

# An overview on IP offer and IP demand

**Gabrièle Saucier**  
**Design And Reuse**

**IP SoC Grenoble 2019**

# Outline

- **History**
- D&R Ecosystem
- The Future

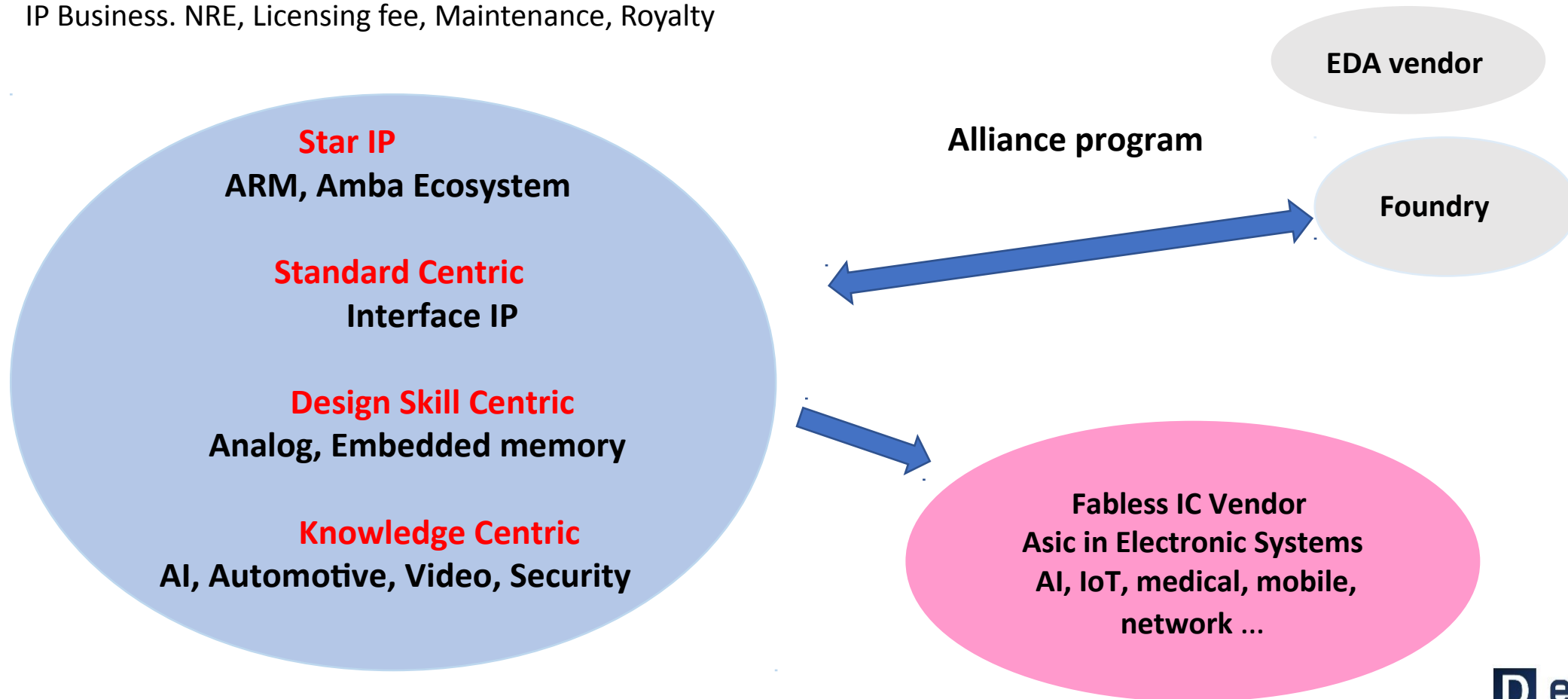
# IP Concept: Why? Who? Which IP ?

Why?

- The world is speeding up??? Time to market pressure; Engineering (Knowledge) shortage
- Talented engineering and knowledge available? Globalization?

IP Concept born: Resource & Knowledge sharing/Reuse

IP Business. NRE, Licensing fee, Maintenance, Royalty



# D&R Ecosystem: 42.000 Registered members

D&R founded in 97 as a privately hold company with a mission:

**Be the catalyst of IP Dissemination & IP business providing support to IP providers & IP consumers**

- **Hold Premier IP SoC Market Place** [www.design-reuse.com](http://www.design-reuse.com)
  - displaying exhaustive list of resources available as Silicon IP and SoC (System on Chip) solutions
  - Facilitating the contact between provider and consumer
- Extended to [www.dr-embedded.com](http://www.dr-embedded.com) (2012)
  - Dedicated to Application specific solutions (Automotive, AI, IoT, Security, ...)
- Extended to [www.design-reuse-china.com](http://www.design-reuse-china.com) (2016)
  - Dedicated to Chinese audience

**Provides next generation Technology and Services based on IP Management Platform - IPMS™**

- Web e-Catalog
- IP Management Enterprise Platform For IP providers and IP consumers
- Vendor tool Management

# Outline

- **D&R Ecosystem**
  - **What is published**
  - **The audience**
- Acquisition Flow
- The Future

Native Design Reuse site: www.design-reuse.com

Exhaustive IP SoC list – No selection – Open upload  
Google-like Search -Emphasis on maturity on specific Target Process.  
80 000 unique visitors per month (Google statistics )

**Design & Reuse** IP Core Works **Wireless Communications**

SEARCH IP ▾ NEWS ▾ INDUSTRY ARTICLES ▾ BLOGS ▾ VIDEOS SLIDES EVENTS ▾

**SEARCH IP** Semiconductor IP Verification IP Wanted IP

Search Silicon IP... **OK**

**16,000 IP Cores from 450 Vendors**

› Browse › Provider List › Advanced Search

› IoT... Automotive... Security solutions... Design Ressources ?

