







MICROSPACE® PCIe/104™ MSMST Kontron Compact Computers, Luterbach



Andres Kammermann
Sales & Marketing Director
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- » 15 Mio Euro / year turnover, 100 employees
- » Development, production, sales support in-house
- » Focus on X86 CPU technology
- » Boards and systems, broadest range of PC/104 products
- » Extended temperature $-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$
- » Rugged, conformal coating

PC/104 SBCs

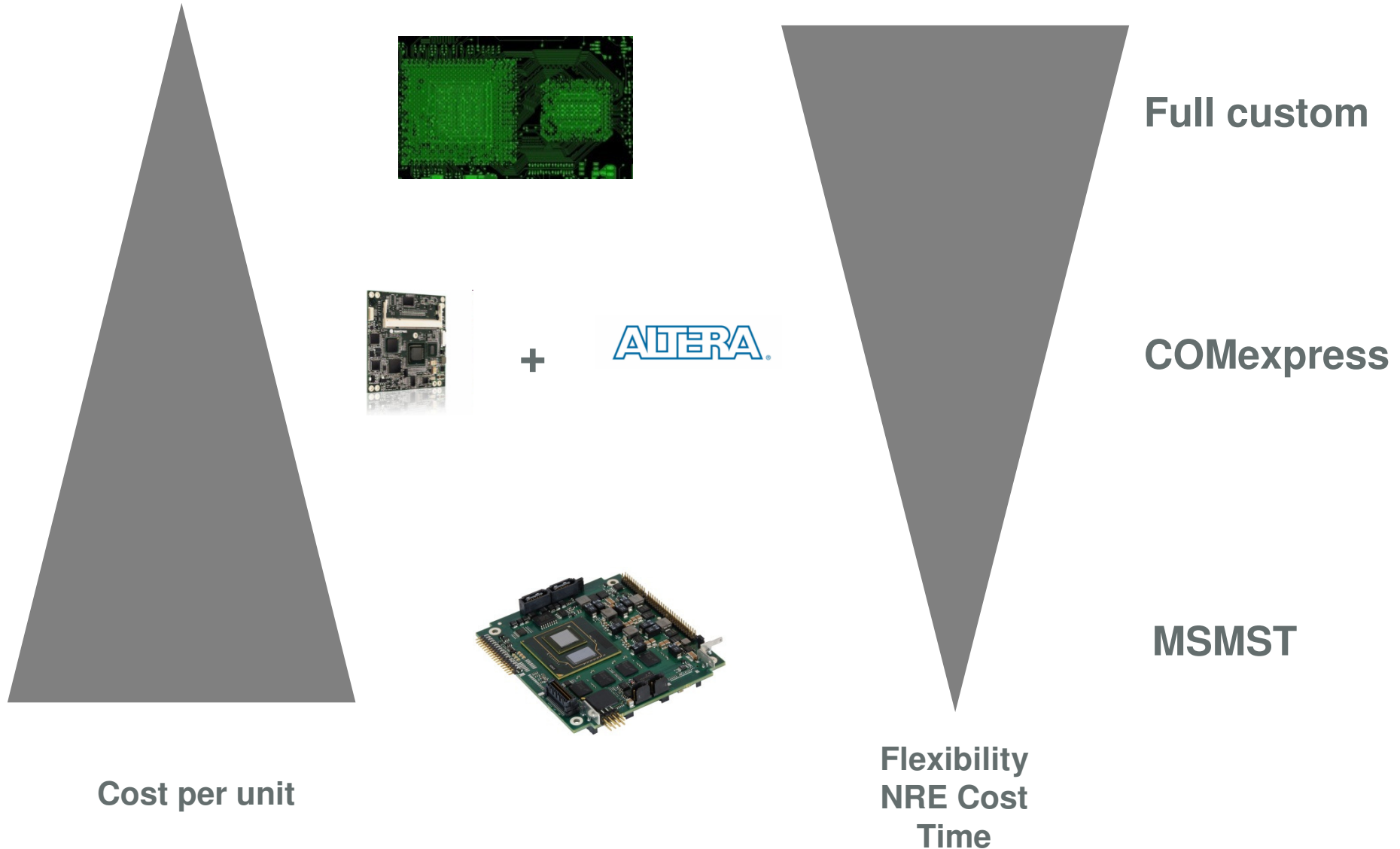
	LX800	Core2 Duo	Z530	E6x5C	D525	G-Series
PC/104						
	MSM800	MSM945	MSM200	MSMST	MSM-LP	MSM-eO

