



CPU-Z

Binaries

CPU-Z version 1.87.0.x64

Processors

Number of sockets 1
Number of threads 8

APICs

Socket 0

-- Core 0 (ID 0)
 -- Thread 0 0
 -- Thread 1 1
-- Core 1 (ID 1)
 -- Thread 2 2
 -- Thread 3 3
-- Core 2 (ID 2)
 -- Thread 4 4
 -- Thread 5 5
-- Core 3 (ID 3)
 -- Thread 6 6
 -- Thread 7 7

Timers

ACPI timer 3.580 MHz
Perf timer 2.046 MHz
Sys timer 1.000 KHz

Processors Information

Socket 1 ID = 0
Number of cores 4 (max 4)
Number of threads 8 (max 8)
Name Intel Core i7 3612QM
Codename Ivy Bridge
Specification Intel(R) Core(TM) i7-3612QM CPU @ 2.10GHz
Package (platform ID) Socket 988B rPGA (0x4)
CPUID 6.A.9
Extended CPUID 6.3A
Core Stepping E1/L1
Technology 22 nm
TDP Limit 35.0 Watts

Tjmax	105.0 °C
Core Speed	1198.0 MHz
Multiplier x Bus Speed	12.0 x 99.8 MHz
Base frequency (cores)	99.8 MHz
Base frequency (ext.)	99.8 MHz
Stock frequency	2100 MHz
Instructions sets	MMX, SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4.2, EM64T, VT-x, AES, AVX
Microcode Revision	0x12
L1 Data cache	4 x 32 KBytes, 8-way set associative, 64-byte line size
L1 Instruction cache	4 x 32 KBytes, 8-way set associative, 64-byte line size
L2 cache	4 x 256 KBytes, 8-way set associative, 64-byte line size
L3 cache	6 MBytes, 12-way set associative, 64-byte line size
Max CPUID level	0000000Dh
Max CPUID ext. level	80000008h
Cache descriptor	Level 1, D, 32 KB, 2 thread(s)
Cache descriptor	Level 1, I, 32 KB, 2 thread(s)
Cache descriptor	Level 2, U, 256 KB, 2 thread(s)
Cache descriptor	Level 3, U, 6 MB, 16 thread(s)
FID/VID Control	yes
IBRS	not supported
IBPB	not supported
STIBP	not supported
RDCL_NO	no
IBRS_ALL	not supported
Turbo Mode	supported, enabled
Max non-turbo ratio	21x
Max turbo ratio	31x
Max efficiency ratio	12x
Min Power	24 Watts
O/C bins	none
Ratio 1 core	31x
Ratio 2 cores	30x
Ratio 3 cores	28x
Ratio 4 cores	28x
TDP Level	35.0 W @ 21x
Temperature 0	46 degC (114 degF) (Package)
Temperature 1	46 degC (114 degF) (Core #0)
Temperature 2	46 degC (114 degF) (Core #1)
Temperature 3	47 degC (116 degF) (Core #2)
Temperature 4	45 degC (113 degF) (Core #3)
Voltage 0	0.89 Volts (VID)
Power 00	3.41 W (Package)
Power 01	0.85 W (IA Cores)
Power 02	0.05 W (GT)

Power 03	2.50 W (Uncore)
Clock Speed 0	1198.00 MHz (Core #0)
Clock Speed 1	3094.84 MHz (Core #1)
Clock Speed 2	2795.34 MHz (Core #2)
Clock Speed 3	2995.01 MHz (Core #3)
Core 0 max ratio	31.0 (effective 31.0)
Core 1 max ratio	31.0 (effective 31.0)
Core 2 max ratio	31.0 (effective 31.0)
Core 3 max ratio	31.0 (effective 31.0)

Chipset

Northbridge	Intel Ivy Bridge rev. 09
Southbridge	Intel HM77 rev. 04
Memory Type	DDR3
Memory Size	6 GBytes
Channels	Dual
Memory Frequency	798.7 MHz (1:6)
CAS# latency (CL)	11.0
RAS# to CAS# delay (tRCD)	11
RAS# Precharge (tRP)	11
Cycle Time (tRAS)	28
Command Rate (CR)	1T
Host Bridge	0x0154

Memory SPD

DIMM #	1
SMBus address	0x50
Memory type	DDR3
Module format	SO-DIMM
Manufacturer (ID)	(000000000000000000000000)
Size	4096 MBytes
Max bandwidth	PC3-12800 (800 MHz)
Part number	HB3SU004GFM8MMD16
Serial number	6D000000
Manufacturing date	Week 13/Year 12
Number of banks	8
Nominal Voltage	1.50 Volts
EPP	no
XMP	no
AMP	no
JEDEC timings table	CL-tRCD-tRP-tRAS-tRC @ frequency
JEDEC #1	5.0-5-5-14-19 @ 380 MHz
JEDEC #2	6.0-6-6-16-22 @ 457 MHz
JEDEC #3	7.0-7-7-19-26 @ 533 MHz
JEDEC #4	8.0-8-8-22-30 @ 609 MHz