**IPMS Enterprise Platform News**

› Latest Press Release

› D&R [Products](#) [News](#)

**Do not miss IP SoC Santa Clara Apr. 9th 2019**

**ALLEGRO** **AL-E200 Multi-Format Video Encoder IP**

- Optimized solution for 4K resolution encoding
- Unique true multi-format and scalable architecture
- Features smart encoding tools for better video quality

**Learn more >>**

**Featured**

Companion Site for Soc solution : [www.dr-embedded.com](http://www.dr-embedded.com)

List of Selected Soc Solutions in hot areas ( Automotive,AI, Security..)

Reserved to D&R partners

Marketing campaigns on specific solutions

## Find Top SoC Solutions

for AI, Automotive, Internet of Things, Security, Audio & Video...



[Automotive  
Avionics](#)



[Internet  
of Things](#)



[Artificial  
Intelligence](#)



[Embedded FPGA](#)



[Trading  
Cryptomining](#)

[Browse](#) [Provider list](#)

[SoC Design Services](#) [Design Platforms](#) [Verification Platforms](#)

# Website dedicated to Chinese users

## BEST OF- Facilitate IP dissemination in China Weekly News Alert dedicated to Chinese Market

The screenshot shows the Design & Reuse website interface, which is dedicated to Chinese users. The top navigation bar includes the logo, a QR code, and a banner for Synopsys VIP. The main content area features a search bar for SoC solutions, a list of categories (Audio and Video, 5G, 3GPP-LTE, RISC-V, Automotive/Aerospace Electronics, IoT), and a news section with a list of articles. The bottom of the page has a RISC-V section and a footer with the Design & Reuse logo.

**Design & Reuse**  
www.design-reuse-china.com

**SYNOPSYS** 你知道吗?  
全球前十的公司中, 有九家使用 Synopsys VIP  
想知道答案

MEMORY VIP FUTURE  
PAST

从IP到片上系统以及**物联网** 扫描上方二维码关注我们的微信号! **2019年"国产IP最具潜力设计奖"** 加入D&R 社区 视频 新闻

搜索来自450家供应商的16,000个IP核

搜索, 选择, 比较, 与提供商进行安全高效的联系

请输入英文关键词 **OK**

您需要在D&R注册才能查看具体IP内容。  
▶ 点此注册 D&R

查找适用于人工智能, 汽车, 物联网, 安全, 音频, 视频的热门SoC解决方案...

搜索SoC 解决方案... **OK**

音频和视频 5G, 3GPP-LTE RISC-V 汽车电子 航空电子 物联网

▶ 浏览 ▶ 供应商列表 ▶ SoC 设计服务 ▶ 设计平台 ▶ 验证平台

**OPENEDGES**  
本周内存子系统IP方案  
Openedges NoC (片上网络) + DDR 控制器IP  
• 高集成度的NoC和DDR控制器  
• 灵活的低功耗NoC总线互连IP  
• 配备DDR3 / 4 / LPDDR3 / 4 & GDDR6 控制器  
+ 90%的DRAM利用率和低延迟率

**RISC-V** RISC 5设计资源  
SiFive推出适用于高性能计算的新型U8系列

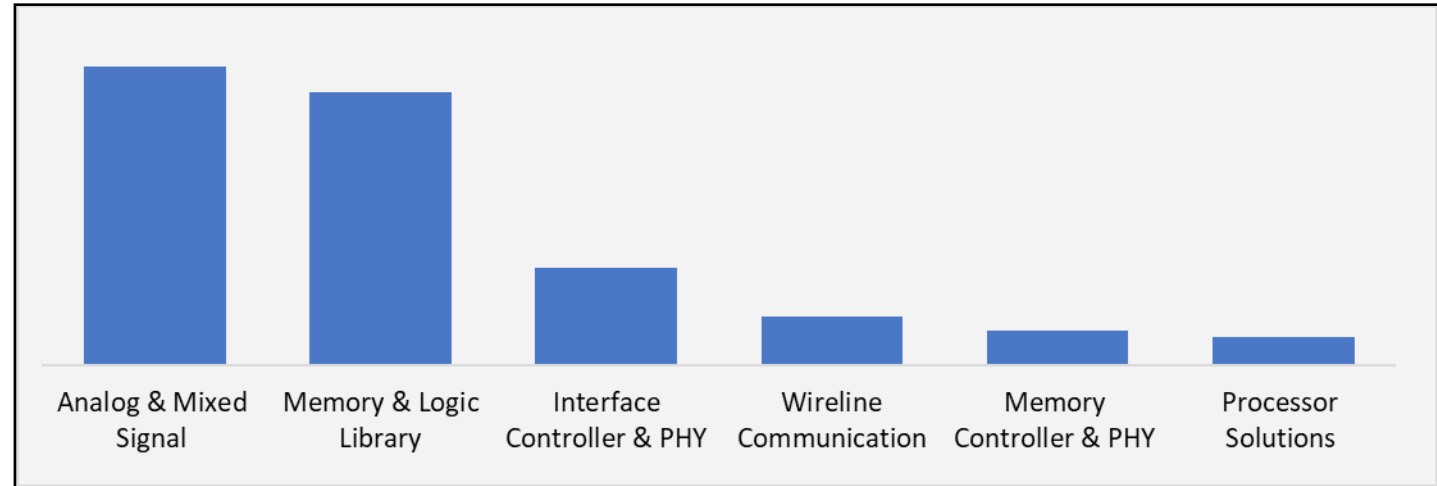
**最新资讯**  
▶ 2019-11-04 市场上有那么多AI芯片, 还需要Arm的NPU吗?  
▶ 2019-11-04 DSP为何在AI时代突然无处不在?  
▶ 2019-11-04 台积电预计明年增长显著 因料iPhone出货量回升  
**阅读本周新闻简报**

