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# Intel® Core™ i3-2330E Processor (3M Cache, 2.20 GHz)

## SPECIFICATIONS

All

Essentials

Memory Specifications

Graphics Specifications

Expansion Options

Package Specifications

Advanced Technologies

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## Specifications


### Essentials

Status	Launched
Launch Date	Q2'11
Processor Number	i3-2330E
# of Cores	2
# of Threads	4
Clock Speed	2.2 GHz
Intel® Smart Cache	3 MB
DMI	5 GT/s
Instruction Set	64-bit
Instruction Set Extensions	AVX
Embedded Options Available	Yes
Lithography	32 nm
Max TDP	35 W

### Memory Specifications

Max Memory Size (dependent on memory type)	16 GB
Memory Types	DDR3-1066/1333
# of Memory Channels	2
Max Memory Bandwidth	21.3 GB/s
ECC Memory Supported	 No

### Graphics Specifications

Processor Graphics	 Intel® HD Graphics 3000
Graphics Base Frequency	650 MHz
Graphics Max Dynamic Frequency	1.05 GHz
Graphics Output	eDP/DP /HDMI/SDVO/CRT
Intel® Quick Sync Video	Yes
Intel® InTru™ 3D Technology,	Yes
Intel® Wireless Display	Yes
Intel® Flexible Display Interface (Intel® FDI)	Yes
Intel® Clear Video HD Technology	Yes
Dual Display Capable	Yes

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## ADDITIONAL INFORMATION

### PCN/MDDS INFORMATION

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Expansion Options	
PCI Express Revision	2.0
PCI Express Configurations	 1x16 1x4, 2x8 1x4, 1x8 3x4
Package Specifications	
T <sub>JUNCTION</sub>	100 C
Package Size	37.5mm x 37.5mm (rPGA988)
Graphics and IMC Lithography	32 nm
Sockets Supported	FCPGA988
Halogen Free Options Available	Yes

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

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.

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](http://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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Although the elemental analysis for Br and Cl in homogeneous materials can be performed by any analytical method with sufficient sensitivity and selectivity, the presence or absence of BFRs, CFRs or PVC must be verified by any acceptable analytical techniques that allow for the unequivocal identification of the specific Br or Cl compounds, or by appropriate material declarations agreed to between customer and supplier.

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/](http://www.intel.com/technology/turboboost/) for more information.

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**Advanced Technologies**

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Intel® Turbo Boost Technology	No
Intel® vPro Technology	No
<a href="#">Intel® Hyper-Threading Technology</a>	Yes
<a href="#">Intel® Virtualization Technology (VT-x)</a>	Yes
<a href="#">Intel® Virtualization Technology for Directed I/O (VT-d)</a>	No
<a href="#">Intel® Trusted Execution Technology</a>	No
AES New Instructions	No
<a href="#">Intel® 64</a>	Yes
Intel® Anti-Theft Technology	Yes
Intel® My WiFi Technology	Yes
4G WiMAX Wireless Technology	Yes
Idle States	Yes
<a href="#">Enhanced Intel SpeedStep® Technology</a>	Yes
<a href="#">Intel® Demand Based Switching</a>	No
Thermal Monitoring Technologies	Yes
<a href="#">Intel® Fast Memory Access</a>	Yes
<a href="#">Intel® Flex Memory Access</a>	Yes
<a href="#">Execute Disable Bit</a>	Yes

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## Intel® Core™ i3-2330E Processor (3M Cache, 2.20 GHz)

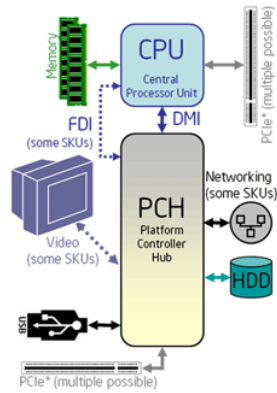
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## Intel® Core™ i3-2330E Processor (3M Cache, 2.20 GHz)

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#### Ordering and Spec Information

#### Intel® Core™ i3-2330E Processor (3M Cache, 2.20 GHz) FC-PGA10, Tray

Socket	Step	Step TDP	Ordering Code	Spec Code	Halogen Free	VT-x
FCPGA988	D2	35 W	FF8062700849000	SR02V	Yes	Yes

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