Innovating to address
market opportunities & technology challenges

HSIA at a glance

The Hellenic Semiconductor Industry Association

Who we are:

We represent the dynamic

Greek microelectronics industry.

Our Association brings together

50 industrial members and about

30 universities and institutes

in Greece and abroad

Our Vision

Establish the Greek microelectronics industry as a recognized center of innovation and a dynamic partner within the global high-tech market

How we are doing it

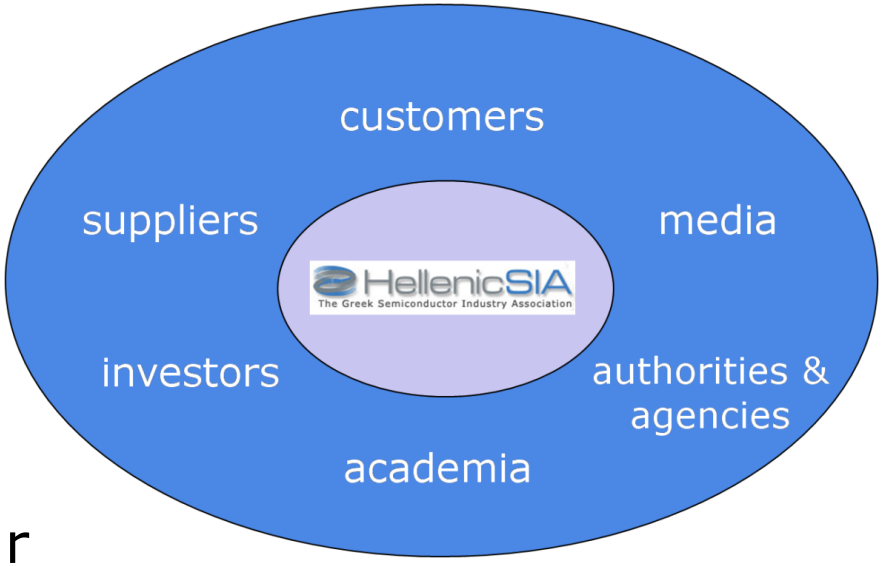
- ✓ Pull together the “success hungry” engineering talent of Greece;
- ✓ Convince the diaspora of Greek executives to overcome their disillusionment over their motherland;
- ✓ Attract international sales and marketing talent;
- ✓ Bring substantial government “matching grant” and
- ✓ Liaise all in a cluster to work for commercially viable, global technology business projects

Our mission

Represent the interests of the Greek microelectronics industry and build our members' business

We are committed to:

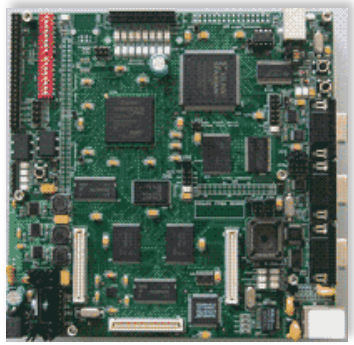
- Promote the innovation and competitive edge of the Greek microelectronics industry
- Advance collaboration with stakeholders
- Enhance synergies amongst our members to create scale



Our members

byte mobile
Helic
micrel
cadence
SCIENSIS
analogies
Alma Technologies
nanoradio The power is yours
ELXYS innovations
SiTel semiconductor
eTTos S.A.
SYNOPSYS
4Plus Technologies Concepts · Engineering · Solutions
Theon sensors
unibrain
Nanotropic
Think Silicon
bluedev
THETA microelectronics
OTE
GENNET S.A.
APIX Industrial Automation
GDT
raymetrics
opt HELLAS
echovision
DIAPLOUS COMPONENTS FOR VISUAL PERCEPTION
ECONAIS
inAccess NETWORKS
astrofos
Prisma Electronics S.A.
µSens@p systems
antcor ADVANCED NETWORK TECHNOLOGIES
Brite
INTRACOM TELECOM
DYNESYS
IRIDA LABS
NanoChronous Logic
THYRATRON ELECTRONIC APPLICATIONS - L.T.D.
v.trip GROUP
fasmetrics
ZERO ONE MECHATRONICS

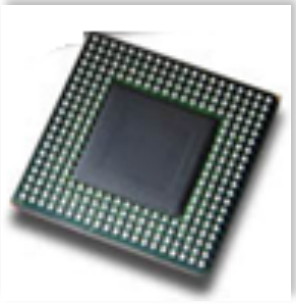
Our innovative technologies and products