5G射频频段的极致突破 编解码已无后顾之忧

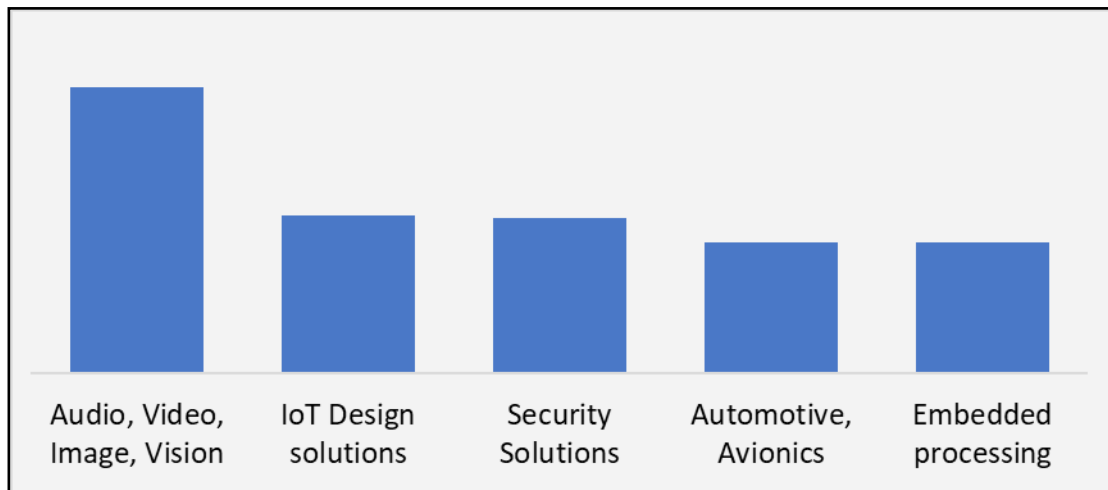


# What is published ?

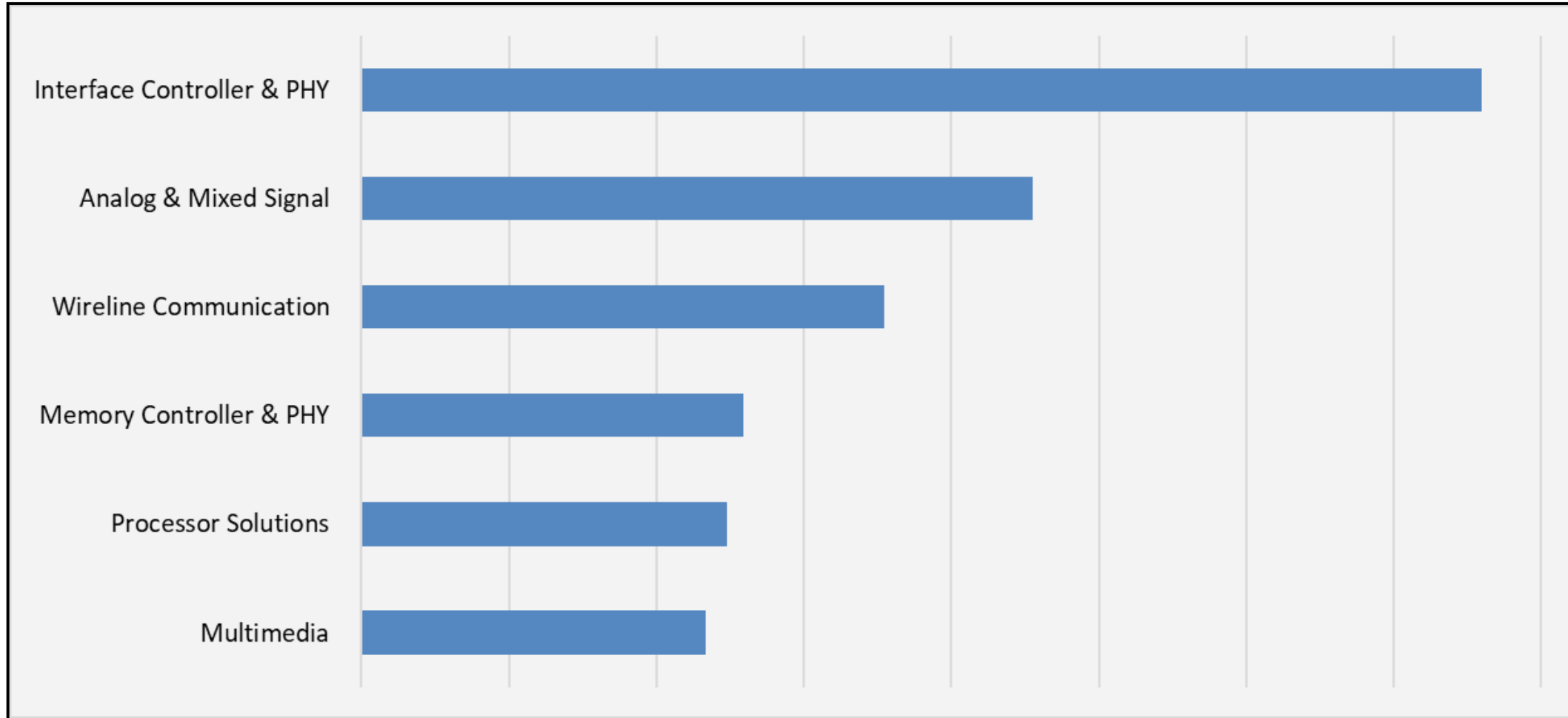
On [www.design-reuse.com](http://www.design-reuse.com) about **18 000 IP cores**



