

CPU-Z

Binaries

CPU-Z version 1.90.1.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 10.000 MHz
 Sys timer 1.000 KHz

Processors Information

Socket 1 ID = 0
 Number of cores 4 (max 4)
 Number of threads 8 (max 8)
 Manufacturer GenuineIntel
 Name Intel Core i7 6700K
 Codename Skylake
 Specification Intel(R) Core(TM) i7-6700K CPU @ 4.00GHz
 Package (platform ID) Socket 1151 LGA (0x1)
 CPUID 6.E.3
 Extended CPUID 6.5E
 Core Stepping R0
 Technology 14 nm
 TDP Limit 95.0 Watts
 Tjmax 100.0 C
 Core Speed 3990.2 MHz
 Multiplier x Bus Speed 40.0 x 99.8 MHz
 Base frequency (cores) 99.8 MHz
 Base frequency (ext.) 99.8 MHz
 Stock frequency 4000 MHz
 Max frequency 4200 MHz
 Instructions sets MMX, SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4.2, EM64T, VT-x, AES, AVX, AVX2, FMA3, TSX

Microcode Revision	0xC6
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, 4-way set associative, 64-byte line size
L3 cache	8 MBytes, 16-way set associative, 64-byte line size
Max CPUID level	00000016h
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, 8 MB, 16 thread(s)
FID/VID Control	yes

Turbo Mode	supported, enabled
Max non-turbo ratio	40x
Max turbo ratio	42x
Max efficiency ratio	8x
Speedshift	Autonomous
O/C bins	unlimited
Ratio 1 core	42x
Ratio 2 cores	40x
Ratio 3 cores	40x
Ratio 4 cores	40x
IA Voltage Mode	PCU adaptive
IA Voltage Offset	0 mV
GT Voltage Mode	PCU adaptive
GT Voltage Offset	0 mV
LLC/Ring Voltage Mode	PCU adaptive
LLC/Ring Voltage Offset	0 mV
Agent Voltage Mode	PCU adaptive
Agent Voltage Offset	0 mV
TDP Level	95.0 W @ 40x

Temperature 0	30 degC (86 degF) (Package)
Temperature 1	27 degC (80 degF) (Core #0)
Temperature 2	29 degC (84 degF) (Core #1)
Temperature 3	27 degC (80 degF) (Core #2)
Temperature 4	27 degC (80 degF) (Core #3)
Voltage 0	1.22 Volts (VID)
Voltage 1	+0.00 Volts (IA Offset)
Voltage 2	+0.00 Volts (GT Offset)
Voltage 3	+0.00 Volts (LLC/Ring Offset)
Voltage 4	+0.00 Volts (System Agent Offset)
Power 00	10.72 W (Package)
Power 01	9.62 W (IA Cores)
Power 02	n.a. (GT)
Power 03	1.10 W (Uncore)
Power 04	0.99 W (DRAM)
Clock Speed 0	3990.24 MHz (Core #0)
Clock Speed 1	3990.24 MHz (Core #1)
Clock Speed 2	3990.24 MHz (Core #2)
Clock Speed 3	3990.24 MHz (Core #3)
Core 0 max ratio	42.0 (effective 42.0)
Core 1 max ratio	42.0 (effective 42.0)
Core 2 max ratio	42.0 (effective 42.0)

Core 3 max ratio

42.0 (effective 42.0)

Chipset

Northbridge	Intel Skylake rev. 07
Southbridge	Intel B150 rev. 31
Graphic Interface	PCI-Express
PCI-E Link Width	x1
PCI-E Max Link Width	x16
Memory Type	DDR4
Memory Size	16 GBytes
Channels	Dual
Memory Frequency	1064.1 MHz (1:16)
CAS# latency (CL)	15.0
RAS# to CAS# delay (tRCD)	15
RAS# Precharge (tRP)	15
Cycle Time (tRAS)	35
Row Refresh Cycle Time (tRFC)	278
Command Rate (CR)	2T
Uncore Frequency	3992.2 MHz
Host Bridge	0x191F