» The key for flexibility and longevity



- Software re-use with x86 processors
- Portable hardware on-demand with Altera

3 different design levels for E6x5C serie

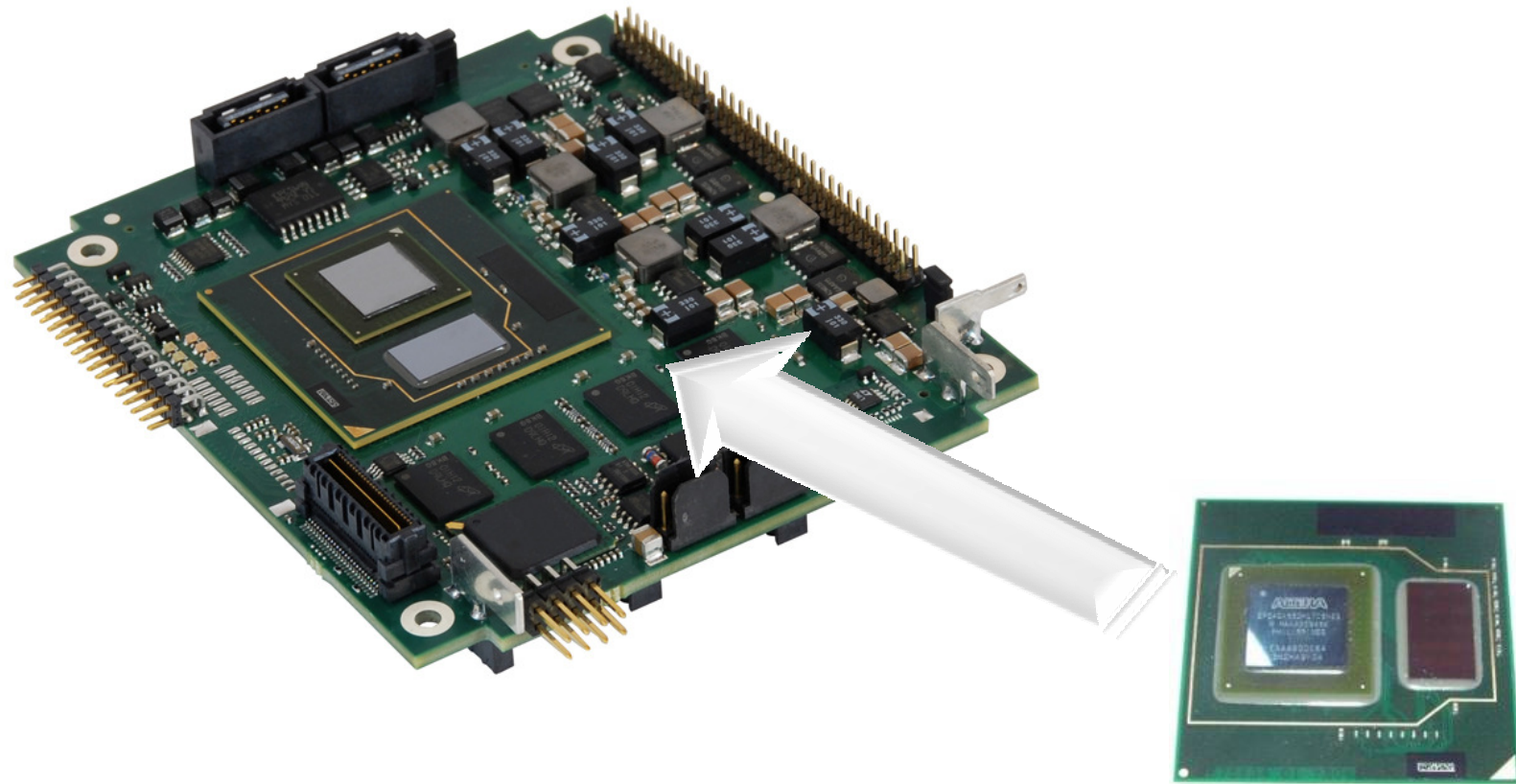


» Stellarton = Intel® Atom™ processor-based configurable platform

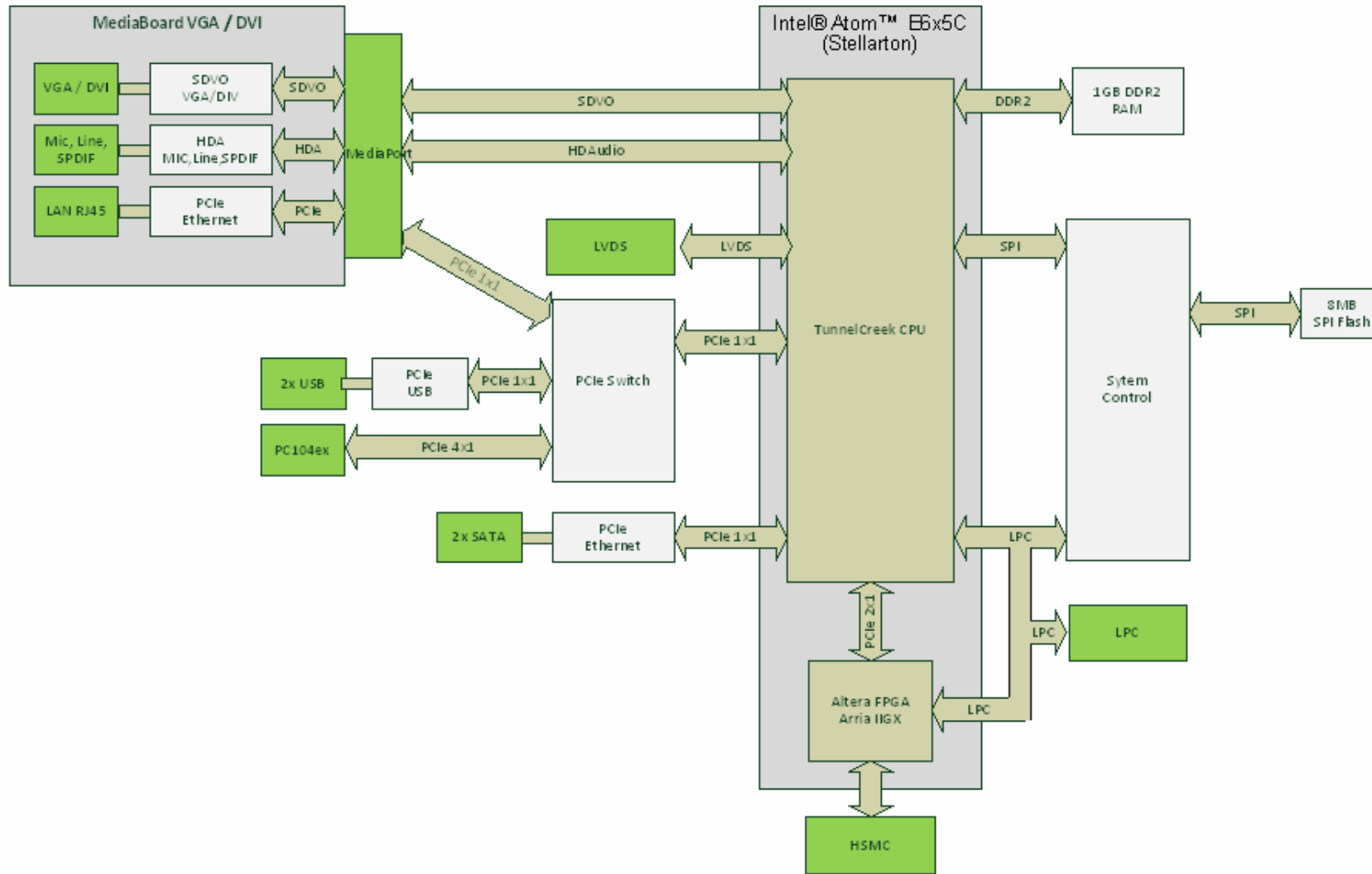
- Intel Atom E6x5CT series CPU (up to 1.3 GHz) with integrated PCIe, memory controller, graphics engine and HD audio and video
- Including ALTERA Arria II GX65 FPGA technology for flexible I/O connectivity
- Meets the requirements for long life product
- Extended operating temperature range (-40° C to +85 ° C) optional