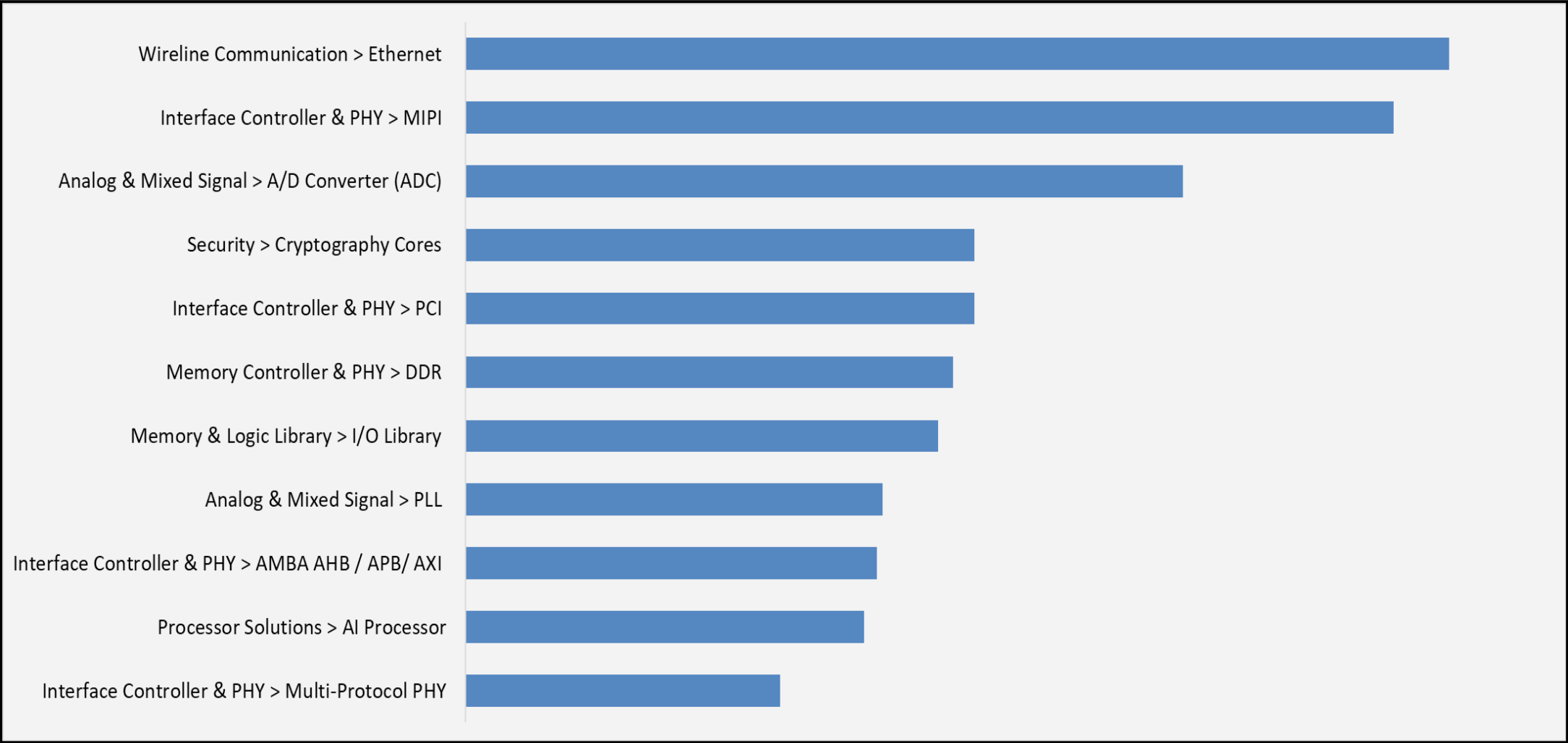
On [www.design-reuse-embedded.com](http://www.design-reuse-embedded.com) more than **1 200 Selected SoC Solutions** targeting dedicated application Vision, Audio, IoT, Embedded processing, Automotive ...



