



**emtrion** DIMM  
a scalable and multi-OS  
SOM family

Francis Ielsch – Product manager

> 20 years experience

## Hardware & Software

Karlsruhe, Germany



## Engineering & Consulting

Karlsruhe, Germany

## Production

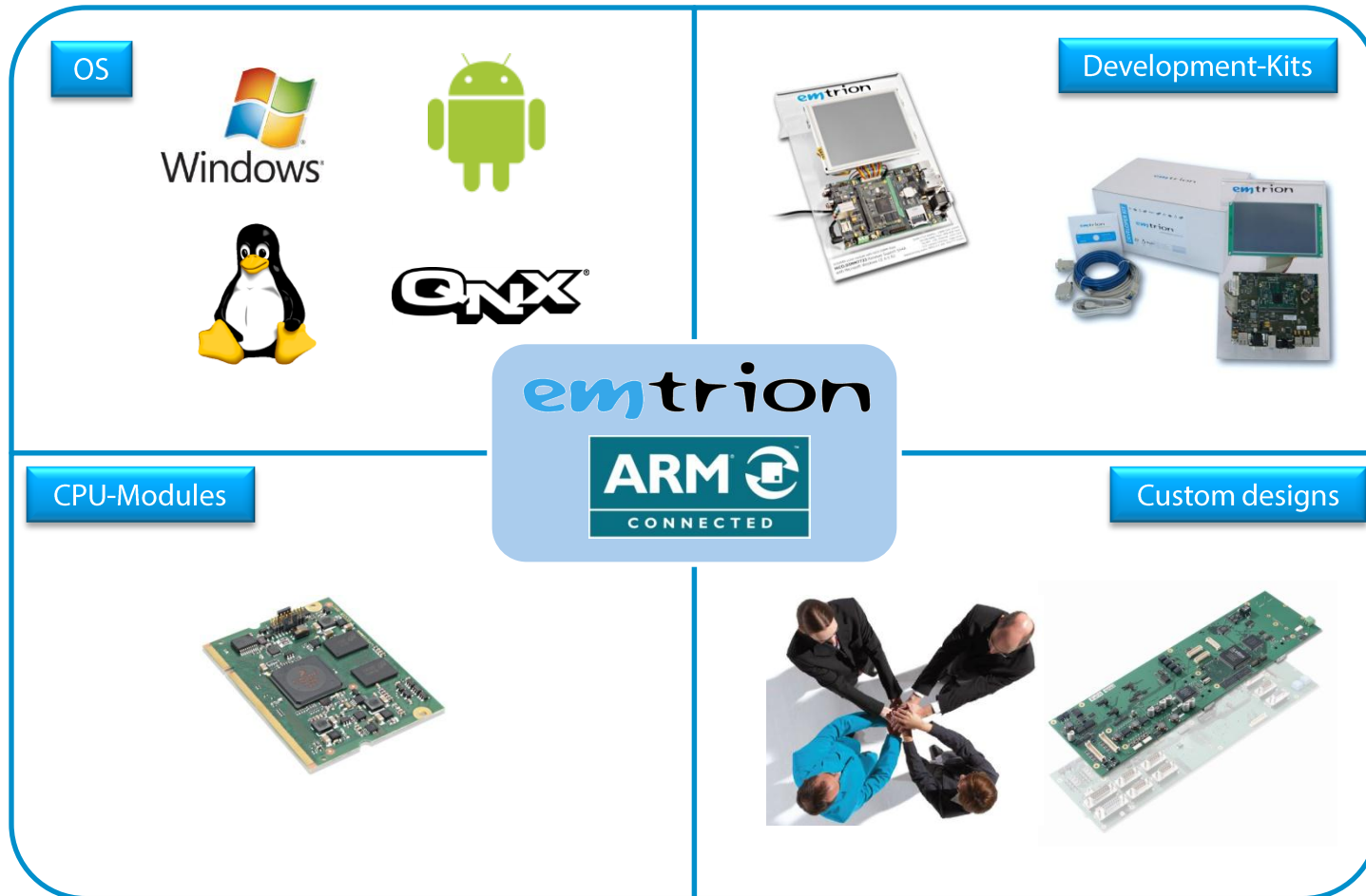
Germany

# emtrion's ARM Ecosystem

boards & solutions  
CONFERENCE

ARM-based  
Embedded Computing

**emtrion**  
embedded systems



emtrion

Competence

Products

Expertise

References



CPU

Single Board  
Computer (SBC)



CPU-Modules



Base Boards



# Why emtrion's SoM ?

boards &  
solutions  
CONFERENCE

ARM-based  
Embedded Computing

**emtrion**  
embedded systems

- Ready to use
  - saves time
  - saves engineering costs
  - saves engineering risks
- Flexible and scalable
- Longevity and migration path
- Maintenance: save yearly HW/SW maintenance costs

emtrion

Competence

Products

Expertise

References

# DIMM family

boards &  
solutions  
CONFERENCE

ARM-based  
Embedded Computing

emtrion  
embedded systems



DIMM-MX257



DIMM-AM335x



DIMM-MX53



DIMM-EMEV2



DIMM-MX6

new !