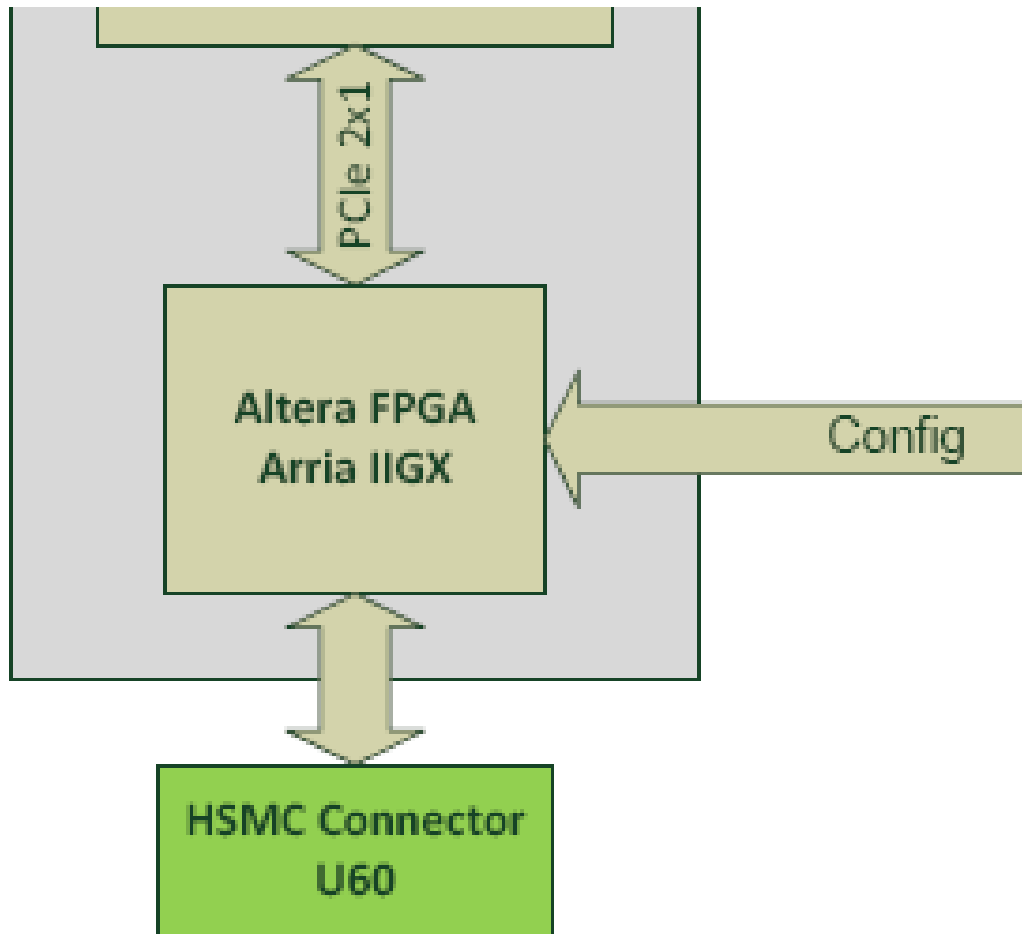
MSMST: The Stellarton PCIe/104 Solution

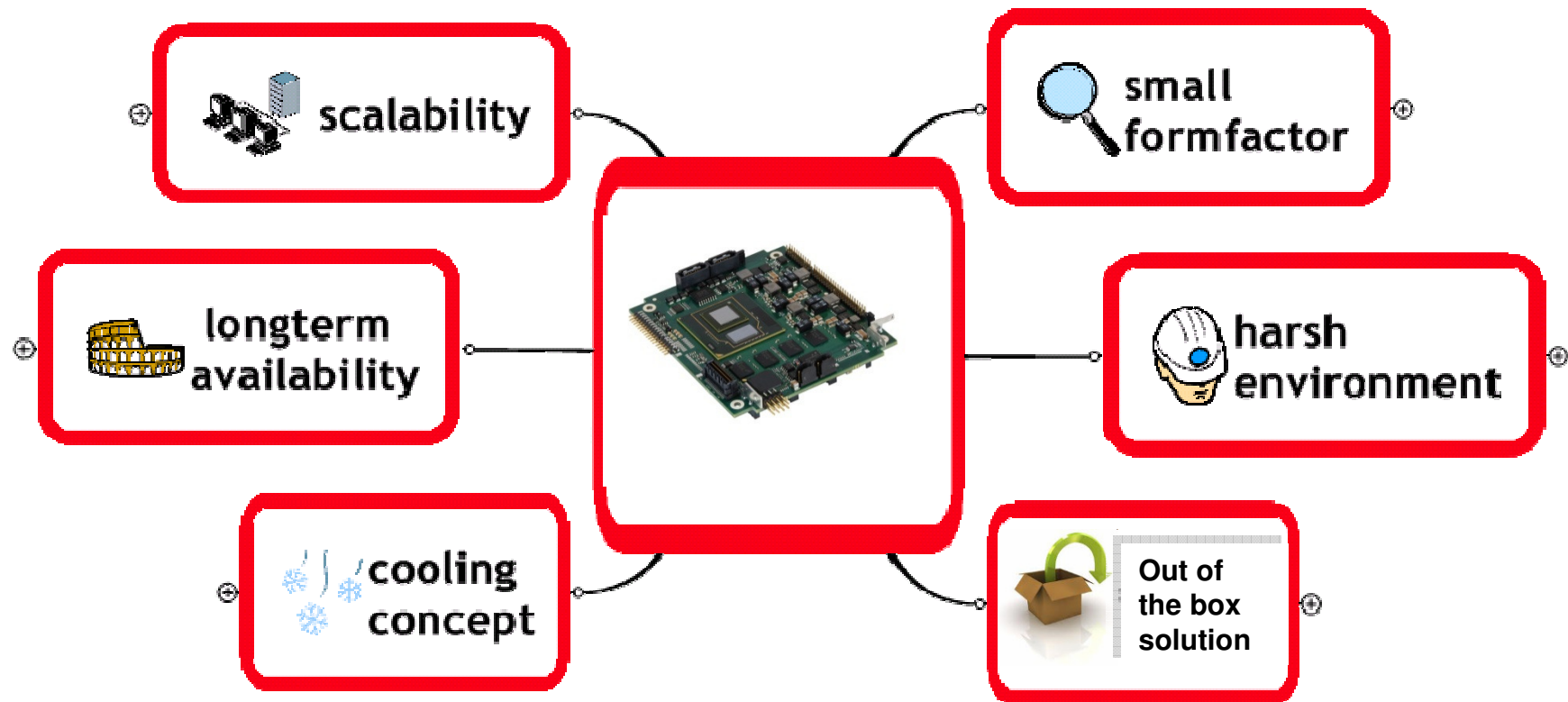


MSMST Block Diagram (1 of 2)



MSMST Block Diagram (2 of 2)





Possible developments in the FPGA

- Encryption options for FPGA content - “no-copy” feature
- Microcontroller function, co-processor
- Data acquisition and processing (DSP)
- Graphic processing
- Video processing (MPEG4 Encoding)
- Customer protocol stack
- And a lot more.....



- » The E6x6C device from Intel is supported by the Quartus II **Subscription Edition** Software from Altera.

<http://www.altera.com/products/software/quartus-ii/subscription-edition/qts-se-index.html>

NOTE: The free Quartus II Web edition Software **does not** support the Intel device E6x5C

- » MSMST offers HSMC standard connector for implementing physical layer
HSMC = High Speed Mezzanine Connector
- » Please check the Altera web page for detailed specification available
boards
http://www.altera.com/products/devkits/kitdaughter_boards.jsp?GSA_pos=1&WT.oss_r=1&WT.oss=HSMC

Example of a Quad Video HSMC card



» Ready to Run Package

Included:

- » **Microspace MSMST
