Intel Core i3-3220 specifications

General information

Type <u>CPU / Microprocessor</u>

Market segment Desktop
Family Intel Core i3
Model number ? i3-3220

CPU part numbers CM8063701137502 is an OEM/tray microprocessor

CM8063701246900 is an OEM/tray microprocessor **CM8063701247200** is an OEM/tray microprocessor

BX80637I33220 is a boxed processor with fan and heatsink

(English version)

BXC80637I33220 is a boxed processor with fan and heatsink

(Chinese version)

Frequency ? 3300 MHz
Bus speed ? 5 GT/s DMI

Clock multiplier ? 33

 Package
 1155-land Flip-Chip Land Grid Array

 Socket
 Socket 1155 / H2 / LGA1155

 Size
 1.48" x 1.48" / 3.75cm x 3.75cm

Introduction date September 2, 2012

End-of-Life date Last order date for consumer processors is Jun 26, 2015

Last shipment date for consumer tray processors is Dec 04, 2015

Price at introduction \$117 (OEM) \$125 (box)

S-spec numbers

	ES/QS processors			Production processors	
Part number	<u>QC8H</u>	QCC0	QCFW	QCKW	SRORG
BX80637I33220					+
BXC80637I33220					+
CM8063701137502	+				+
CM8063701246900			+	+	
CM8063701247200		+			

Architecture / Microarchitecture

Microarchitecture Ivy Bridge
Processor core ? Ivy Bridge
Core steppings ? E1 (QCKW)

L1 (QC8H, SR0RG)

N0 (QCC0)

Manufacturing process 0.022 micron

Data width 64 bit

The number of cores 2
The number of threads 4

Floating Point Unit Integrated

Level 1 cache size ? 2 x 32 KB 8-way set associative instruction caches

2 x 32 KB 8-way set associative data caches

Level 2 cache size ? 2 x 256 KB 8-way set associative caches

Level 3 cache size 3 MB 12-way set associative shared cache

Physical memory 32 GB

Multiprocessing Uniprocessor

Features • MMX instructions

SSE / Streaming SIMD Extensions
 SSE2 / Streaming SIMD Extensions 2
 SSE3 / Streaming SIMD Extensions 3

SSSE3 / Supplemental Streaming SIMD Extensions 3
 SSE4 / SSE4.1 + SSE4.2 / Streaming SIMD Extensions 4 ?

AVX / Advanced Vector Extensions

F16C / 16-bit Floating-Point conversion instructions
 EM64T / Extended Memory 64 technology / Intel 64

NX / XD / Execute disable bit ?
 HT / Hyper-Threading technology ?
 VT-x / Virtualization technology ?

Low power features Enhanced SpeedStep technology ?

Integrated peripherals / components

Integrated graphics GPU Type: HD 2500

Base frequency (MHz): 650

Maximum frequency (MHz): 1050 The number of supported displays: 3

Memory controller The number of controllers: 1

Memory channels: 2

Supported memory: DDR3-1333, DDR3-1600 Maximum memory bandwidth (GB/s): 25.6

Other peripherals • Direct Media Interface 2.0

■ PCI Express 2.0 interface

Electrical / Thermal parameters

Maximum operating temperature? 65.3°C

Thermal Design Power ? 55 Watt

Notes on Intel Core i3-3220

- Also ships as an embedded microprocessor
- The processor has the following security, data protection and/or software features: Intel Identity Protection technology and Anti-Theft technology.
- The CPU is compatible with DirectX 11.0, OpenGL 4.0 and OpenCL 1.2 APIs.
- The graphics unit has the following software features enabled: Intel Quick Sync Video, Wireless Display, Insider, InTru 3D technology and Clear Video HD technology.