

**NETWORKING DAY**

**Συνεργασία στην Έρευνα & Επαγγελματικές  
Προοπτικές Νέων Επιστημόνων**

**Τρίτη, 24 Μαΐου 2011**  
Συνεδριακό και Πολιτιστικό Κέντρο  
Πανεπιστήμιο Πατρών  
**10:00-15:30**

**Νάνο/Μικροηλεκτρονική και Ενσωματωμένα Συστήματα**

**Nanoradio Hellas A.E.**



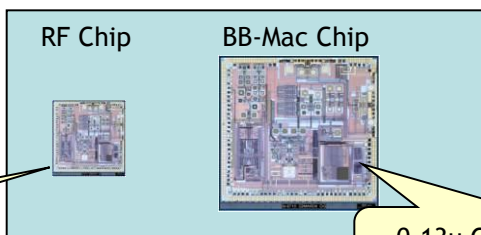
# Τεχνολογία, ερευνητικά αποτελέσματα και πνευματική ιδιοκτησία

Currently in Production

- 802.11b/g
- Compact BOM and Footprint (total 54,7 mm<sup>2</sup> typical appl.)
- Total silicon die area 16+4 = 20mm<sup>2</sup> including RF-PA

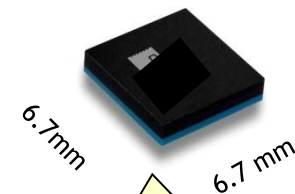
**NRX700**  
mass production

- 0.35μ SiGe
- Integrated PA



- 0.13μ CMOS
- Integrated power mgmt

SiP Solution



- Produced by module manufacturers

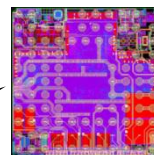
802.11b/g/n

BOM and Footprint further shrunk (total 35 mm<sup>2</sup> total system solution)

WL-CSP CoB

**NRX600/605**  
Engineering Samples

- 0.13μ SiGe
- Integrated power management & PA



Single chip Solution



- Ready for mount on PCB
- WLCSP 400um pitch

Future

802.11a/b/g/n + HT40 (Rx/Tx)

Dual Band

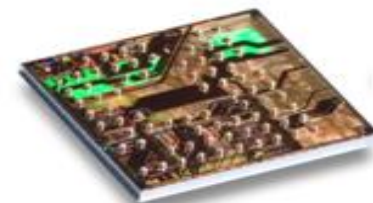
Bluetooth

**NRX900/905**  
Design Phase

- 65nm CMOS
- Integrated power management & PA

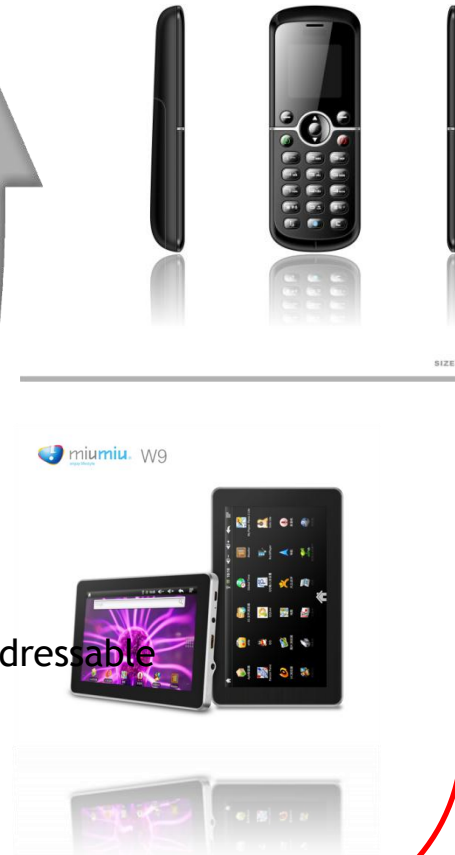


Single chip Solution



# Εξαγωγική δραστηριότητα και επιτυχίες

- ✓ 15 major mobile phone manufactures have selected Nanoradio, and growing
  - ❑ 5 Global TOP10 mobile players, including Samsung, selected the Nanoradio Solution
  - ❑ #1 Japanese vendor Sharp
  - ❑ leading ODM's and OEM's in China and Taiwan
  
- ✓ Nanoradio also selected for
  - ❑ MIDs
  - ❑ VoIP phones
  - ❑ Wi-Fi headsets
  - ❑ DSC
  - ❑ Photo frames
  
- ✓ Volumes increasing fast
  - ❑ 350% 2008->2009
  - ❑ 350% 2009->2010
  
- ✓ Leading wafer and back-end partners
  
- ✓ Ported on major operating systems and platforms, increasing the market to 70%



# Προβλέψεις και προοπτικές ανάπτυξης

- ✓ WLAN is, if not the only one, but one of the few High Tech Segment Markets which keep double digit growth rate every year, the last 10 years !!
- ✓ WLAN penetration in new markets is admirable:  
8 years ago: Desktops, Laptops, Access Points  
3-4 years ago: smartphones, MP3 players, cameras, Voice over IP  
Today: Home entertainment systems, Personal Area Networks, PC peripherals, smart grid and many others
- ✓ The strategy of the company is to remain in the leading position in the list of the Wi-Fi IC vendors for portable device. This will be achieved by focusing on:
  - ❑ *Power consumption issues*
  - ❑ *Size of our products*
  - ❑ *Best in class IC technology*
  - ❑ *Compliance with Wi-Fi Alliance Specifications and Optimization of the protocol implementation to minimize the need of hardware resources and reduce cost*
  - ❑ *Mobile Platform evolution (e.g. Android, RTOS, RTK-E, REX etc)*
- ✓ The forecast for this year and a feasible target is to sell 10 million Wi-Fi ICs, an increase of almost 300% compared to 2010

*Nanoradio Hellas will continue to provide high quality design services, as part of the Nanoradio Research and Development team in the following areas: Hardware, Software, Integration and Verification, Customers' Proprietary Feature Development*

# Συνεργασίες που έχει ή θέλει να αναπτύξει η επιχείρηση

Nanoradio has a strong partnership network which is expanding constantly and consists of:

- ✓ Silicon Technology suppliers  
IBM, Tower, Global Foundries
- ✓ Mobile Platform vendors  
Qualcom, STE, Infineon (Intel), Broadcom
- ✓ Product Manufacturers mainly in Asia
- ✓ Design Centers, HW/SW

Nanoradio is interested in working with the world leaders or those who have the ambition and enough self-confidence to reach the top.

# Ανάγκες της επιχείρησης σε ειδικότητες και προσωπικό

## Areas of Interest:

- High speed (60GHz), low power, RF design for its next generation products
- Mobile Platform SW Development Experts
- Network Experts