Coming Q3

440 MIPS

12.000 MIPS

- compatible size
- pin-to-pin compatible
- Scalable, Flexible

emtrion

Competence

Products

Expertise

References

# Solutions for CCTV and Multimedia

boards & solutions CONFERENCE

ARM-based Embedded Computing

**emtrion**  
embedded systems



2D

3D



DIMM-MX53

2

encode  
decode

yes

yes



DIMM-EMEV2

1

decode

yes

yes



DIMM-MX257

1

no

no

no

2600 MIPS

440 MIPS

emtrion

Competence

Products

Expertise

References

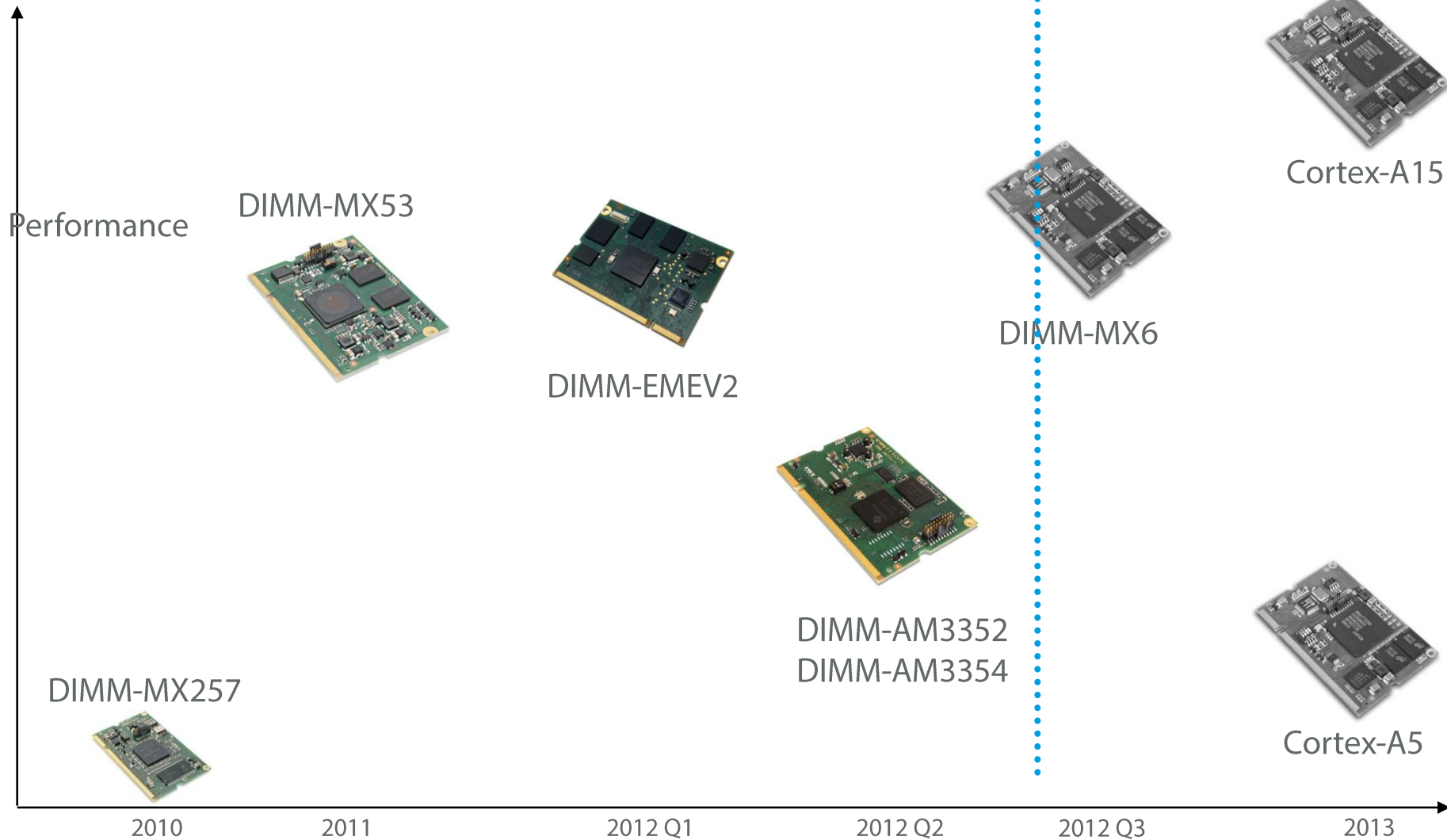


# Roadmap

boards & solutions  
CONFERENCE

ARM-based  
Embedded Computing

**emtrion**  
embedded systems



emtrion

Competence

**Products**

Expertise

References

- Most powerful ARM based SoM
  - Up to Quad-core 12.000 MIPS
  - Powerful Graphic Acceleration
- RAM: DDR3 from 512MB up to 2 GB
- Flash: NAND SLC from 512MB up to 8 GB
- Available with
  - i.MX6 Solo
  - i.MX6 Duo
  - i.MX6 Quad
  - extended temp. -40°C to +85°C



Coming Q3



## Features

Ethernet

Power over Ethernet (PoE)