## Which categories of products are the most popular on D&R?

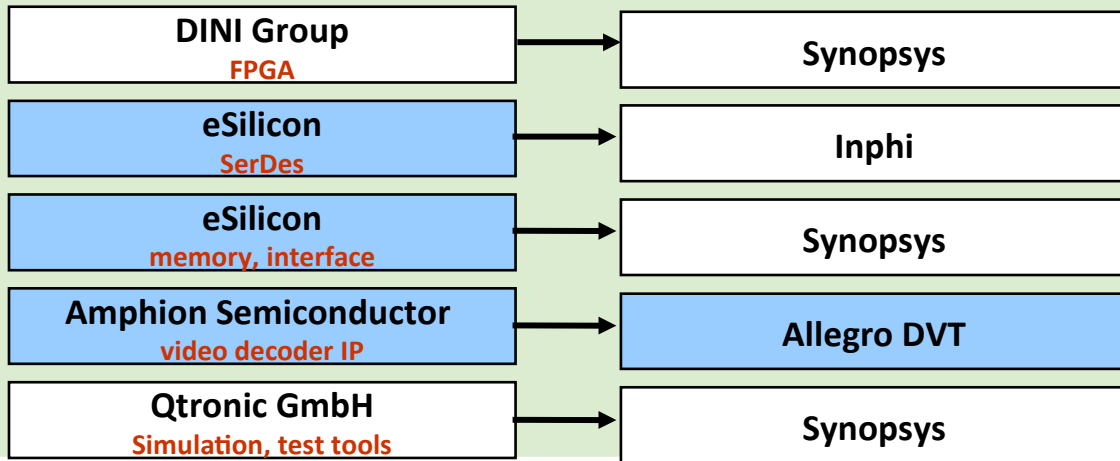


# Most popular sub categories

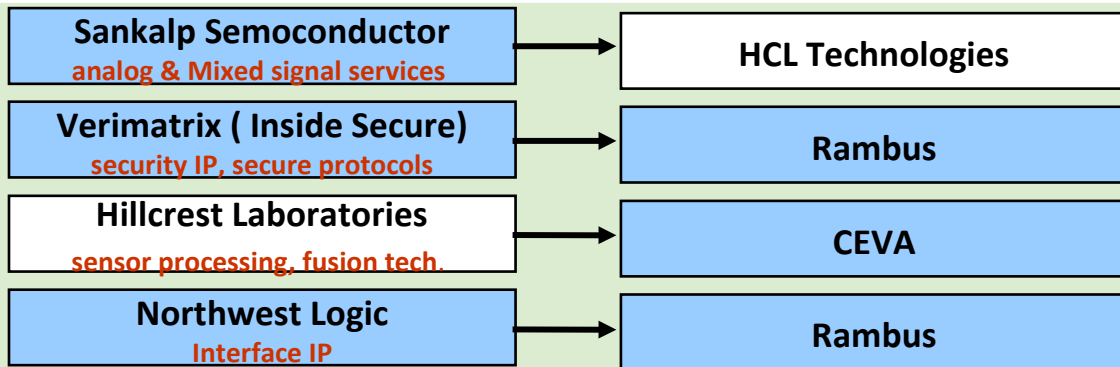


# Who provides ?200 partners -Hot Acquisitions in the D&R community