Memory SPD

DIMM #	1
SMBus address	0x51
Memory type	DDR4
Module format	UDIMM
Module Manufacturer(ID)	G.Skill (7F7F7F7FCD000000000000)
SDRAM Manufacturer (ID)	Samsung (CE00000000000000000000)
Size	8192 MBytes
Max bandwidth	DDR4-2132 (1066 MHz)
Part number	F4-2133C15-8GNT
Nominal Voltage	1.20 Volts
EPP	no
XMP	no
AMP	no
JEDEC timings table	CL-tRCD-tRP-tRAS-tRC @ frequency
JEDEC #1	9.0-9-9-22-31 @ 666 MHz
JEDEC #2	11.0-11-11-27-38 @ 814 MHz
JEDEC #3	12.0-12-12-29-42 @ 888 MHz
JEDEC #4	13.0-13-13-31-45 @ 962 MHz
JEDEC #5	14.0-14-14-34-49 @ 1037 MHz
JEDEC #6	15.0-15-15-35-50 @ 1066 MHz
JEDEC #7	16.0-15-15-35-50 @ 1066 MHz
JEDEC #8	18.0-15-15-35-50 @ 1066 MHz
JEDEC #9	19.0-15-15-35-50 @ 1066 MHz
DIMM #	2
SMBus address	0x53
Memory type	DDR4
Module format	UDIMM
Module Manufacturer(ID)	G.Skill (7F7F7F7FCD000000000000)
SDRAM Manufacturer (ID)	Samsung (CE00000000000000000000)
Size	8192 MBytes
Max bandwidth	DDR4-2132 (1066 MHz)

Part number	F4-2133C15-8GNT
Nominal Voltage	1.20 Volts
EPP	no
XMP	no
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JEDEC #7	16.0-15-15-35-50 @ 1066 MHz
JEDEC #8	18.0-15-15-35-50 @ 1066 MHz
JEDEC #9	19.0-15-15-35-50 @ 1066 MHz

Monitoring

Mainboard Model B150M Night Elf (MS-7979) (0x00000694 - 0x2D21C549)

LPCIO

LPCIO Vendor Nuvoton
LPCIO Model NCT6793/NCT5563
LPCIO Vendor ID 0x5CA3

LPCIO Chip ID 0xD1
LPCIO Revision ID 0x21

Hardware Monitors

Hardware monitor Nuvoton NCT6793
Voltage 0 1.02 Volts [0x80] (CPU VCORE)
Voltage 1 5.04 Volts [0x7E] (+5V)
Voltage 2 3.41 Volts [0xD5] (AVCC)
Voltage 3 3.34 Volts [0xD1] (3VCC)
Voltage 4 12.00 Volts [0x7D] (+12V)
Voltage 11 1.01 Volts [0x7E] (IGP)
Voltage 13 1.01 Volts [0x7E] (DRAM)
Temperature 3 30 degC (86 degF) [0x1E] (TMPIN3)
Fan 0 697 RPM [0x2B9] (SYSFANIN)
Fan 1 758 RPM [0x2F6] (CPUFANIN)

Hardware monitor D3D

Hardware monitor NVIDIA NVAPI
Voltage 0 0.63 Volts [0x271] (GPU)
Power 0 20.16 pc (GPU)
Temperature 0 36 degC (96 degF) [0x24] (GPU)
Fan 0 0 RPM [0x0] (GPU #0)
Fan PWM 0 0 pc [0x0] (FANPWMIN0)
Clock Speed 0 1063.00 MHz [0x427] (Graphics)
Clock Speed 1 4006.80 MHz [0xFA6] (Memory)
Clock Speed 2 n.a. (Processor)

PCI Devices

Description Host Bridge
Location bus 0 (0x00), device 0 (0x00), function 0 (0x00)