JEDEC #5	9.0-9-9-24-33 @ 685 MHz
JEDEC #6	10.0-10-10-27-37 @ 761 MHz
JEDEC #7	11.0-11-11-28-39 @ 800 MHz
DIMM #	2
SMBus address	0x52
Memory type	DDR3
Module format	SO-DIMM
Manufacturer (ID)	(000000000000000000000000)
Size	2048 MBytes
Max bandwidth	PC3-12800 (800 MHz)
Part number	HB3SU002GFM8MMD16
Serial number	56000000
Manufacturing date	Week 13/Year 12
Number of banks	8
Nominal Voltage	1.50 Volts
EPP	no
XMP	no
AMP	no
JEDEC timings table	CL-tRCD-tRP-tRAS-tRC @ frequency
JEDEC #1	5.0-5-5-14-19 @ 380 MHz
JEDEC #2	6.0-6-6-16-22 @ 457 MHz
JEDEC #3	7.0-7-7-19-26 @ 533 MHz
JEDEC #4	8.0-8-8-22-30 @ 609 MHz
JEDEC #5	9.0-9-9-24-33 @ 685 MHz
JEDEC #6	10.0-10-10-27-37 @ 761 MHz
JEDEC #7	11.0-11-11-28-39 @ 800 MHz

Monitoring

Mainboard Model LG3 (0x000000C6 - 0x00000564)

LPCIO

Hardware Monitors

Hardware monitor D3D

Hardware monitor Intel I/O

Temperature 0 48 degC (118 degF) [0x30] (GPU)

Clock Speed 0 349.42 MHz [0x15D] (Graphics)

PCI Devices

Description Host Bridge

Location bus 0 (0x00), device 0 (0x00), function 0 (0x00)

Common header

Vendor ID 0x8086

Model ID 0x0154

Revision ID	0x09
Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 1 (0x01), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x0151
Revision ID	0x09
Description	VGA Controller
Location	bus 0 (0x00), device 2 (0x02), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x0166
Revision ID	0x09
Description	USB Controller
Location	bus 0 (0x00), device 20 (0x14), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1E31
Revision ID	0x04
Description	Communication Device
Location	bus 0 (0x00), device 22 (0x16), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1E3A
Revision ID	0x04
Description	USB 2.0 Controller (EHCI)
Location	bus 0 (0x00), device 26 (0x1A), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1E2D
Revision ID	0x04
Description	Multimedia device
Location	bus 0 (0x00), device 27 (0x1B), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1E20
Revision ID	0x04
Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 28 (0x1C), function 0 (0x00)
Common header	

Vendor ID	0x8086
Model ID	0x1E10
Revision ID	0xC4
Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 28 (0x1C), function 1 (0x01)
Common header	
Vendor ID	0x8086
Model ID	0x1E12
Revision ID	0xC4
Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 28 (0x1C), function 2 (0x02)
Common header	
Vendor ID	0x8086
Model ID	0x1E14
Revision ID	0xC4
Description	USB 2.0 Controller (EHCI)
Location	bus 0 (0x00), device 29 (0x1D), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1E26
Revision ID	0x04
Description	PCI to ISA Bridge
Location	bus 0 (0x00), device 31 (0x1F), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1E57
Revision ID	0x04
Description	Serial ATA Controller
Location	bus 0 (0x00), device 31 (0x1F), function 2 (0x02)
Common header	
Vendor ID	0x8086
Model ID	0x1E03
Revision ID	0x04
Description	SMBus Controller
Location	bus 0 (0x00), device 31 (0x1F), function 3 (0x03)
Common header	
Vendor ID	0x8086
Model ID	0x1E22
Revision ID	0x04
Description	Data Aquisition and Signal Processing Device

Location	bus 0 (0x00), device 31 (0x1F), function 6 (0x06)
Common header	
Vendor ID	0x8086
Model ID	0x1E24
Revision ID	0x04

Description	Ethernet Controller
Location	bus 8 (0x08), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x1969
Model ID	0x1091
Revision ID	0x10

Description	BaseClass 0xFF, SubClass 0x00, PI 0x00
Location	bus 9 (0x09), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x10EC
Model ID	0x5209
Revision ID	0x01

DMI

DMI BIOS	
vendor	Insyde Corp.
version	LG3LP122
date	05/28/2012
ROM size	4608 KB

DMI System Information	
manufacturer	LG Electronics
product	N450-S.BE77P1
version	TBD
serial	209BZDQ010482
UUID	{01A3086A-B56D-D545-8C67-00E0914E6285}
SKU	Type1Sku0
family	Type1Family

DMI Baseboard	
vendor	Quanta
model	LG3
revision	TBD
serial	Type2 - Board Serial Number

DMI System Enclosure	
manufacturer	Quanta
chassis type	Notebook
chassis serial	00E0914E6285

