# Micro-/Nanoelectronic Industry in Romania

### An Overview and Growth Potential

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#### Infineon worldwide



- Infineon provides semiconductor and system solutions, focusing on three central needs of our modern society: Energy efficiency, Communications and Security
- Revenue in FY 2009: 3.027 billion EUR
- Some 25,000 employees worldwide (as of Jan 2010)
- Strong technology portfolio with about 22,900 patents and patent applications
- More than 30 major R&D locations

#### Infineon Romania

- Founded in April 2005
- Located in the northern part of Bucharest
- R&D Center, 200 employees
- 3500m<sup>2</sup> office, research and laboratory area

#### Infineon Romania core competencies



#### Automotive applications

#### Chip Cards and Security

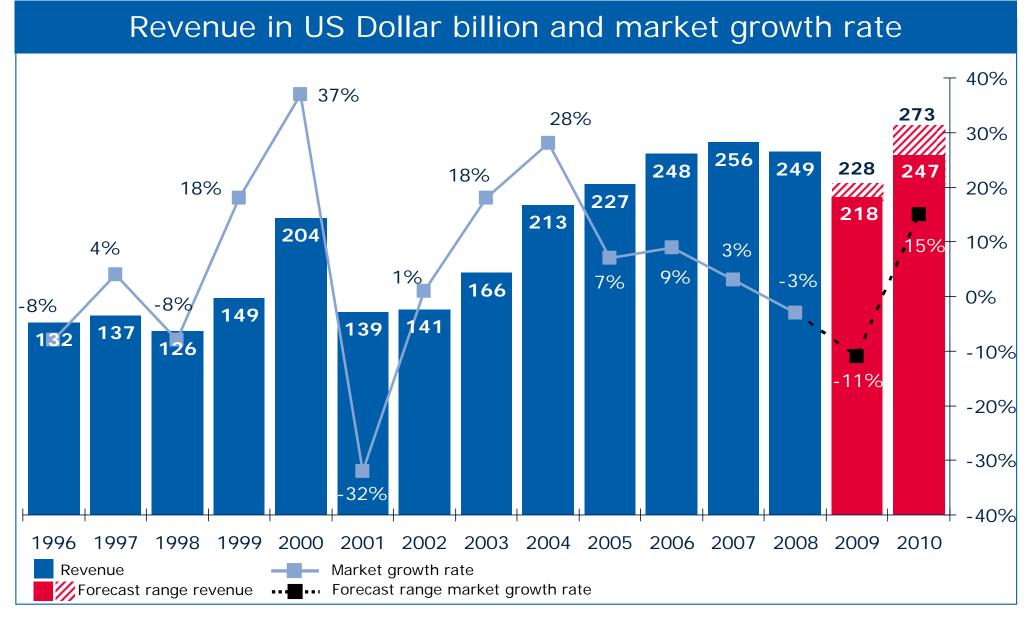






#### Infineon Romania is working over the complete value chain, from concept to product ramp-up for state of the art semiconductors

# Positive outlook for global semiconductor market



Source: WSTS for historical data; Forecast: Ø of VLSI, Gartner, iSuppli, WSTS, IC Insights, Future Horizons; market growth rate y-o-y January 29, 2010 Copyright © Infineon Technologies 2010. All rights reserved. Page 4

