

➤ microETXexpress-SP



- Intel® Atom™ Z5XX series up to 1.6 GHz and Intel® System Controller Hub US15W
- Supports up to 1 GByte DDR2 400/533 system memory
- PCI Express and PCI
- SDVO for HDMI, DVI, Single channel LVDS 18/24 bit with 256MB onboard graphics memory
- COM Express™ compatible module based Pin-out Type 2.

Product Overview

The Kontron microETXexpress-SP Computer-on-Module is designed to extend the COM Express™ specification to include a small module format (95 x 95 mm) with the commonly used COM Express™ Type 2 connector. This will enable the development of energy-saving, high-end graphics devices based on the Intel® Atom™ processor (up to 1.6GHz) and the Intel® System Controller Hub US15W without having to stray from the secure development path of utilizing an established and future-proof industry standard.

The Kontron microETXexpress-SP offers PCI as well as more sophisticated graphics support with SDVO. Via the PEG pinout, SDVO delivers additional video signals for VGA and 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 multimedia devices as well as for mobile test and measurement applications. Other standard features of the microETXexpress-SP include: Gigabit Ethernet, Serial ATA, single-channel LVDS and USB 2.0.

All Kontron microETXexpress family modules are compatible with the COM Express™ standard allowing for easy interchangeability and ensuring design scalability and future migration paths. For additional details regarding the microETXexpress specification as a proposed extension to the PICMG® COM Express™ specification, please visit: www.Kontron.com/COM-Express-Micro-Specification

Technical Information

Processor	Intel® Atom™ processor Z510 (1.1GHz) and Z530 (1.6GHz)
Chipset	Intel® System Controller Hub US15W
Cache	32KB Instruction Cache + 24KB L1 Cache, 256/512KB L2 Cache
Memory	up to 1GB 1x DDR2 SO-DIMM 400/533
Hard Disk	up to 2x SATA, 1x PATA
USB	8x USB 2.0 (1x USB client)
PCI Express	2 to 5 PCIe x1 are supported
PCI	1x PCI (PCIe to PCI bridge for PCI Bus)
Ethernet	10/100/1000 Mbit Intel® LAN
Sound	Intel® High Definition Audio
Graphics Memory	256MB

Video Controller	Integrated Intel® Graphics, Intel® GMA 500, HDTV/HD capable, Decoder for MPEG2(HD)/H.264
LVDS Resolutions	Single Channel LVDS 18/24 bit WXGA 1366x768
Other Features	SD/MMC Socket and LPC
SDIO	1 SDIO port (shared with GPIO)
Operating Systems	Windows® XP, XPe, CE, Linux, VxWorks
Form Factor	95mm x 95mm, COM Express™ Type 2 compatible
Power Consumption	typ. Idle ~ 6 W @12V 8,5V – 18V wide range (5V SBY optional for ATX function)
Temperature (*)	operation: 0° to 60°C storage: -10° to 85°C
Humidity	operation: 10% to 90% storage: 5% to 95% (non condensing)

(*) Ask about extended temperature ranges

Ordering Information

Article	Part.-No.	Description
microETXexpress-SP-11 w/o PCI	36003-0000-11-0	uETXe-SP with 1.1GHz Intel® Atom™ processor, 2x PCI-E, 8x USB, 10/100 Etn, LVDS, SDVO/HDMI, IDE, LPC, SDIO/GPIO, no GigE, no PCI, no PCIe bridge, no SATA
microETXexpress-SP-11	36003-0000-11-1	uETXe-SP with 1.1GHz Intel® Atom™ processor, GigE, PCI, 2x SATA, PCIe bridge, 2x PCI-E, 8x USB, LVDS, SDVO/HDMI, IDE, LPC, SDIO/GPIO
microETXexpress-SP-16	36003-0000-16-1	uETXe-SP with 1.6GHz Intel® Atom™ processor, GigE, PCI, 2x SATA, PCIe bridge, 2x PCI-E, 8x USB, LVDS, SDVO/HDMI, IDE, LPC, SDIO/GPIO
HSP-uETXe-SP, threaded	36003-0000-99-0	Heatspreader for microETXexpress-SP, with 2.5mm thread hole corner standoff
HSP-uETXe-SP, through	36003-0000-99-1	Heatspreader for microETXexpress-SP, with through 2,7mm hole corner standoff
microETXexpress-SP Starter-Kit	36003-0000-00-S	uETXe-SP module, approved memory 1GB, uETXe mini baseboard, HSP, Panel, preload WinXP image on SATA HD, div.cables
ETXexpress Mini-baseboard	38102-0000-00-0	ETXexpress Mini-baseboard for COM Express™ Modules, with reduced size for express evaluation purposes, Includes all connectors for a quick start, Choose your COM Express™ module - to just Plug & Go

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