in 2019

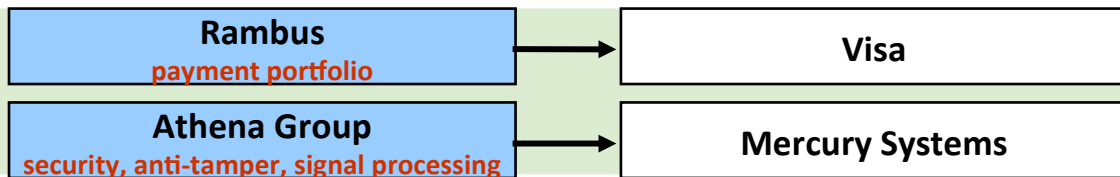
Q4'19



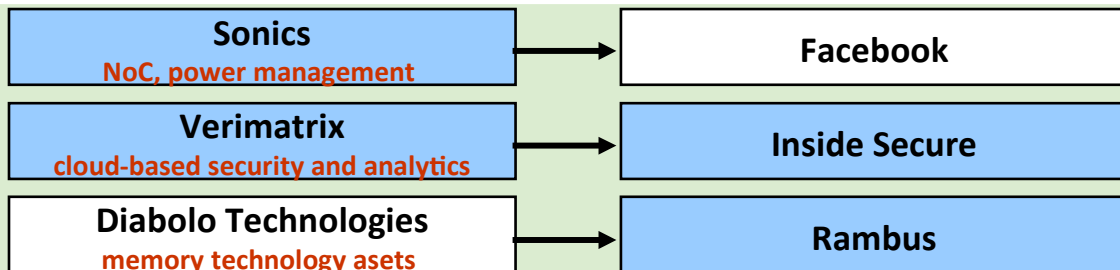
Q3'19



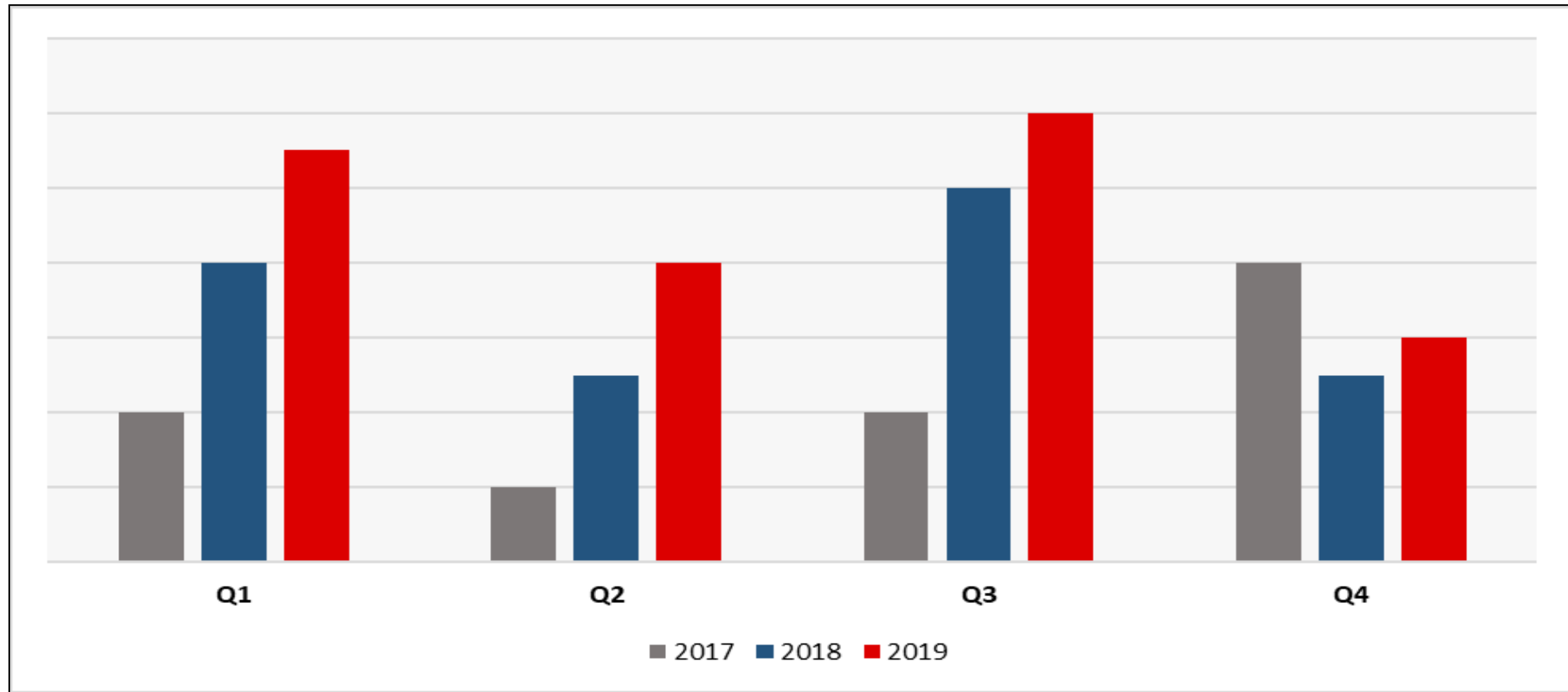
Q2'19



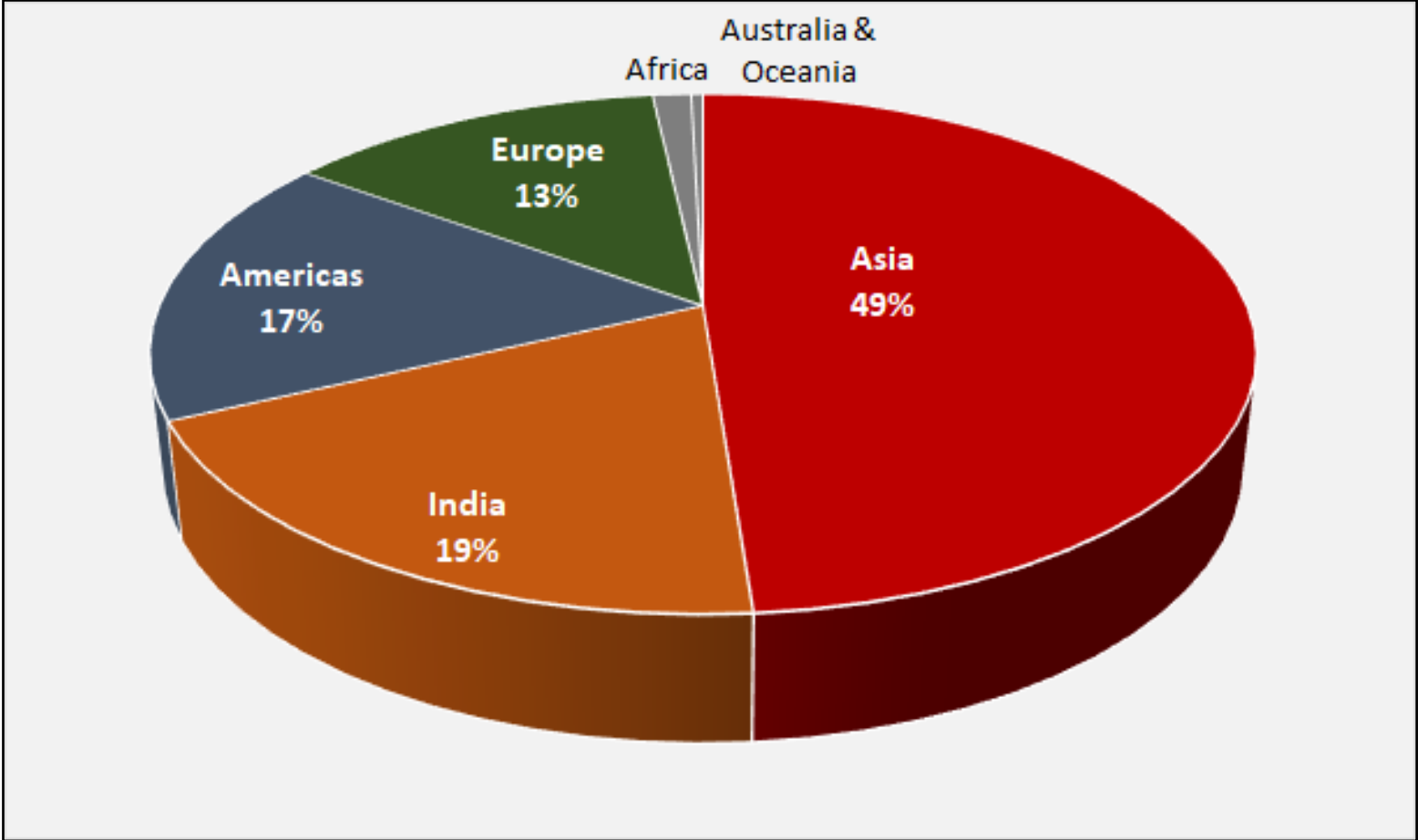
Q1'19



