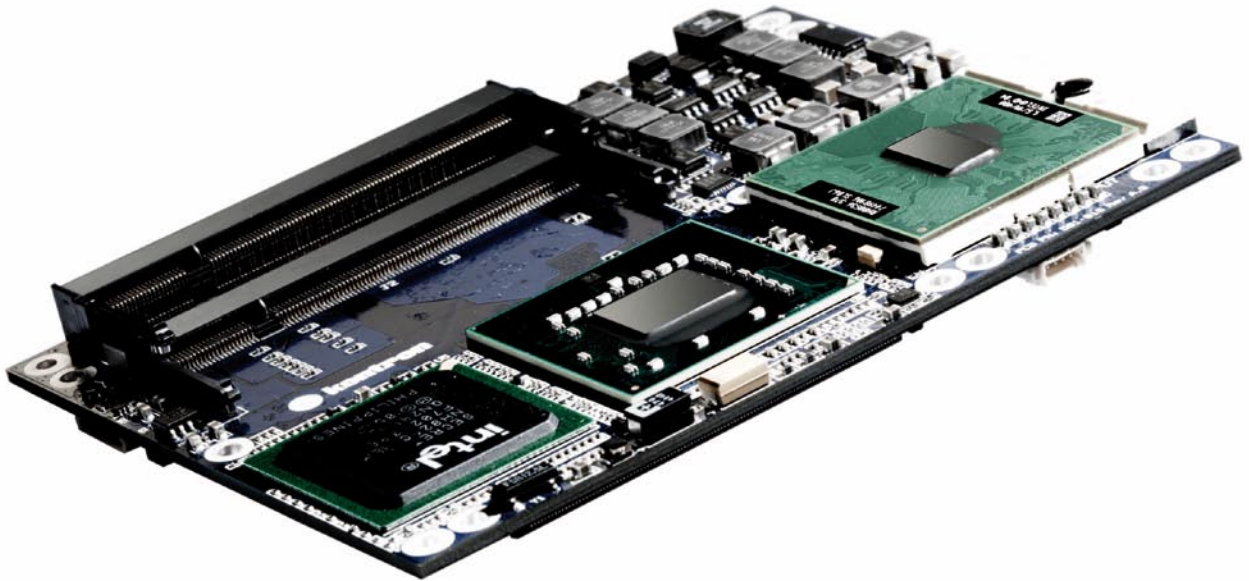


# ▶ ETXexpress<sup>®</sup>-MC



**COM**   
**Express**



- ▶ Intel<sup>®</sup> Core<sup>™</sup> 2 Duo (up to 2.2GHz) Processors
- ▶ Integrated Graphics Mobile Intel<sup>®</sup> GMA X3100 w/ 24 Bit LVDS Support
- ▶ Up to 4GB System Memory
- ▶ 5x PCI Express, 8x USB 2.0 and 3x SerialATA 300
- ▶ Wide Input Supply Support - 8.5V-18V
- ▶ Onboard TPM 1.2

## ► Product Overview

Built around the Intel® Core™ 2 Duo processor (4MB L2, 800FSB) and Intel® GME 965 chipset, the Kontron ETXexpress-MC is the most robust and power-efficient COM currently available. The Kontron ETXexpress®-MC offers support for fourth-generation graphics architecture to meet the requirements of embedded applications that require advanced video capabilities. The Kontron ETXexpress-MC® is one of the first COM Express™ pin-out type 2 compliant modules supporting dual-channel memory up to 4GB via two DDR2 SO-DIMM sockets positioned on the top side of the module. This module has 5x PCI Express x1, 3x SerialATA ports, and 8x USB 2.0 ports along with Gigabit Ethernet to round out the list of standard features. The inclusion of onboard TPM 1.2 ensures that the Kontron ETXexpress-MC® is a perfect fit for power and thermal sensitive designs.

All Kontron COM Express™ modules provide PCI Express, PCI, SUB and SerialATA which maintain the same physical positions on each module. This guarantees scalability between modules. An Advanced Configuration and Power Interface (ACPI) for optimized power management is standard on all Kontron COM Express™ modules.

Kontron's COM Express™ family are fully compliant with the PCI Industrial Computer Manufacturer's Group (PICMG®) COM Express™ Specification. The COM Express™ format represents a more cost-effective replacement versus time and resource-hungry full custom designs. Time to market is dramatically reduced and future upgrades are as simple as choosing a new COM Express™ CPU module. Therefore, the total cost of ownership of the end design is improved as well.

## ► Technical Information

<b>Processor</b>	Intel® Core™2 Duo processors up to 2.2GHz, Intel® Celeron® processors up to 2.13 GHz
<b>Cache</b>	Up to 4MB L2
<b>Chipset</b>	Mobile Intel® GME 965 Express chipset
<b>Memory</b>	Up to 4GB Dual Channel (533/667) DDR2 SO-DIMM (2x200-pin)
<b>Hard Disk</b>	3x SerialATA 300 (AHCI/ RAID 0,1), 1x Parallel ATA
<b>USB</b>	8x USB 2.0
<b>PCI Express</b>	5 PCI Express x1 (1 PCIe x 4 possible), 1 PEG x16
<b>PCI</b>	PCI 2.1, 32 bit/33MHz
<b>Ethernet</b>	Up to 1x Gigabit Ethernet (Intel® 82566MM)
<b>Sound</b>	Intel® High Definition Audio
<b>Video Controller</b>	Integrated in Intel® GME 965 chipset with Intel® GMA X3100 graphics technology with DirectX® 9.0/SM3.0 and DVMT 4.0 support; SDVO multiplexed with PEG

<b>CRT and LVDS Resolutions</b>	CRT up to 2048 x 1536, LVDS up to UXGA (1600 x 1200), JILI/ EDID support)
<b>LVDS Panel Support</b>	Single and Dual Channel LVDS 18/24 bit
<b>TV out / HDTV Resolution</b>	TV output. Component , S-Video or composite HDTV support (480i/480p/720p/1080i/1080p)
<b>Other Features</b>	LPC, JIDA Support, WakeOnLAN, Watchdog, 8 GPIO, I²C Bus, RTC, LAN Boot, JRC support, Suspend states (S0/S1/S3/S4/S5)
<b>Form Factor / Pin-out Type</b>	COM Express™ (by PICMG®) "Basic" Form Factor Pin-out Type 2 95 x 125 mm
<b>Power Consumption</b>	typ. Idle 9W @ Intel® Core™2 Duo processor L7500
<b>Temperature (*)</b>	Operation: 0° to 60°C Storage: -10° to 85 °C
<b>Humidity</b>	Operation: 10% to 90% Storage: 5% to 95% (non condensing)

(\*) Ask about extended temperature ranges

## ► Ordering Information

Article	Part.-No.	Description
ETXexpress-MC T7500	38006-0000-22-2	Intel® Core™2 Duo T7500 (2x2.2GHz BGA ,800MHz FSB, 4MB cache 65nm)
ETXexpress-MC L7500	38006-0000-16-2	Intel® Core™2 Duo L7500 (2x1.6GHz BGA, 800MHz FSB, 4MB cache 65nm)
ETXexpress-MC 550	38006-0000-21-1	Intel® Celeron® M 550 (2.0GHz BGA, 533MHz FSB, 1MBCache, 65nm)

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