PCIe/104 Board with Intel Atom E6x5CT**
- » **Media Board DVI or VGA with
Gbit Ethernet and Sound port**
- » **4-Digit POST Code Board**
- » **HSMC Break Out, Debug and
Loopback Board**
- » **Power Supply**
- » **Cable Set (SATA, USB, Power, PS2)**
- » **USB JTAG Programmer**
- » **Bootable Memory Stick with 2 O/S options:
Windows and Fedora 14 Linux**



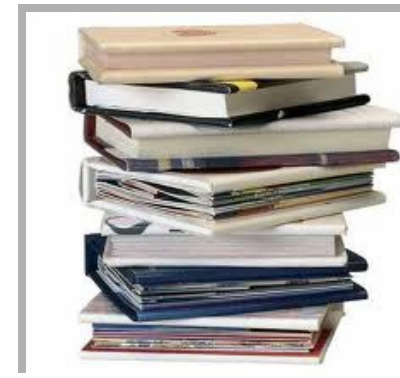
» <http://us.kontron.com/searchresult/?searchterm=MSMST>

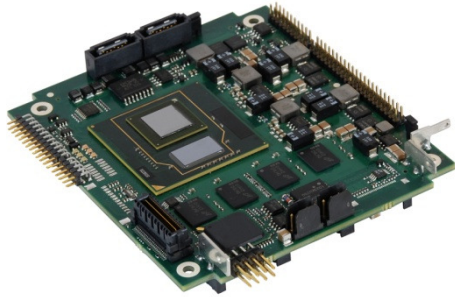
» **Datasheet**

» **Manual**

» **Start up guide**

» **3D Drawings**





- » MSMST Development Kit
- Full production, available



- » Kontron is your source for embedded solution
- » We offer a broad range in PC/104 solutions
- » MSMST
PCIe/104 off-the-shelf solution that combine x86 technology with programmable logic
- » Achieve your goals more effectively when teamed with the **Innovation Leader**



Questions???

Thank
Thank
You
THANK
You
Thank You



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Warsaw Kiev Liberec/Pilsen Chichester Copenhagen Brussels Toulon Luterbach

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