

Product Name	<a href="#">Intel® Core™ i3-3110M Processor (3M Cache, 2.40 GHz)</a>	<a href="#">Intel® Core™ i3-2350M Processor (3M Cache, 2.30 GHz)</a>	<a href="#">Intel® Core™ i3-2370M Processor (3M Cache, 2.40 GHz)</a>
Code Name	<a href="#">Ivy Bridge</a>	<a href="#">Sandy Bridge</a>	<a href="#">Sandy Bridge</a>

### Essentials

Status	Launched	Launched	Launched
Launch Date	Q2'12	Q4'11	Q1'12
Processor Number	i3-3110M	i3-2350M	i3-2370M
# of Cores	2	2	2
# of Threads	4	4	4
Clock Speed	2.4 GHz	2.3 GHz	2.4 GHz
Cache	3 MB Intel® Smart Cache	3 MB Intel® Smart Cache	3 MB Intel® Smart Cache
Bus/Core Ratio	24	23	24
Bus Type	DMI	DMI	DMI
System Bus	5 GT/s	5 GT/s	5 GT/s
Instruction Set	64-bit	64-bit	64-bit
Instruction Set Extensions	AVX	AVX	AVX
Embedded Options Available	No	No	No
Lithography	22 nm	32 nm	32 nm
Max TDP	35 W	35 W	35 W
Recommended Customer Price	TRAY: \$225	TRAY: \$225	TRAY: \$225
Datasheet Url		<a href="#">Link</a>	<a href="#">Link</a>

### Memory Specifications

Max Memory Size (dependent on memory type)	32 GB	16 GB	16 GB
Memory Types	DDR3/L/-RS 1333/1600	DDR3-1066/1333	DDR3-1066/1333

# of Memory Channels	2	2	2
Max Memory Bandwidth	25.6 GB/s	21.3 GB/s	21.3 GB/s
ECC Memory Supported	No	No	No
<b>Graphics Specifications</b>			
Processor Graphics	Yes	Yes	Yes
Graphics Model	Intel® HD Graphics 4000	Intel® HD Graphics 3000	Intel® HD Graphics 3000
Graphics Base Frequency	650 MHz	650 MHz	650 MHz
Graphics Max Dynamic Frequency	1 GHz	1.15 GHz	1.15 GHz
Graphics Output	eDP/DP/HDMI/SDVO/CRT	eDP/DP/HDMI/SDVO/CRT	eDP/DP/HDMI/SDVO/CRT
Intel® Quick Sync Video	Yes	Yes	Yes
Intel® InTru™ 3D Technology	Yes	Yes	Yes
Intel® Insider™	Yes	Yes	Yes
Intel® Wireless Display	Yes	Yes	Yes
Intel® Flexible Display Interface (Intel® FDI)	Yes	Yes	Yes
Intel® Clear Video HD Technology	Yes	Yes	Yes
Dual Display Capable	Yes	Yes	Yes
Macrovision* License Required		No	No
# of Displays Supported	3	2	2

### Expansion Options

PCI Express Revision	3.0	2.0	2.0
PCI Express Configurations	1x16, 2x8, 1x8 2x4	1x16, 2x8, 1x8 2x4	1x16, 2x8, 1x8 2x4
# of PCI Express Ports	1	1	1

### Package Specifications

Max CPU Configuration	1	1	1
T <sub>JUNCTION</sub>	90C (PGA); 105C (BGA)	85C (PGA); 100C (BGA)	85C (PGA); 100C (BGA)
Package Size	37.5mm x 37.5mm (rPGA988B); 31mm x 24mm (BGA1023)	37.5mm x 37.5mm (rPGA988B); 31mm x 24mm (BGA1023)	37.5mm x 37.5mm (rPGA988B); 31mm x 24mm (BGA1023)
Graphics and IMC Lithography	22 nm	32 nm	32 nm
Sockets Supported	FCBGA1023, FCPGA988	PPGA988	PPGA988
Low Halogen Options Available	See MDDS	See MDDS	See MDDS

### Advanced Technologies

Intel® Turbo Boost Technology	No	No	No
Intel® vPro Technology	No	No	No
Intel® Hyper-Threading Technology	Yes	Yes	Yes
Intel® Virtualization Technology (VT-x)	Yes	Yes	Yes
Intel® Virtualization Technology for Directed I/O (VT-d)	No	No	No
Intel® Trusted Execution Technology	No	No	No

AES New Instructions	No	No	No
Intel® 64	Yes	Yes	Yes
Intel® Anti-Theft Technology	Yes	Yes	Yes
Intel® My WiFi Technology	Yes	Yes	Yes
4G WiMAX Wireless Technology	Yes	Yes	Yes
Idle States	Yes	Yes	Yes
Enhanced Intel SpeedStep® Technology	Yes	Yes	Yes
Intel® Demand Based Switching	No	No	No
Thermal Monitoring Technologies	Yes	Yes	Yes
Intel® Fast Memory Access	Yes	Yes	Yes
Intel® Flex Memory Access	Yes	Yes	Yes
Execute Disable Bit	Yes	Yes	Yes
Intel® VT-x with Extended Page Tables (EPT)	Yes		