#### Romania: Automotive Industry Map

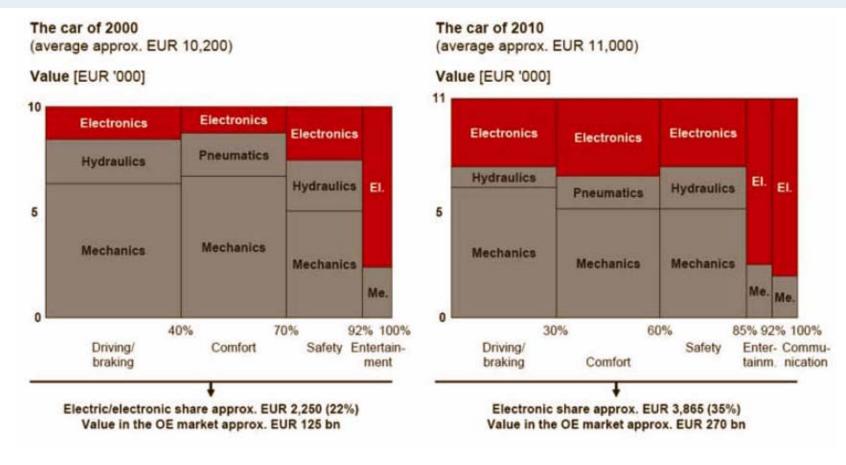


OEM Renault (complete value chain in Romania) Ford **TIER 1 SUPPLIERS Running gear Electrical systems** Interior equipment Propulsion Body Cockpit, seats, dash-board, air Cables, bus systems, embedded Power train, exhaust systems, Body, roof, glass, doors, lighting Suspension, brakes, axles, steering, conditioning systems engines etc. tyres □ Johnson Controls Dräxlmaier Borla Autoliv □ Continental Delphi Packard □ Faurecia Cortubi □ BOS Michelin Honeywell Garett D Pirelli Continental □ Continental □ Hella □ Kromberg&Schubert Valeo Pulsor Takata Corporation Bosch Bega Tehnomet □ Alcatel Calsonic Kansei Compponente Auto □ Rolem Lear Corporation Topoloveni Valeo Alcoa Fujikura Gean Otomative Leoni Wiring Sys.

Production is moving East and more R&D is being carried out by the OEMs and suppliers (e.g. Renault, Infineon, Honeywell, ON Semi).

□ Suleve

### Electronic share within automotive applications



Romania has a good research competence and the complete value chain of the automotive industry is already present => Use the trend of increasing the electronic share within automotive applications! Now!

Infineon



#### National Programs

Set-up of National Funding Programs/Platforms with clear focus on certain technology fields and the needs of the local industry (No watering-pot principle)

#### EU Programs

Set-up of National coordination groups for EU Programs / Gov. – Industry (e.g. ENIAC Austria, an open platform acting as an industry driven enabler for research and development activities in the field of micro- and nanoelectronics) Necessary measures to use the momentum (2)



#### Legislation to improve R&D activity in Romania

- Corporate Tax (chapter in Fiscal Procedure Code, Law 571/2003): Extra deductibility of eligible costs for R&D activity for tax on profit calculation - dificult to apply as there is no norm in place
- Income Tax (chapter in Fiscal Procedure Code, Law 571/2003): Income tax exemption for employees working in the area of creating computers programs -dificult to apply as list of specialisation is limitted and not updated periodically; e.g. employees doing the same job and graduating the same faculty but different specialisation

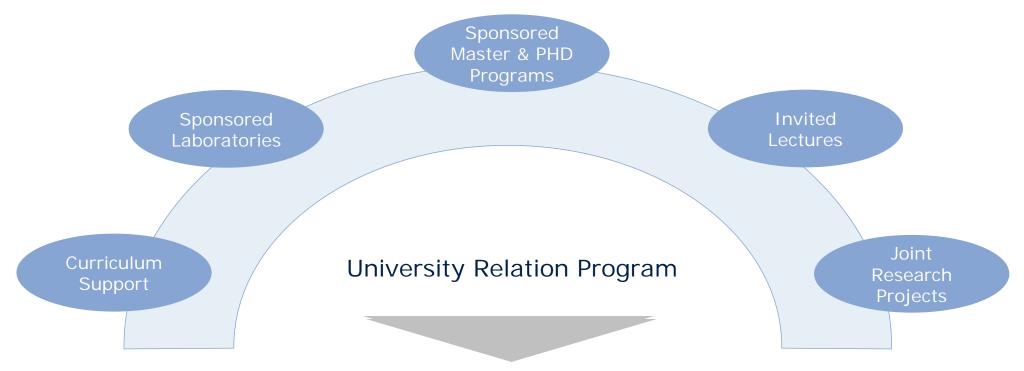
(electronics and microelectronics can not benefit from this law)

□ Intellectual Property. A better legislation regarding will:

- secure companies investment in R&D activities
- develop innovation activities in Romanian R&D centers
- Attract more R&D activities/companies

## Necessary measures to use the momentum (3)

New concepts in cooperation across Universities – R&D institutes – Industrial partners to develop a strong cooperation platforms and enable a more focused education



Industry can provide leadership and support for Romanian learning system that guides students in making informed career preparation decisions, developing skills and knowledge, and preparing them to compete effectively in a global economy

İnfineon



# We commit. We innovate. We partner. We create value.



# ENERGY EFFICIENCY COMMUNICATIONS SECURITY

Innovative semiconductor solutions for energy efficiency, communications and security.

