



» 2011 Portfolio Overview «

Driving the world's embedded computing platforms



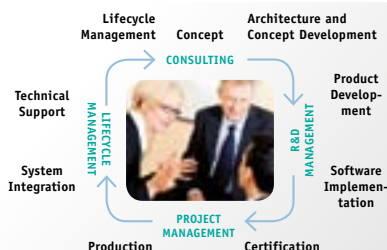
» We have the right solution for you «



Comprehensive Services

Kontron offers customers value-added services for their projects. Our professional services include, but are not limited to:

- » Consulting
- » Concept optimization
- » Specification support
- » Kontron Academy for hard- and software trainings
- » Extended Product Life Cycle Management:
 - High quality, reliable components with predictable and long lives
 - Product Change Notifications (PCNs) for validation and documentation
 - Defined End-Of-Life (EOL) processes with selectable options
- » Customer Service wherever you need it the most



Software Services

All Kontron standard products are supported and validated with:

- » Board Support Packages for all important Operating Systems like Windows 7, Linux, VxWorks including all drivers and support for all hardware features
- » Hypervisor/Virtualization, validated with different OS (if hyper-threading and/or multi-core is supported by the CPU)
- » Software tool chain including common, standardized Embedded API (EAPI)
- » BIOS adaption with CMOS setting, security functionality and boot-logo customization

Kontron's Global Software Center offers FPGA programming as an optional software services for customers.

Validated IP Cores are available for CAN-Bus, serial interfaces, PCI Express, I²C and GPIO.

On the basis of a new cooperation, Kontron provides customers with application-ready implementations of PROFINET, Ethercat, EtherNET/IP and MODBUS TCP for FPGA-based I/O hubs.

Technical Support

Kontron emphasizes personal contact rather than answering systems and virtual assistants. Our technical support staffs are comprised of experienced engineers who are ready and able to respond to your requests. This means that you instantly get in contact with someone who understands your situation, analyzes the problem and gets it resolved quickly.

- » On-site support services
- » Different support and maintenance levels for customized packages
- » Direct access to engineering as needed
- » RMA process: repair service for boards and systems
- » Customer-specific service contracts



Military & Aerospace



Cobalt

Transportation



HMTR

Custom Design ODM Services



Software Services



Custom OEM Solutions

For applications where standard COTS products are not a perfect fit, Kontron offers partial or fully customized designs, tailored to the individual demands of the application, like carrier boards, SBCs and integrated systems. Thanks to Kontron's broad product range and excellent expertise in board and system design, customers gain an advantage for their application-specific designs for the same high quality, ruggedness and longevity.

- » Extended temperature, ruggedization and conformal coating for harsh environmental conditions
- » Dedicated project management through your local project manager with worldwide access to specialist know-how
- » Verification and validation for prototype and production releases under close-to-production conditions
- » Certifications for quality assurance and for various industry-specific standards



Custom Design and Manufacturing / ODM Services

At Kontron, our strength in original Design and Manufacturing Services (ODM) comes from our roots as an innovative leader in open standards for embedded computers. Kontron understands the importance of this groundwork. With over 890 highly qualified engineers, Kontron has one of the **world's largest R&D teams for embedded computing**. Kontron has a portfolio of COTS products that are customized for unique designs and solutions.

The re-use of existing technology **optimizes costs**. OEMs also receive the benefit of utilizing open-standard COTS products without having to pay for the functional specification. **Shorter development time** speeds up time-to-market.

Kontron capabilities then come full circle with our high-quality production site in Malaysia.





Boards & Mezzanines

Kontron board and mezzanine products give designers a commercial off-the-shelf solution that offer the flexibility of full or semi-customization. Search below to find the board-level product family that best matches your application needs.



KTLX800/pITX

2.5" Single Board Computers

- » Pico-ITX™ Small Form Factor 100x72 mm
- » Intel® Atom™ and AMD low power CPUs and bootable microSD support
- » Perfect for ultra small and mobile devices



JReplus-DC

3.5" Single Board Computers

- » Available with Intel® Atom™ and AMD CPUs
- » PCI/104™ compatible expansion interface, up to 6x USB 2.0, Dual LAN, Dual SATA, PATA 44



VMP3

3U VME

- » Extrem long term availability
- » Optimized for real-time solutions
- » Excellent Shock and Vibration capabilities through rugged design



VX3035

3U VPX

- » Intel and PowerPC Processors
- » VPX (VITA 46) and OpenVPX (VITA 65)
- » Standard Air- and Rugged Conduction-Cooled builds
- » Available also as Turnkey Eval/Development System



VM6250

6U VME

- » 6U VME High Performance PowerPC and Intel SBC
- » Maximum I/O Versatility Support for XMC, PMC and FMC Modules
- » Air and Conduction-Cooled Variants



