



## Intel® Core™ i7-3517UE Processor (4M Cache, up to 2.80 GHz)

### SPECIFICATIONS

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- Expansion Options
- Package Specifications
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### ORDERING / SSPECS / STEPPINGS

### Specifications

#### Essentials

Status	Launched
Launch Date	Q2'12
Processor Number	i7-3517UE
# of Cores	2
# of Threads	4
Clock Speed	1.7 GHz
Max Turbo Frequency	2.8 GHz
Intel® Smart Cache	4 MB
Bus/Core Ratio	17
DMI	5 GT/s
Instruction Set	64-bit
Instruction Set Extensions	AVX
Embedded Options Available	Yes
Lithography	22nm
Max TDP	17 W
Recommended Customer Price	
Product Brief	yes

#### Memory Specifications

Max Memory Size (dependent on memory type)	32 GB
Memory Types	DDR3/DDR3L 1333/1600
# of Memory Channels	2
Max Memory Bandwidth	25.6 GB/s
ECC Memory Supported	Yes

#### Graphics Specifications

Processor Graphics	Intel® HD Graphics 4000
Graphics Base Frequency	350 MHz
Graphics Max Dynamic Frequency	1 GHz
Graphics Output	eDP/DP /HDMI/SDVO/CRT
Intel® Quick Sync Video	Yes
Intel® InTru™ 3D Technology	Yes
Intel® Insider™	No
Intel® Wireless Display	No
Intel® Flexible Display Interface (Intel® FDI)	Yes
Intel® Clear Video HD Technology	Yes
Intel® Clear Video Technology for MID	No
Dual Display Capable	Yes
# of Displays Supported	3

#### Expansion Options

PCI Express Revision	3.0
PCI Express Configurations	1x16 2x8 1x8 2x4
# of PCI Express Ports	1

#### Package Specifications

TJUNCTION	105°C
Package Size	31mm x 24mm
Graphics and IMC Lithography	22nm
Sockets Supported	FCBGA1023

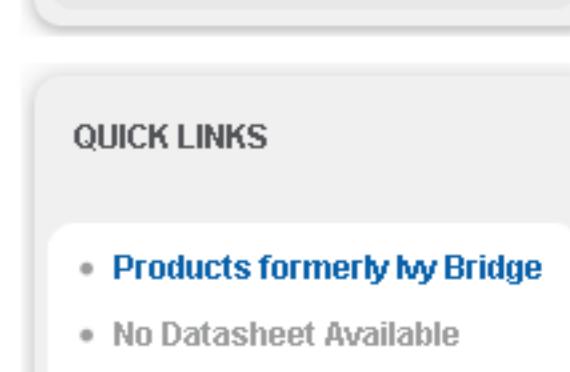
Low Halogen Options Available See MDDDS

#### Advanced Technologies

Intel® Turbo Boost Technology	2.0
Intel® vPro Technology	Yes
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
Intel® Anti-Theft Technology	No
Intel® My WiFi Technology	Yes
4G WiMAX Wireless Technology	No
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Intel® Demand Based Switching	No
Thermal Monitoring Technologies	Yes
Intel® Fast Memory Access	Yes
Intel® Flex Memory Access	Yes
Execute Disable Bit	Yes
Intel® VT-x with Extended Page Tables (EPT)	Yes

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### ADDITIONAL INFORMATION

#### PCN/MDDDS INFORMATION

SROTS 921368: [PCN](#) | [MDDDS](#)

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

The Recommended Customer Price ("RCP") is pricing guidance for Intel products. Prices are for direct Intel customers and are subject to change without notice. Taxes and shipping, etc. not included.

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Processor numbers are not a measure of performance. Processor numbers reflect features within each processor family, not across different processor families. See [http://www.intel.com/products/processor\\_number](http://www.intel.com/products/processor_number) for details.

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/ht\\_perthreading\\_more.htm](http://www.intel.com/products/ht/ht_perthreading_more.htm) for more information including details on which processor's support HT technology.

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 for 32-bit operation without Intel® 64 architecture. Performance will vary depending on hardware and software configurations. Consult your system vendor for more information.

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 varies based 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/turbo/boost/](http://www.intel.com/technology/turbo/boost/) for more information.

Enabling Execute Disable Bit functionality requires a PC with a processor with Execute Disable Bit capability and a supporting operating system. Check with your PC manufacturer on whether your system delivers Execute Disable Bit functionality.

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.

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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Low Halogen: Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet IEC 60068-2-21 requirements, and the PCB / substrate meet IEC 61240-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2670QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS update available.

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