## Acceleration of Acquisitions 2017-2019



# Registered Users- D&R Community

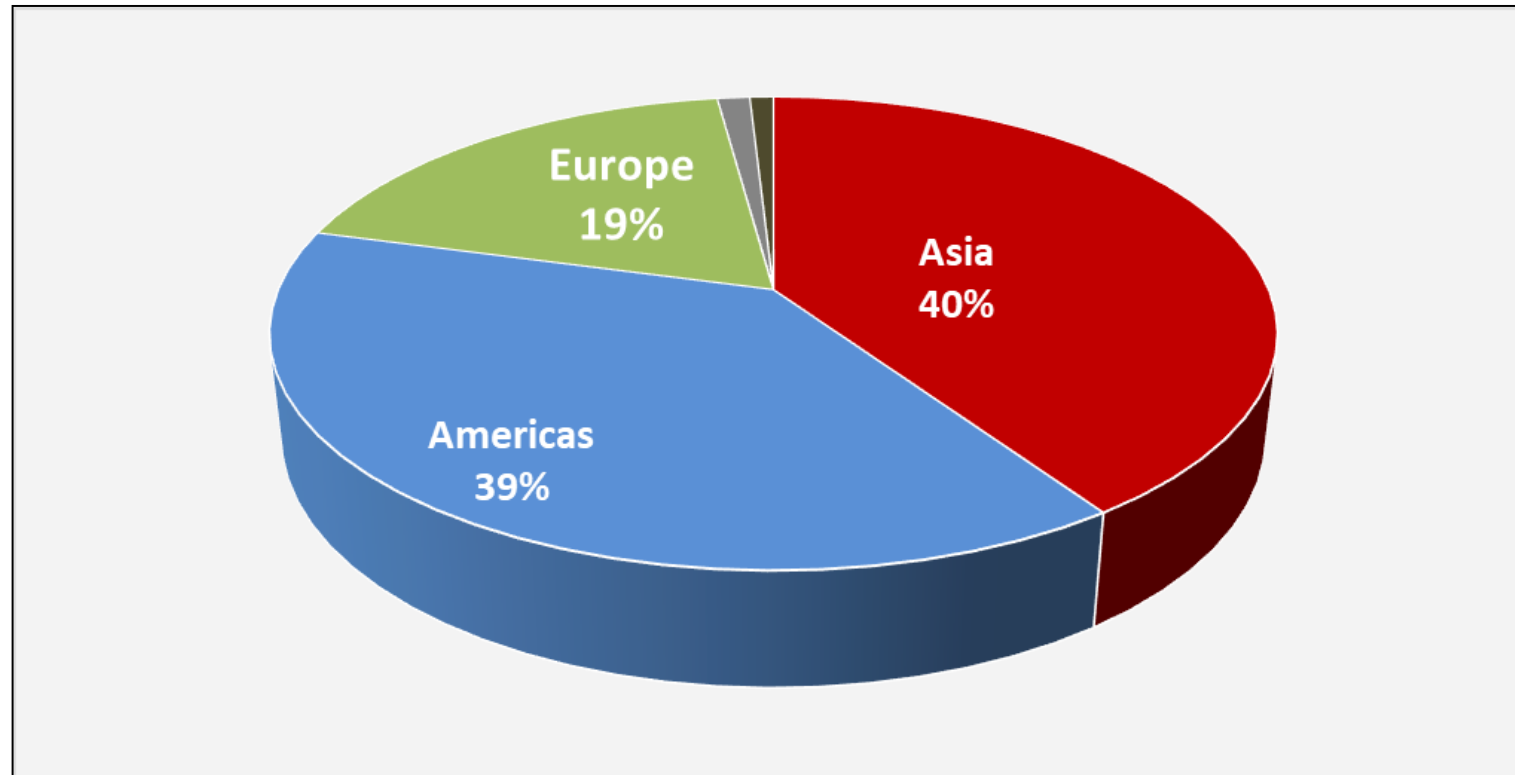


## Visitor Traffic on [www.design-reuse.com](http://www.design-reuse.com)

Google Statistics for [www.design-reuse.com](http://www.design-reuse.com)