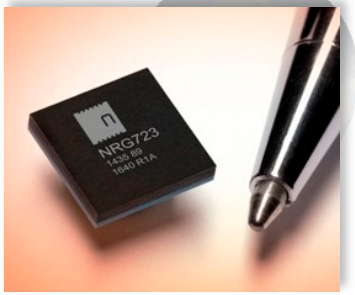
Integrated video coders
MPEG 4-10/AVC or H. 264

World's greenest VoIP processor with DECT

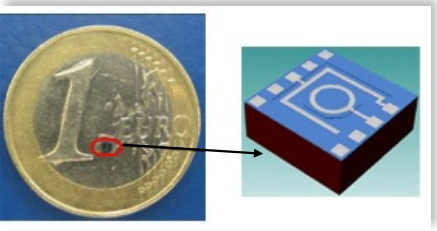
Residential gateways: Ethernet Switch, HDTV ADSL2/2+, SoftPBX, USB2.0, WiFi, SD Flash Card UWB, GPON, VDSL



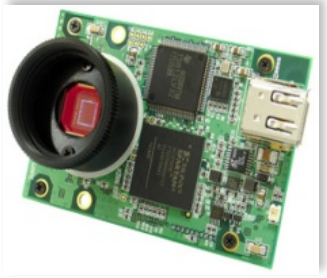
Integrated circuits for Gbit Ethernet and wireless (GSM, 3G, WiFi, WiMax)



Single-chip transceivers for wireless data: WiFi, WiMax

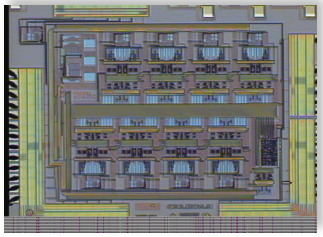


Integrated flow and acceleration sensors

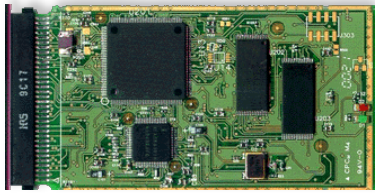


On-Board cameras

Electronic Design Automation (EDA) software tools



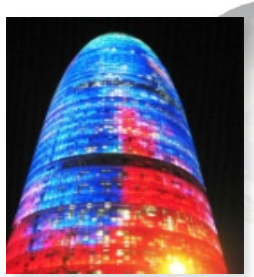
Analog, Mixed-signal and RF integrated circuits



Integrated PCMCIA systems for wireless laptop access

Our target applications

- Telecommunications
- Security & Defense
- Industrial automation
- Home, office, consumer
- Medical
- Energy
- Light/LED
- Optoelectronics
- Automotive



Our members' biz models

- IP and ASIC design
- Fabless
- Embedded software
- System design
- EDA tools

Our success stories

✓ Over **$30M** VC investments

✓ Over **$80M** direct investments from multinational companies

✓ Innovative technologies and products: > **$400M** revenues

✓ **2** successful investor exits

over 90% of our revenues outside Greece

Our members' customers

Our members serve several Tier-1 customers around the world, including:

- AT&T
- Brazil Telecom
- Broadcom
- CERN
- Cypress
- EADS Avionics
- Freescale
- Fujitsu
- Goodrich
- Intel
- Israel Aerospace
- Jazz
- LG
- Lockheed
- Mitsubishi
- Motorola
- NASA
- Netlogic
- NTT
- O2 UK
- OKI
- Omega
- Panasonic
- Philips
- RFMD
- Rockwell
- Samsung
- Sharp
- Skyworks
- Sony
- T-Mobile
- TI
- Toshiba
- Xerox

