Activities of the TU Graz Institute of Electronics
Microelectronics companies in the region

- NXP Gratkorn
- austriamicrosystems
- Infineon Graz Villach...
- Micronas Villach
- Dialog Semi
- Other small companies
- Lumitec
- & International Relations (all companies)
μE application companies

- Infineon
- Graz
- Villach
- ...
- austriamicrosystems
- AVL
- Magna
- NXP
- Gratkorn
- kleinere E & μE
- Lumitec
- TU Graz Electronics
- AT&S
- Paar
- JR
- KMUs
- μE application companies
- kleinere E & μE
- MICRONAS
- Villach
- austria-microsystems
- …
Activities at TU Graz related to μE can be found in several institutes, main topics are:

- electronics & microelectronics
- information technology & computer science
- „telematics“
- measurement & test engineering
- solid state physics
- electron microscopy and nanoanalysis

→ ICT is one of the key research/competence areas
Digital Arena

Systems

Complexity

Embedded Software

Software & Update

SW Dependability

Testability

DFM

Production

Digital

Power

Technology

Device Models

Electronics Physics

Environmental Aspects

EMC / ESD

Quality & Reliability

Assembly & Packaging

Analog & Mixed Signal
Conventional electronic systems, value chain pyramid
IFE focus #1: electronic systems

Conventional electronic systems, value chain pyramid
IFE focus #2: integrated circuits

Conventional electronic systems, value chain pyramid
IFE combined focus: integrated systems  
analog / mixed signal
Research topics

ADU / DAU

EMC on system & chip level

RFID low power front end
RFID reader integration

power supply @ mixed signal SoC

high speed serial links

automotive electronics / busses
Master - μE / Analog Chip Design

**Pre-condition:**

Completion of 6 semester bachelor program @ TUG or comparable education

**Duration:** 3 semesters + thesis

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Regular master program @ TU Graz starting in WS 2007/08
Automotive electronics for the TUG racing car
High performance audio signal analysis for mobile music platform circuits
Analog chip design
Master program

Lecture & training
using state of the art
CAD tools
Thank you for your attention