

DO254, DAL-A/E, ISO26262, ASIL-A/D, AECQ100 when required



Foundry-independency

for flexibility. Chosen

technology is tailored

## IC'Alps is your one-stop shop ASIC partner

From our two design centers, we design and supply Application Specific Integrated Circuits (ASIC/SoC) and IP blocks exclusive and custom-made for our customers in the medical, automotive, industrial, consumer, mil/aero, security and IoT/IA markets.

Our services portfolio is extensive and flexible. As your one-stop-shop partner from ASIC feasibility to ASIC mass production, we thrive to meet your requirements. At the end, you fully-own the circuit.

We have experts for specification, system architecture, application design, physical implementation, project management, IC test, system-level test and supply management. Our team of experts will complement your team's capabilities. We supply cost-effective Integrated Circuits in time and quality matching your specifications.

Our Quality Management system is ISO 9001:2015, ISO 13485:2016, EN 9100:2018, Common Criteria certified and IATF-16949 compliant.

## Our goal

To help you unlock the potential of your product, enhance its performance, increase your margins thanks to Application Specific Integrated Circuit (ASIC).

## What would be your ASIC / SoC need?

## **Grenoble Headquarters**

21 rue Frédéric Mistral 38400 Saint-Martin-d'Hères FRANCE



sales@icalps.com www.icalps.com +33 (0) 480 421 340

### **Toulouse Design Center**

132 chemin de Basso Combo 31100 Toulouse FRANCE