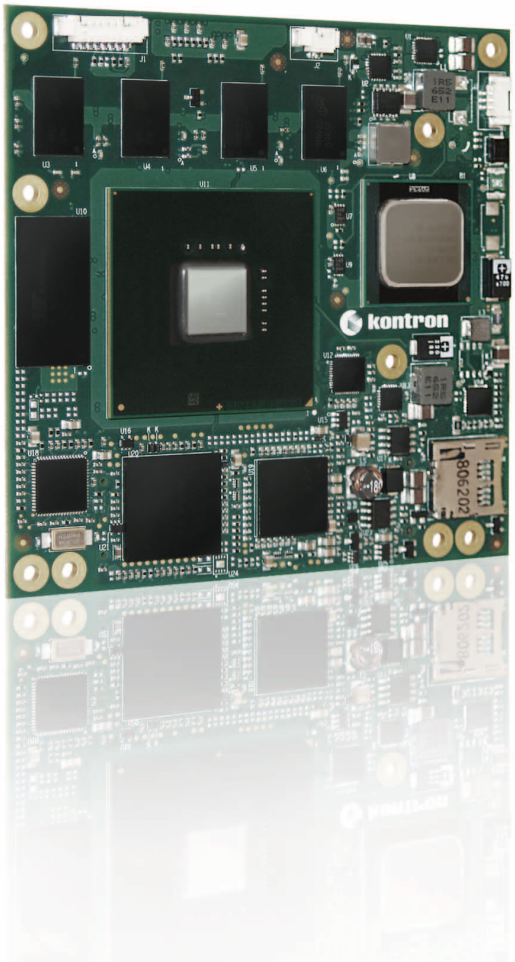
» microETXexpress®-XL «



COM Express

Intel® Atom™ for extreme environments on COM Express™ compact, Pin-out Type 2

» Intel® Atom™ Z520PT and US15WPT System Controller Hub

» Designed for -40°C to +85°C operation

» Onboard system memory and SSD (option) for extreme reliability

The Kontron microETXexpress®-XL, a COM Express™ pin-out type 2 compatible Computer-on-Module, is truly designed for use in extreme conditions. Each component is selected with the industrial temperature range of -40°C to +85°C in mind as well as the necessary tolerances for high reliability with respect to shock and vibration resistance. The SDVO pin-out delivers additional video signals for DVI monitor outputs, SDTV and HDTV television outputs and TV tuner inputs that greatly simplify system graphics design.

This special feature makes this 95 x 95 mm Computer-on-Module ideal for small mobile and extremely energy-efficient devices including those used in government/military and transportation applications. All Kontron microETXexpress® family modules are compatible with the COM Express™ standard allowing for easy inter-changeability and ensuring design scalability and future migration paths.

Technical Information

Processor	Intel® Atom™ processor Z520PT (1.33GHz), 45 nm technology, 22 x 22 mm package
Cache	512KB L2
Chipset	Intel® US15WPT System Controller Hub, 533MHz FSB, 37.5 x 37.5 mm package
BIOS	AMI Core 8
Memory	On-board DDR2 industrial temperature range (up to 2GB) Implemented as 8 chips configuration (64M x 16)
Hard Disk	1x SATA, 1x PATA, (Optional on-board industrial temperature range SSD)
USB	8x USB 2.0
PCI	32 bit / 33 MHz, On-board PCIe to PCI bridge
PCI Express	2x PCI Express x1 lanes (only available with no LAN or PCI implemented)
Ethernet	10/100/1000 MBit Ethernet, Intel® 82574 for Industrial Temperature
Sound	Intel® HD Audio
Video Controller	Single channel 24 bit LVDS, Single SDVO channel, No VGA support
Form Factor	COM Express™ compact: 95x95mm Pin-out Type 2
Dimensions	95 x 95mm
Operating Systems	Windows® XP, Windows® XP Embedded, Windows® CE, QNX, VxWORKS, Linux and others
Security Features	Optional TPM
Power Consumption	< 8 W (estimate) 4.75V - 18V Wide Range Power Supply Optional 5V Standby Power
Temperature	Operating: -40 to +85° C, Storage: -40 to +85° C
Humidity	Operation: 10% to 90%, Storage: 5% to 95% (non-condensing)
Shock and Vibration	IEC 60068-2-27 and IEC 60068-2-6

Ordering Information

Article	Part-No.	Description
microETXexpress®-XL	36006-1000-13-1	microETXexpress®-XL Z520PT (1.33GHz) 1GB DDR2 SDRAM
microETXexpress®-XL	36006-2000-13-1	microETXexpress®-XL Z520PT (1.33GHz) 2GB DDR2 SDRAM
microETXexpress®-XL HSP, threaded	36006-0000-99-0	Heatspreader for microETXexpress®-XL, threaded stand-off
microETXexpress®-XL HSK, passive	36006-0000-99-0C02	Passive Heatsink for microETXexpress®-XL without fan

CORPORATE OFFICES

Europe, Middle East & Africa

Oskar-von-Miller-Str. 1
85386 Eching/Munich
Germany

Tel.: +49 (0)8165/ 77 777
Fax: +49 (0)8165/ 77 279

info@kontron.com

North America

14118 Stowe Drive
Poway, CA 92064-7147
USA

Tel.: +1 888 294 4558
Fax: +1 858 677 0898

info@us.kontron.com

Asia Pacific

17 Building,Block #1,ABP.
188 Southern West 4th Ring Road
Beijing 100070, P.R.China

Tel.: + 86 10 63751188
Fax: + 86 10 83682438

info@kontron.cn

intel Embedded Alliance Premier

#microETXexpress-XL# 09072010PDL
All data is for information purposes only and not guaranteed for legal purposes. Subject to change without notice. Information in this datasheet has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. All brand or product names are trademarks or registered trademarks of their respective owners.