WiFi 802.11g/b

USB 2.0 Host

USB 2.0 Device

TFT Display (generic)

Touch Screen

DVI-I Port

Camera Input 1

Camera Input 2

Video Input

Video Output

Analog Audio

Digital Audio

SD-Card Socket

microSD-Card Socket

UART (-A, -B) RS232

UART (-C, -D, -E) LVTTTL

UART-A via miniUSB

CAN

SPI

I<sup>2</sup>C

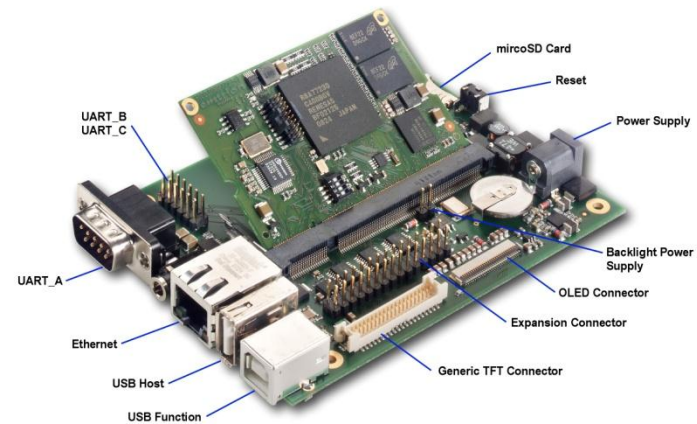
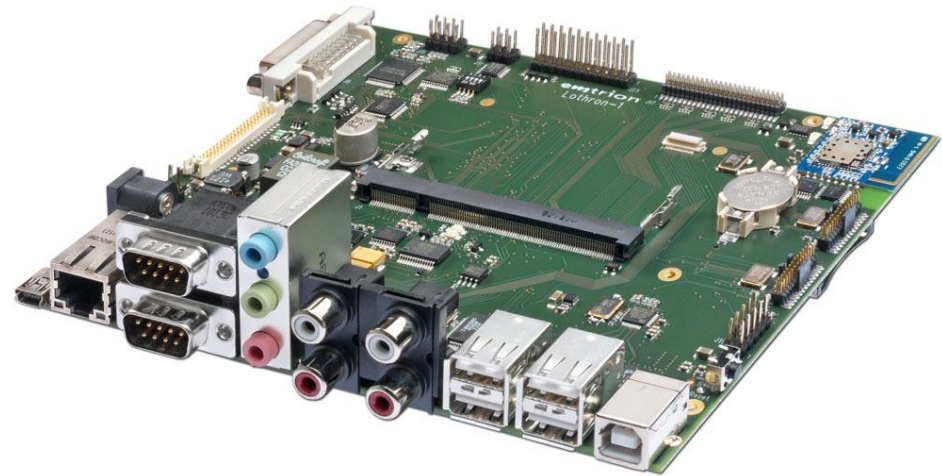
IrDA Interface

GPIO

Analog Inputs

3D Acceleration Sensor

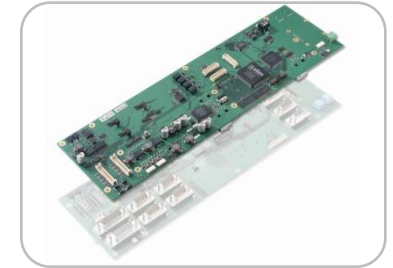
CPU-Bus Interface



- All-in-one and ready to use
- Evaluation, prototyping
- Application or system development
- Fast time to market solution
- Re-use our module, make your own base-board
- Real industrial kit



- Custom solutions for hardware and software



Vorteil:

- bewährtes Design
- kurzes Time-to-market durch Standards
- kosten- und funktionsoptimierte Baugruppen
- Outsourcing development
- Outsourcing life cycle management
- Support für Soft- und Hardware

**Questions ?**

**emtrion**