VX6060

6U VPX

- » Dual Intel® Core™ i7 Computing Node
- » Four Cores with Hyperthreading from 1.67 GHz to 2+ GHz
- » Rugged Conduction-Cooled Version under 100W Power
- » Support of VXFabric™
- » Available also as Turnkey Eval/Development System



AM4020

Single AdvancedMCs

- » For use in ATCA and extreme high density MicroTCA platforms
- » Massive data throughput via high speed serial interconnects
- » Sophisticated manageability and serviceability via IPMI and hot-swap concept



KTQM67/mITX

Embedded Motherboards

- » Up to 2nd Generation Intel® i7/i5/i3 2Core and 4Core CPUs
- » Up to Intel® AMT 7.0
- » Solid capacitors
- » Longterm available up to 7 years



Double AdvancedMCs

- » Fully featured SBC (graphic, mass-storage, IO), power envelope of 80W enables high performance platforms
- » Massive data throughput via high speed serial interconnects
- » Sophisticated manageability and serviceability via IPMI and hot-swap concept



KTC5520-EATX

Server Board

- » Cost-Effective and Long-Life Server-Class Embedded Mother-board
- » Single/Dual Socket with 2 options: Intel® Xeon® 32 nm, 6-core E5645; Intel® Xeon® 45 nm 4-core L5518
- » KVM over IP and Remote Management; IPMI v2.0



CP3002

3U CompactPCI

- » Compact Size
- » Excellent Shock and Vibration capabilities
- » Scalable from ultra low power to dual core performance



CP6003

6U CompactPCI

- » High computing density solution through multi-core and multi-processor systems
- » Rugged Air- and Conduction-Cooled designs
- » Comprehensive I/O capabilities



AT8050

AdvancedTCA

- » Single Socket with 2 options: Intel® Xeon® 32 nm, 6-core L5638; Intel® Xeon® 45 nm 4-core L5518
- » Support for up to 48 GB on 3-channels, DDR3 1066 MHz, ECC, registered SDRAM on 6 DIMM sockets total
- » 1x Mid-size AdvancedMC bays



MICROSPACE® MSMST

PC/104™

- » PC/104™/-Plus™/-Express™, PCIe/104™
- » Stackable, space saving, extremely robust
- » Wide range of peripheral cards
- » Extended temperature available



PCI-761

Slot-CPU Full-Size

- » PICMG 1.0 + PICMG 1.3
- » Up to Intel® Core™ i3/i5/i7
- » Up to Triple 10/100/1000 Base-T LAN



XMC-ETH2

XMC/PMC

- » Ethernet, Graphics, Fieldbus and I/O modules
- » Standard Air- and Rugged Conduction-Cooled designs
- » Low Power Dissipation



HMI's

The scalable product line of the embedded HMI systems (Panel PCs, Micro Clients) offers scalable processor performance and display dimensions.



V Panel Express

- » High performance up to Intel® Core™ 2 Duo
- » Fanless cooling/max. processor performance
- » Scalable display size: 12.1"/15.0"/17.0"/19.0"



Micro Client IIA

- » 7.0"/10.4"/12.1"/15.0"/17.0" TFT Display
- » Fanless cooling, front IP 65
- » Small installation depth



Nano Client

- » Sealed chassis (IP66 around)
- » Fanless cooling
- » Low power management (Intel® Atom™ processor up to 1.6 GHz)



Pico Client

- » Industrial Panel PC with ARM9 processor
- » Cost and energy-efficient
- » Resistive touchscreen 5.7"
- » Front IP 65 protected



HMITR

- » 10.4" rugged low power display computer
- » Modular and maintenance free
- » Keypad or touch screen
- » Acc. EN50155 & UIC612-01



Computer-on-Modules

Computer-on-Modules (COMs) are highly integrated component Single Board Computers (SBCs) that support system expansion and application-specific customization. The CPU

module delivers the core functionality while all of the application-specific features are designed into the carrier board creating a semi-custom embedded solution.



ETExpress®-SC

COM Express® basic

- » Form factor (125x95 mm) for highest performance and most features
- » Intel® Core™ 2 Duo, Intel® Core™ i5 and i7 up to Quad Core
- » Up to 16 GB DDR3 dual memory with ECC support
- » PCI Express, PEG x16, SATA 300, USB 2.0 and more
- » COM Express® pin-out Type 2 and 6



ETX®-DC

ETX® 3.0

- » 95x114 mm Computer-on-Module
- » Intel® Atom™ N270, Intel® Core™, Intel® Core™ 2 Duo
- » ETX 3.0 boosts SATA interface
- » Migration path for Pentium® M modules



microETExpress®-OH

COM Express® compact

- » Form factor (95x95 mm) for small sized applications
- » High scalability
- » AMD G-Series, Intel® Atom™, Intel® Celeron® & Core™ 2 Duo technology
- » microETExpress®-XL for E2 Industrial Temp. (-40° to +85°C)
- » COM Express® pin-out Type 2 & 6



nanoETExpress®-TT

Ultra-small COM Express® solution

- » nanoETExpress (55x84 mm) with Intel® Atom™ Technology
- » Based on COM Express® COM.0 Pin-out Type 1 and 10
- » Memory and Flash Drive on board for mobile & rugged environment
- » Available up to E2 Industr. Temp.