HSIA strong partnerships

HSIA is a proud and active member of the

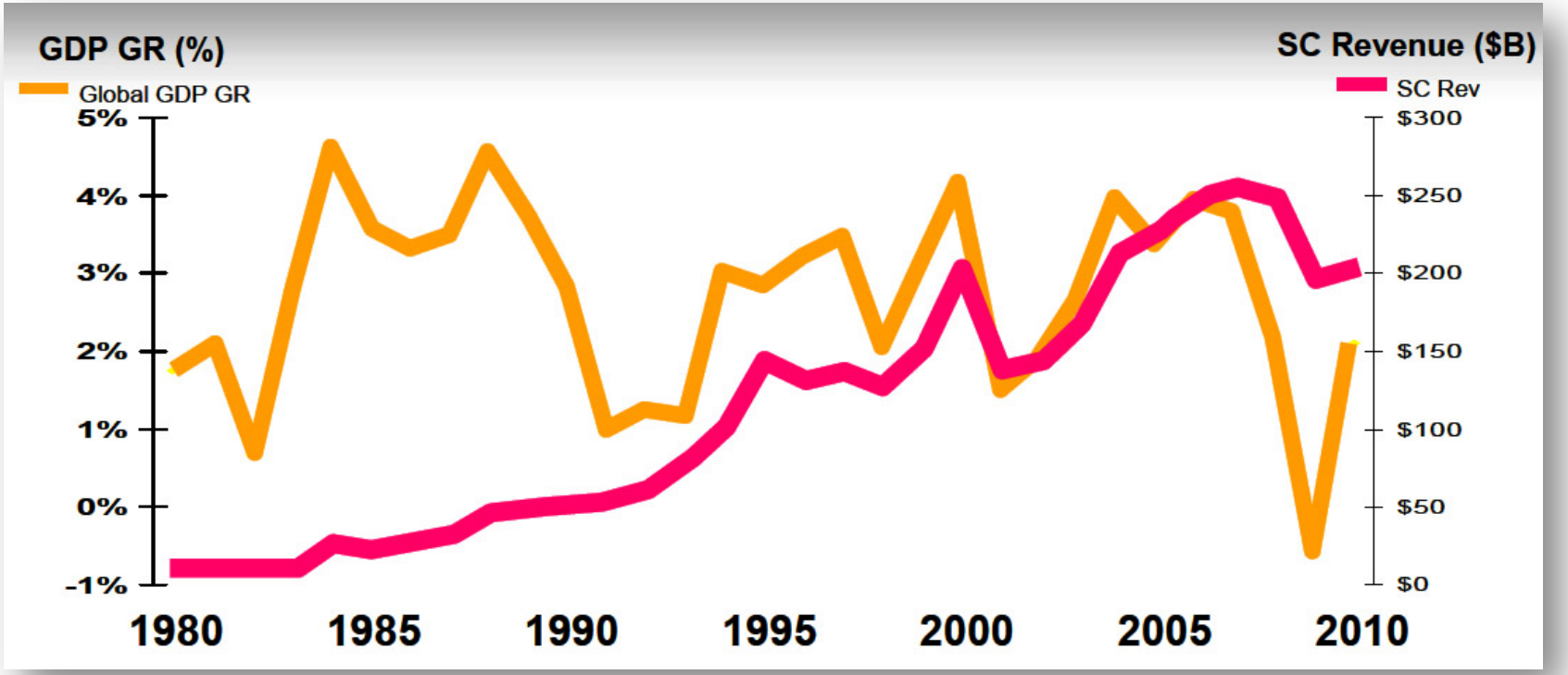
- ✓ European Semiconductor Industry Association (**ESIA**)
- ✓ Global Semiconductor Alliance (**GSA**)

Our website

www.hellenic-sia.org

Semiconductor market outlook

- 2010: 22% growth leading to $276B market
- 2011-2014: 4.2% CAGR
  - 7.2% Fabless companies CAGR



Source : TSMC

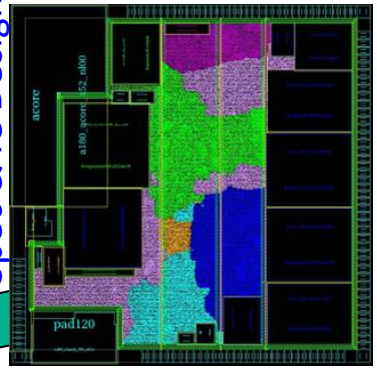
HSIA case studies

- SiTel Semiconductor
- Alma Technologies
- Think Silicon
- Analogies
- Helic

SiTel Semiconductor Hellas S.A.

- **Subsidiary** of SiTel Semiconductor B.V. fabless chip maker
- **Target** → VoIP Enterprise Phones with DECT
- **Challenge** → VoiP desktop Enterprise phone with full features and lowest power consumption in the world

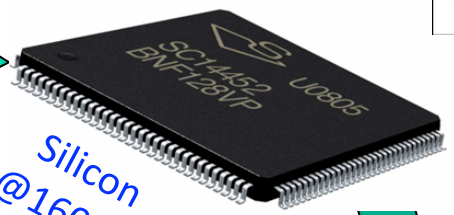
Spec & IC Design



Development Kit

OS & Apps

Silicon @160nm



Product at ODM

Alma Technologies S.A.

