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Understanding [Embedded - Microprocessors](#)

Embedded microprocessors are specialized computing chips designed to perform specific tasks within an embedded system. Unlike general-purpose microprocessors found in personal computers, embedded microprocessors are tailored for dedicated functions within larger systems, offering optimized performance, efficiency, and reliability. These microprocessors are integral to the operation of countless electronic devices, providing the computational power necessary for controlling processes, handling data, and managing communications.

Applications of [Embedded - Microprocessors](#)

Embedded microprocessors are utilized across a broad spectrum of applications, making them indispensable in

Details

Product Status	Obsolete
Core Processor	i7-2600
Number of Cores/Bus Width	4 Core, 64-Bit
Speed	3.4GHz
Co-Processors/DSP	-
RAM Controllers	-
Graphics Acceleration	Yes
Display & Interface Controllers	-
Ethernet	-
SATA	-
USB	-
Voltage - I/O	-
Operating Temperature	-
Security Features	-
Package / Case	1155-LGA Module
Supplier Device Package	1155-LGA (37.5x37.5)
Purchase URL	https://www.e-xfl.com/product-detail/advantech/96mpi7-3-4-8m11t



Intel® Core™ i7-2600 Processor (8M Cache, 3.40 GHz)

SPECIFICATIONS

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SPECIFICATIONS

Essentials

Status	Launched
Launch Date	Q1'11
Processor Number	i7-2600
# of Cores	4
# of Threads	8
Clock Speed	3.4 GHz
Max Turbo Frequency	3.8 GHz
Intel® Smart Cache	8 MB
Bus/Core Ratio	34
Instruction Set	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX
Embedded Options Available	Yes
Lithography	32 nm
Max TDP	95 W
Tray 1ku Budgetary Price	\$294.00

Memory Specifications

Max Memory Size (dependent on memory type)	32 GB
Memory Types	DDR3-1066/1333
# of Memory Channels	2
Max Memory Bandwidth	21 GB/s
ECC Memory Supported	No

Graphics Specifications

Integrated Graphics	Yes
Intel® HD Graphics	Yes
Intel® HD Graphics with Dynamic Frequency	Yes
Graphics Base Frequency	850 MHz
Graphics Max Dynamic Frequency	1.35 GHz
Intel® Quick Sync Video	Yes
Intel® InTRU™ 3D Technology,	Yes
Intel® Wireless Display	No
Intel® Flexible Display Interface (Intel® FDI)	Yes
Intel® Clear Video HD Technology	Yes
Dual Display Capable	Yes

Expansion Options

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PCI Express Revision	2.0
*Trademarks	
# of PCI Express Ports	1
Package Specifications	
Max CPU Configuration	1
T CASE	72.6°C
Package Size	37.5mm x 37.5mm
Sockets Supported	LGA1155
Halogen Free Options Available	Yes
Advanced Technologies	
Intel® Turbo Boost Technology	2.0
Intel® Hyper-Threading Technology	 Yes
Intel® Virtualization Technology (VT-x)	 Yes
Intel® Virtualization Technology for Directed I/O (VT-d)	 Yes
Intel® Trusted Execution Technology	 Yes
AES New Instructions	 Yes
Intel® 64	 Yes
Idle States	Yes
Enhanced Intel SpeedStep® Technology	 Yes
Thermal Monitoring Technologies	Yes
Intel® Fast Memory Access	Yes
Intel® Flex Memory Access	Yes
Execute Disable Bit	Yes

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Max Turbo Frequency refers to the maximum single-core frequency that can be achieved with Intel® Turbo Boost Technology, which requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software, and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

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64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Consult with your system vendor for more information.

Hyper-Threading Technology (HT Technology) requires a computer system with an Intel® processor supporting HT Technology and an HT Technology enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See www.intel.com/products/ht/hyperthreading_more.htm for more information including details on which processors support HT Technology.

Intel® Virtualization Technology requires a computer system with a processor, chipset, BIOS, virtual machine monitor (VMM) and for some uses, certain platform software, enabled for it. Functionality, performance or other benefit will vary depending on hardware and software configurations. Intel Virtualization Technology-enabled VMM applications are currently in development.

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System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

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Halogen Free implies the following:

Bromine and/or chlorine in materials that may be used during processing, but do not remain within the final product are not included in this definition. The halogens fluorine (F), iodine (I), and astatine (At) are not restricted by this standard.

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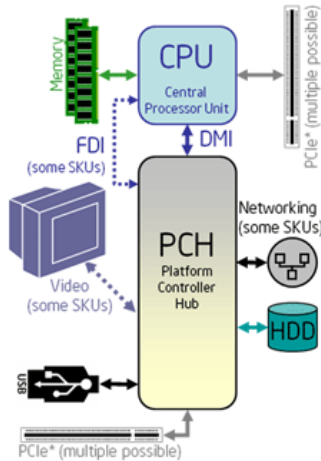
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Ordering and Spec Information

Boxed Intel® Core™ i7-2600 Processor (8M Cache, 3.40 GHz) FC-LGA10, for China

Socket	Step	Step TDP	Ordering Code	Spec Code	Halogen Free	VT-x
LGA1155	D2	95 Watts	BXC80623I72600	SR00B	Yes	Yes

Boxed Intel® Core™ i7-2600 Processor (8M Cache, 3.40 GHz) FC-LGA10

Socket	Step	Step TDP	Ordering Code	Spec Code	Halogen Free	VT-x
LGA1155	D2	95 Watts	BX80623I72600	SR00B	Yes	Yes

Intel® Core™ i7-2600 Processor (8M Cache, 3.40 GHz) FC-LGA10, Tray

Socket	Step	Step TDP	Ordering Code	Spec Code	Halogen Free	VT-x
LGA1155	D2	95 Watts	CM8062300834302	SR00B	Yes	Yes

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