SOFTWARE & SERVICES

Schematics and Evaluation Boards



- » Schematics and Proven Layouts for display integration & graphics adapter
- » Starter kits and evaluation boards for quick evaluation purposes and a head start in development
- » Reference schematics, i.e. for battery-powered applications (MARS) or graphic converters



Embedded Software

- » Embedded API for access to hardware, BIOS, OS & application
- » Unique API for all Computer-on-Modules
- » Reference Source Code and BSPs
- » Customization Services for BIOS and BSPs

CUSTOMER CARRIER BOARDS & SYSTEM INTEGRATION

What services can do for you



Custom Carrier Board

- » Computer-on-Modules carrier boards and full custom designs
- » x86, ARM and PowerPC design expertise
- » Complete system integration including thermal management



Customized Housing



Systems & Platforms

Kontron offers designers a broad variety of industrial rack mount computers and enclosures, industrial chassis, industrial panel PCs, industrial LCD monitors and industrial flat

panels, plus a selection of commercial-off-the-shelf open standard AdvancedTCA, MicroTCA, CompactPCI and VME/VPX pre-integrated platforms.



OM9141-40G

AdvancedTCA® OM Platforms

- » Designed for NEBS compliance
- » 2x 40 GbE switches, 10 GbE options
- » 12x slots for 40 GbE Packet processor Nodes, and/or, 10 GbE x86 processor and carrier nodes



CG2100 Carrier Grade Server

CRMS – Communications Rack Mount Servers

- » NEBS-3 / ETSI compliant
- » Long life support (3-5 years)
- » Integrated HW RAID



OBSERVO

CompactPCI® Platforms

- » Modular, rugged, market proven and long-lasting
- » Highest computing power through multi-core & multi processor systems
- » System management and HotSwap capabilities
- » Air- & Conduction-Cooled platforms



Concept Box CB752

Concept Box Family

- » Embedded Low Power with up to Intel® Core™2 Duo processors
- » Fanless cooling and flexible expansions
- » Long life support



OM6120

MicroTCA Platforms

- » From cost optimized compact system design to fully featured redundant system implementation
- » Massive data bandwidth on backplane via 1/10 GbE, sRIO or PCIe serial interconnects
- » Scalable performance via multi-processor concept



ThinkIO-Duo/-Solo

Embedded IPC

- » Ultracompact and reliable: MTBF 22 years, 10ms supply holdup
- » Maintenance free design
- » Open OEM software platforms: XPe, Real-time Linux, IEC61131-3



MICROSPACE® MPCX28R

Ruggedized Box PC's

- » Optimized for in-vehicle and railway applications, EN50155 certified
- » Extended temperature range of -25°C to +70°C (T3) is available



KISS 4U

Rack Mount Systems

- » Absolutely reliable
- » Extremely quiet
- » Highly rugged
- » Long life support



EZ3-VX3030

Turnkey VME/VPX platforms

- » Fast and easy Evaluation and Software Development (10mn setup)
- » cPCI, VPX or VME
- » Air-Cooled Laboratory Environment
- » Built for Customization



Vehicle Expansion Unit (VEU)

Rugged Enclosures, Systems & Custom System Integration

- » Wide range of standard and custom form factors supported
- » Rugged systems design/integration for COTS & custom solutions
- » Expertise in all forms of thermal management
- » Full qualification testing to EMI/RFI and extreme environmental specifications

» Looking for more information? «

Please send it to **Fax +49 (0)8165 77 279**
or go to **Web kontron.com/response**

Email Newsletter

- Yes, please send me your **monthly email newsletter**

Technical Information

- Yes, please send me the complete **Kontron Product Guide**
or a detailed **technical data sheet** about:

- Yes, **please call me**, I have a question concerning:

- Yes, please make me an **offer – free-of-charge** and
with no obligation – for the following product:

Product name _____ quantity _____

Consultation

- Yes, please arrange an **obligation-free consultation**

My address is:

_____ Company

_____ First name, Surname

_____ Position

_____ Street

_____ Postcode

_____ City

_____ Country

_____ Telephone

_____ Fax

_____ Email

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