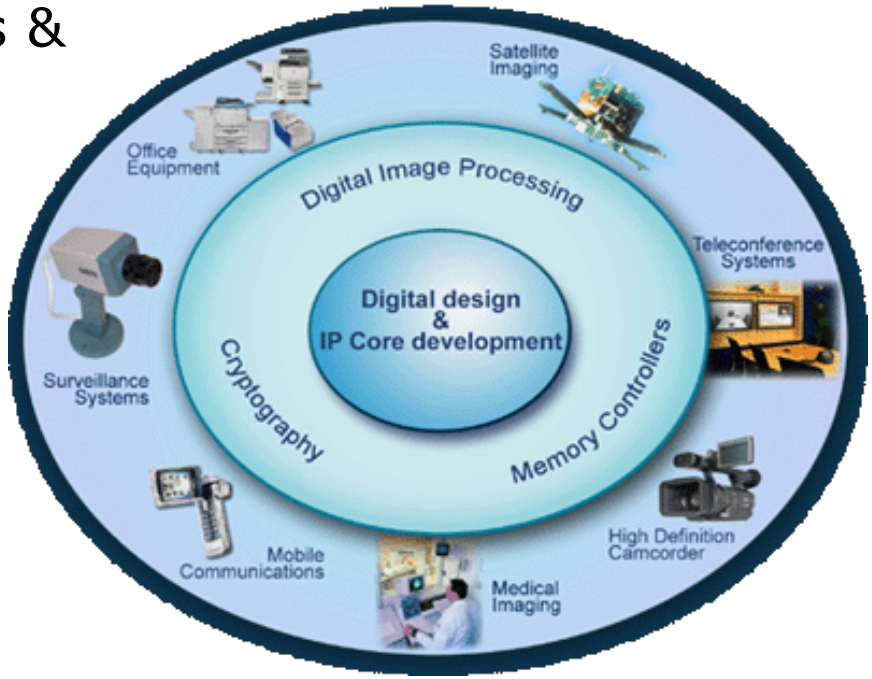
Employ-owned silicon IP vendor, established in 2001

➔ **Technology**: Custom hardware architectures for image and video compression

➔ **Challenge:** Keep up with the Mpixels and compression algorithms complexity evolution, while keeping the hardware resources & power low

➔ **Results: >60 customers WW** Products used from aerospace to consumer electronics applications

JPEG2000, JPEG, JPEG-LS, Lossless JPEG, H264



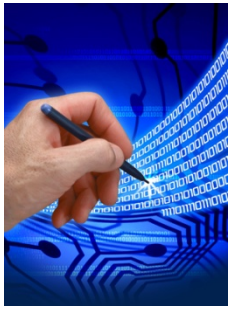
Think Silicon

Think Silicon Ltd

➔ **Market:** Semiconductor Intellectual Propery (SIP)

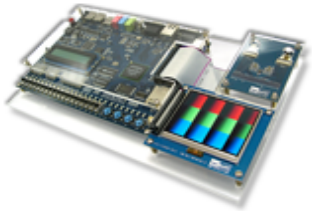
➔ **Target:** Mobile Graphics Solutions

➔**Technology Challenges**: Algorithm Design, HW Design, SW Drivers, Verification, Interoperability, OS porting, Prototyping, System Integration



DirectFB

OpenVG Linux



Graphics Algorithms

SW Design

HW Design

Interoperability OS Porting

Prototyping

System Integration

Analogies S.A.