DMI Processor	
manufacturer	Intel(R) Corporation
model	Intel(R) Core(TM) i7-3612QM CPU @ 2.10GHz
clock speed	2100.0 MHz
FSB speed	100.0 MHz
multiplier	21.0x
DMI Memory Controller	
correction	unknown
Max module size	8192 MBytes
DMI Memory Module	
designation	DIMM0
size	4096 MBytes (single bank)
DMI Memory Module	
designation	DIMM1
size	2048 MBytes (single bank)
DMI Port Connector	
designation	J1A1 (internal)
designation	Keyboard (external)
port type	Keyboard Port
connector	PS/2
DMI Port Connector	
designation	J1A1 (internal)
designation	Mouse (external)
port type	Mouse Port
connector	PS/2
DMI Port Connector	
designation	J2A2 (internal)
designation	COM 1 (external)
port type	Serial Port 16550A
connector	DB-9 male
DMI Port Connector	
designation	J3A1 (internal)
designation	USB (external)
port type	USB
connector	Access Bus (USB)
DMI Port Connector	
designation	J3A1 (internal)
designation	USB (external)

port type	USB
connector	Access Bus (USB)
DMI Port Connector	
designation	J3A1 (internal)
designation	USB (external)
port type	USB
connector	Access Bus (USB)
DMI Port Connector	
designation	J5A1 (internal)
designation	USB (external)
port type	USB
connector	Access Bus (USB)
DMI Port Connector	
designation	J5A1 (internal)
designation	USB (external)
port type	USB
connector	Access Bus (USB)
DMI Port Connector	
designation	J5A1 (internal)
designation	Network (external)
port type	Network Port
connector	RJ-45
DMI Port Connector	
designation	J9G2 (internal)
designation	OnBoard Floppy Type (external)
connector	On Board Floppy
DMI Port Connector	
designation	J7J1 (internal)
designation	OnBoard Primary IDE (external)
connector	On Board IDE
DMI Port Connector	
designation	J2A1 (internal)
designation	TV OUT (external)
port type	Video Port
connector	Mini DIN
DMI Port Connector	
designation	J2A2 (internal)
designation	CRT (external)
port type	Video Port

connector	DB-15 female
DMI Port Connector	
designation	J30 (internal)
designation	Microphone In (external)
port type	Audio Port
connector	Mini Jack (headphones)
DMI Port Connector	
designation	J30 (internal)
designation	Line In (external)
port type	Audio Port
connector	Mini Jack (headphones)
DMI Port Connector	
designation	J30 (internal)
designation	Speaker Out (external)
port type	Audio Port
connector	Mini Jack (headphones)
DMI Extension Slot	
designation	J5C1
type	AA
populated	no
DMI Extension Slot	
designation	J6C1
type	A6
populated	no
DMI Extension Slot	
designation	J6C2
type	A6
populated	no
DMI Extension Slot	
designation	J6D2
type	A6
populated	no
DMI Extension Slot	
designation	J7C1
type	A6
populated	no
DMI Extension Slot	
designation	J7D2

type	A6
populated	no
DMI Extension Slot	
designation	J8C1
type	A6
populated	no
DMI Extension Slot	
designation	J8C2
type	AA
populated	no
DMI OEM Strings	
string[0]	String1 for Original Equipment Manufacturer
string[1]	String2 for Original Equipment Manufacturer
string[2]	String3 for Original Equipment Manufacturer
string[3]	String4 for Original Equipment Manufacturer
string[4]	String5 for Original Equipment Manufacturer
DMI Physical Memory Array	
location	Motherboard
usage	System Memory
correction	None
max capacity	16 GB
max# of devices	2
DMI Memory Device	
designation	DIMM0
format	SODIMM
type	DDR3
total width	64 bits
data width	64 bits
size	4 GB
DMI Memory Device	
designation	DIMM1
format	SODIMM
type	DDR3
total width	64 bits
data width	64 bits
size	2 GB
DMI Additional Information Device	
string #	2
string[0]	PCIExpressx16
string[1]	Compiler Version: VC 9.0

Graphics

Number of adapters 1

Graphic APIs

API D3D
API Intel I/O

Display Adapters

Display adapter 0

ID 0x40000000
Name Intel(R) HD Graphics 4000
Board Manufacturer 0x1854 (0x1809)
PCI device bus 0 (0x0), device 2 (0x2), function 0 (0x0)
Vendor ID 0x8086 (0x1854)
Model ID 0x0166 (0x1809)
Revision ID 0x9
Performance Level 0
Core clock 350.0 MHz

Win32_VideoController AdapterRAM = 0x84000000 (2214592512)
Win32_VideoController AdapterRAM = 0x40000000 (1073741824)
Win32_VideoController DriverVersion = 10.18.10.4653
Win32_VideoController DriverVersion = 15.200.1062.1004
Win32_VideoController DriverDate = 04/07/2017
Win32_VideoController DriverDate = 08/03/2015

Monitor 0

Model ()
ID LGD033C
Serial
Manufacturing Date Week 0, Year 2012
Size 13.9 inches
Max Resolution 1366 x 768 @ 60 Hz
Horizontal Freq. Range 0-0 kHz
Vertical Freq. Range 0-0 Hz
Max Pixel Clock 0 MHz
Gamma Factor 2.2

Software

Windows Version Microsoft Windows 7 (6.1) Professional 64-bit Service Pack 1 (Build 7601)
DirectX Version 11.0