Intel Celeron B800 specifications

General information

Type <u>CPU / Microprocessor</u>

Market segment Mobile

Family <u>Intel Mobile Celeron Dual-Core</u>

Model number ? B800

CPU part number FF8062701142600 is an OEM/tray microprocessor

Frequency ? 1500 MHz
Bus speed ? 5 GT/s DMI

Clock multiplier ? 15

Package 988-pin micro-FCPGA10 (rPGA988B)

Socket G2 / rPGA988B

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

Weight 0.2oz / 5.7g
Introduction date June 19, 2011

End-of-Life date Last order date for tray processors is February 21, 2014

Last shipment date for tray processors is August 8, 2014

Price at introduction \$86

S-spec numbers

ES/QS processors Production processors

OB1U

SR0EW

+

FF8062701142600 +

Architecture / Microarchitecture

Part number

Microarchitecture Sandy Bridge
Processor core ? Sandy Bridge

Core stepping ? Q0 (QB1U, SR0EW)
CPUID 206A7 (SR0EW)

Manufacturing process 0.032 micron High-K metal gate process

Data width 64 bit
The number of cores 2
The number of threads 2

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 2 MB 8-way set associative shared cache

Physical memory 16 GB

Multiprocessing Not supported

Features • MMX instructions

SSE / Streaming SIMD Extensions

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 ?

■ EM64T / Extended Memory 64 technology / Intel 64 ?

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

Low power features Enhanced SpeedStep technology ?

Integrated peripherals / components

Integrated graphics GPU Type: HD (Sandy Bridge)

Base frequency (MHz): 650 Maximum frequency (MHz): 1000 The number of supported displays: 2

The number of controllers: 1

Memory channels: 2

Supported memory: DDR3-1066, DDR3-1333 Maximum memory bandwidth (GB/s): 21.3

Other peripherals • Direct Media Interface 2.0

PCI Express 2.0 interface

Electrical / Thermal parameters

Memory controller

Maximum operating temperature? 100°C

Thermal Design Power ? 35 Watt

Notes on Intel Celeron B800

■ The CPU is compatible with Shader Model 4.1, along with DirectX 10.1 and OpenGL 3.1 APIs. OpenCL API is not supported.