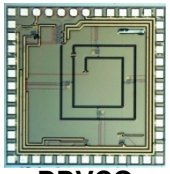
A New Semiconductor Intellectual Property Design Company

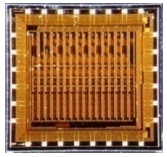
Specializing in the development and provision of analog/mixed signal/RF Intellectual Property (IP) cores and design services

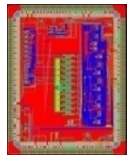
Challenge: Incorporate high speed connectivity interfaces in today's mainstream processes' SoCs

Technology: Design, prove, provide and customize high speed connectivity interface IPs in mainstream processes

14GHz VCO/PLL, SISO FEC, DDR2 PHY, USB3.0 PHY IP


DDVCO

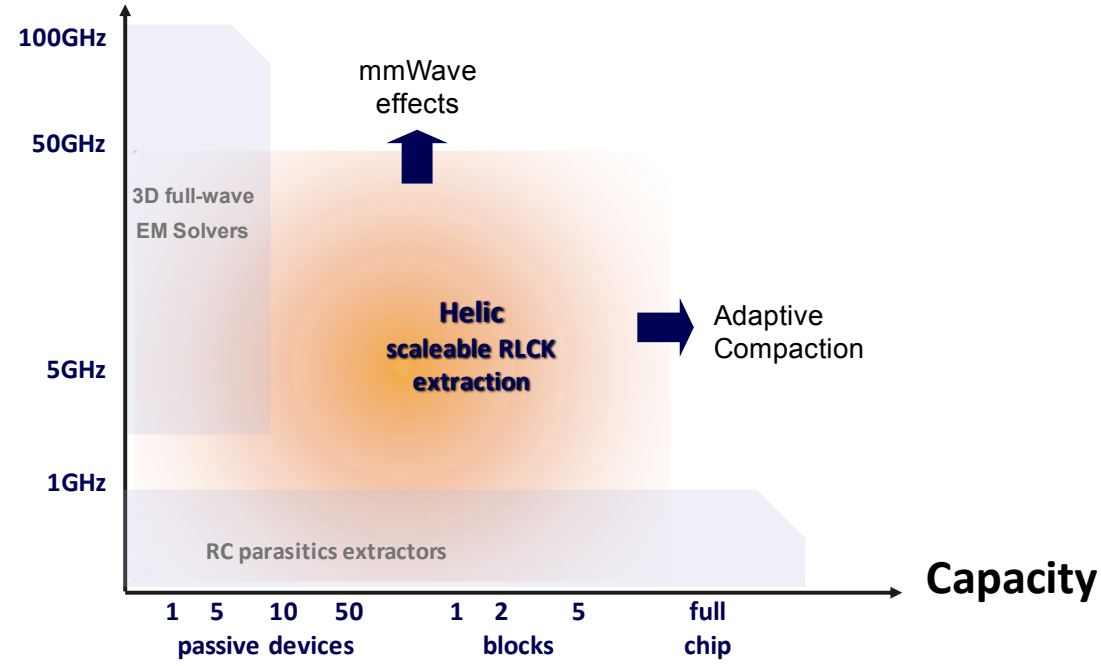

ASISOD

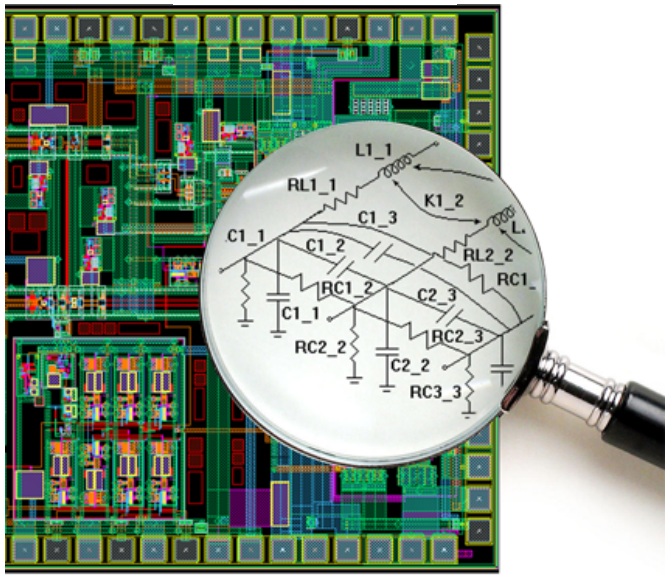

DDR2PHY

Result: Lower risk and TTM for SoC developers

Helic, Inc.

- **EDA company** – 2000 – Financed by reference investors (Andy Bechtolsheim)
- **Target Market**: Analog, MS, RF IC designs
- **Technology**: Fast EM and high-frequency extraction
- **Challenge**: Accuracy and Capacity beyond 60GHz
- **Results**: **>50** corporate customers (US, Japan)





What we can do for you

We will find the right HSIA partner for your business and help you build an effective, collaborative relationship