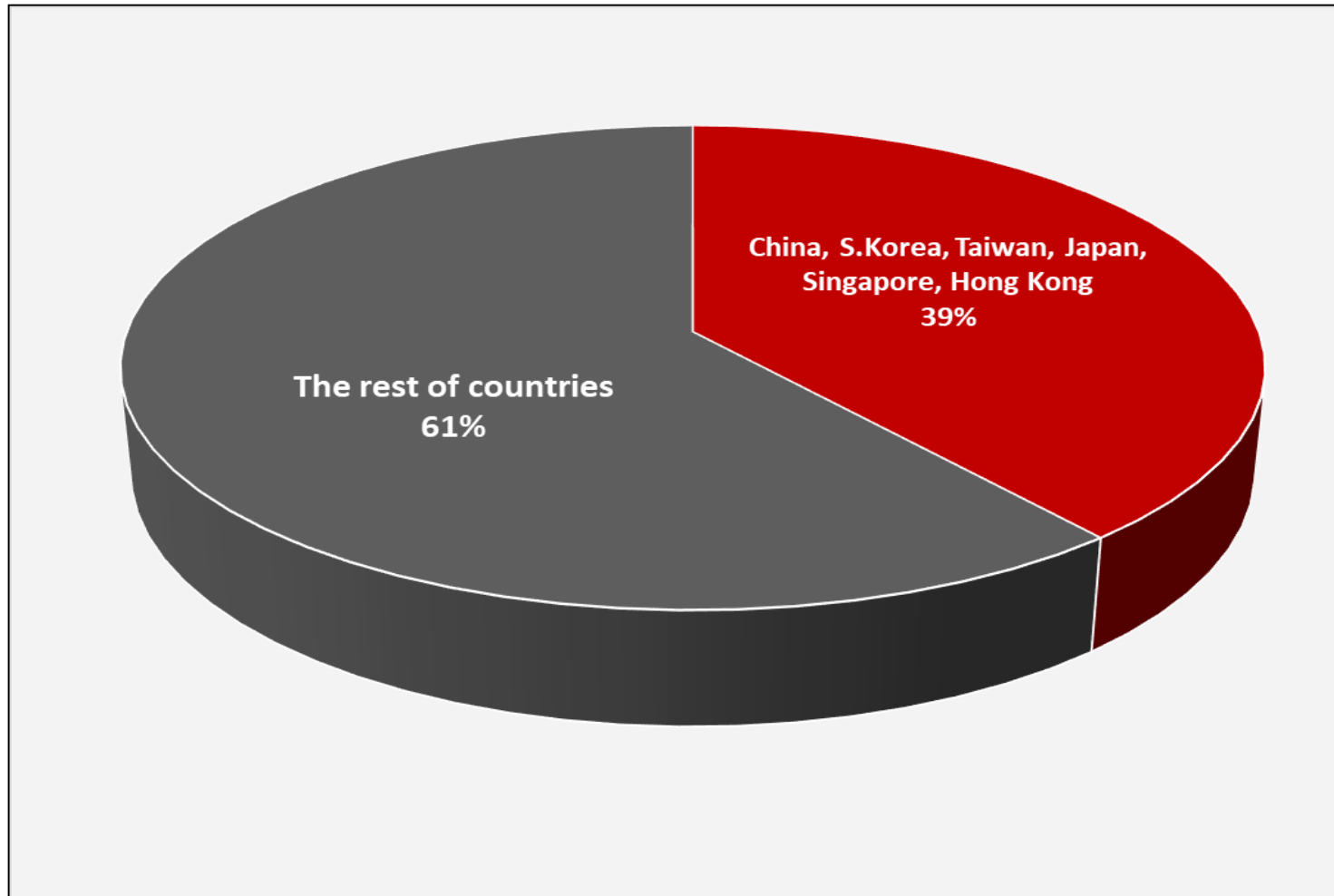
80 000 unique visitors per month

250 000 page views per month



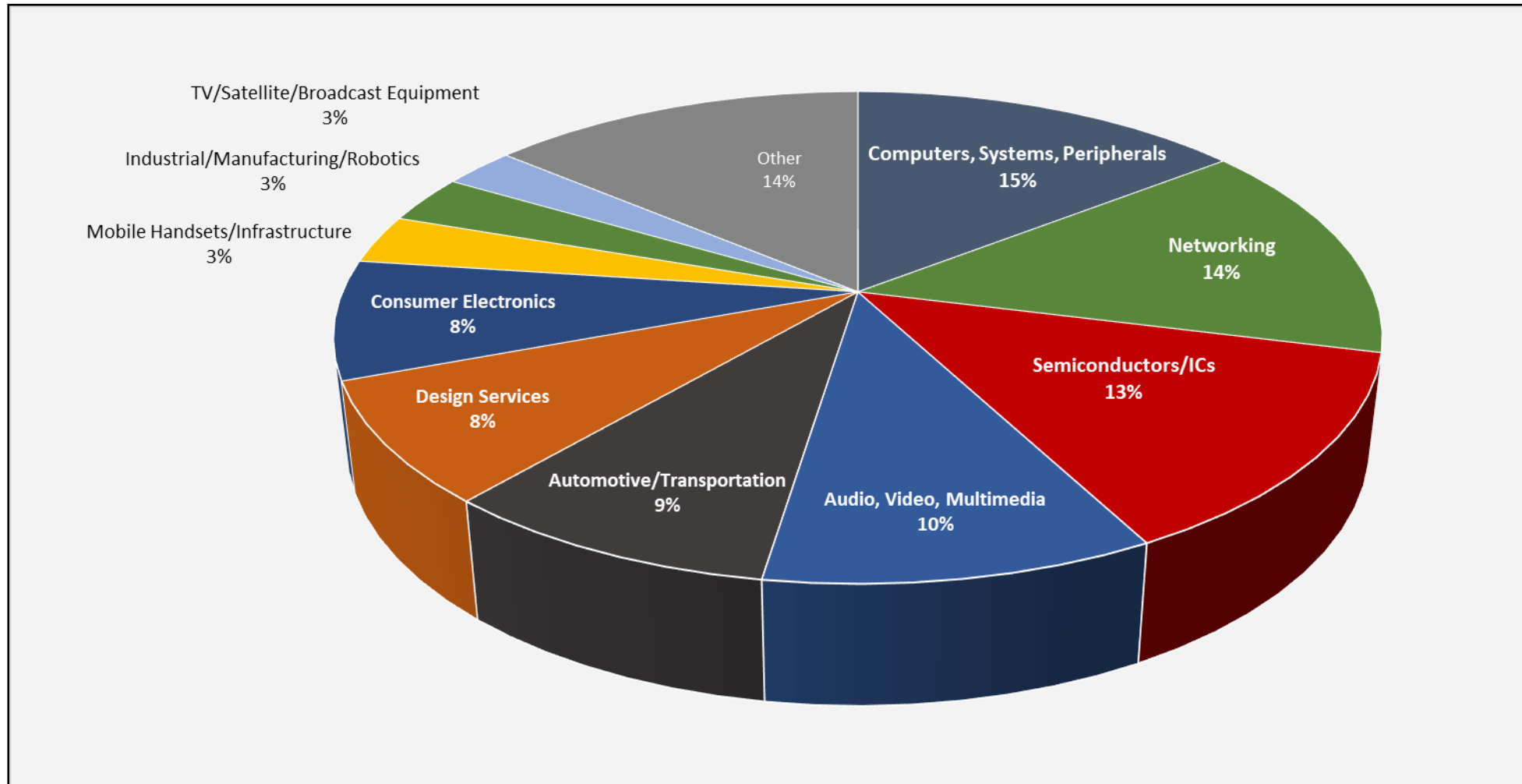
# Who really searches for IP?

Identified registered user downloading IP description





## D&R Registered Users- End Product/ Service



# D&R Marketing Services

## For IP Providers

- Web publicity ( banners)
- Lead service upon Search on D&R web sites
- Topic specific Campaigns

## For IP consumers – Electronic System houses

- Search/Find IP on an exhaustive list of available resources
  - News Alerts
    - 2 English Newsletters sent to 27,000 subscribers
    - 1 Mandarin Newsletter sent to 12,000 subscribers
  - Events ( US, Europe, China).
- In addition to the Search Engine
- Wanted IP/ SoC/Solution service
  - Private Search

# Private and Confidential IP Search

Major players in the Electronic System world

- Need
  - To make fast and well-informed business decisions...
  - To find promptly whether or not a specific licensable IP or System on Chip or a platform
- Requirements
  - Full confidentiality and full privacy
    - Full Flexibility for expressing the needs
    - Easy Dialog with the providers
  - In return
    - Selected Offers

# Outline

- History
- D&R Ecosystem
- **The Future**

## And next ?

- Innovation and engineering skill is the seed of semiconductor industry
  - “Wanted all over the world”
- Trends
  - More SoC design opportunity ( IoT, AI, machine learning, ... )
  - More need in emerging area
  - Consequently IP licensing and IP provider acquisition will warm up
- Better IP dissemination
  - New business model ( open source) and new initiatives (RISC V)
  - Smart contract..
- D&R mission: A worldwide IP ecosystem
  - **Better IP dissemination .. IP democratization .. Easy contracting**

# **And more: Announced To day**

**D&R announces the opening of an IP Core Store to support Soft IP Cores sales to the Chinese Market**

# IP & Innovation Democratization

## For whom?

Access to the worldwide market for "small" IP providers

## Which IP ?

Targeting soft IP as "proof of innovation" (validated on FPGA)

Simple, direct download of soft IP with no wasted time

## Which infrastructure ?

"Easy-to-use" IP purchase center

Simple purchase track

## Which Market ?

Chinese Customers (growing market)

Safe environment within the D&R IP ecosystem