Common header	
Vendor ID	0x8086
Model ID	0x191F
Revision ID	0x07
Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 1 (0x01), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1901
Revision ID	0x07
Description	System Device
Location	bus 0 (0x00), device 8 (0x08), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0x1911
Revision ID	0x00
Description	USB Controller
Location	bus 0 (0x00), device 20 (0x14), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0xA12F
Revision ID	0x31
Description	Data Aquisition and Signal Processing Device
Location	bus 0 (0x00), device 20 (0x14), function 2 (0x02)
Common header	
Vendor ID	0x8086
Model ID	0xA131
Revision ID	0x31
Description	Data Aquisition and Signal Processing Device
Location	bus 0 (0x00), device 21 (0x15), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0xA160
Revision ID	0x31
Description	Data Aquisition and Signal Processing Device
Location	bus 0 (0x00), device 21 (0x15), function 1 (0x01)
Common header	
Vendor ID	0x8086
Model ID	0xA161
Revision ID	0x31
Description	Communication Device
Location	bus 0 (0x00), device 22 (0x16), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0xA13A
Revision ID	0x31
Description	Serial ATA Controller
Location	bus 0 (0x00), device 23 (0x17), function 0 (0x00)

Common header	
Vendor ID	0x8086
Model ID	0xA102
Revision ID	0x31
Description	Data Aquisition and Signal Processing Device
Location	bus 0 (0x00), device 30 (0x1E), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0xA127
Revision ID	0x31
Description	PCI to ISA Bridge
Location	bus 0 (0x00), device 31 (0x1F), function 0 (0x00)
Common header	
Vendor ID	0x8086
Model ID	0xA148
Revision ID	0x31
Description	Memory Controller
Location	bus 0 (0x00), device 31 (0x1F), function 2 (0x02)
Common header	
Vendor ID	0x8086
Model ID	0xA121
Revision ID	0x31
Description	Multimedia device
Location	bus 0 (0x00), device 31 (0x1F), function 3 (0x03)
Common header	
Vendor ID	0x8086
Model ID	0xA170
Revision ID	0x31
Description	SMBus Controller
Location	bus 0 (0x00), device 31 (0x1F), function 4 (0x04)
Common header	
Vendor ID	0x8086
Model ID	0xA123
Revision ID	0x31
Description	Ethernet Controller
Location	bus 0 (0x00), device 31 (0x1F), function 6 (0x06)
Common header	
Vendor ID	0x8086
Model ID	0x15B8
Revision ID	0x31
Description	VGA Controller
Location	bus 1 (0x01), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x10DE
Model ID	0x1B81
Revision ID	0xA1
Description	Multimedia device
Location	bus 1 (0x01), device 0 (0x00), function 1 (0x01)

Common header	
Vendor ID	0x10DE
Model ID	0x10F0
Revision ID	0xA1

DMI

SMBIOS Version 3.0

DMI BIOS

vendor American Megatrends Inc.
version 1.30
date 12/17/2015
ROM size 8192 KB

DMI System Information

manufacturer MSI
product MS-7979
version 1.0
serial Default string
UUID {00000000-0000-0000-0000-4CCC6A07E724}
SKU Default string
family Default string

DMI Baseboard

vendor MSI
model B150M Night Elf (MS-7979)
revision 1.0
serial G116498559

DMI System Enclosure

manufacturer MSI
chassis type Desktop
chassis serial Default string

DMI Port Connector

designation J1A1 (internal)
designation PS2Mouse (external)
port type Mouse Port
connector PS/2

DMI Port Connector

designation J1A1 (internal)
designation Keyboard (external)
port type Keyboard Port
connector PS/2

DMI Port Connector

designation J2A1 (internal)
designation TV Out (external)
connector Mini Centronics Type-14

DMI Port Connector

designation J2A2A (internal)
designation COM A (external)
port type Serial Port 16550A

connector	DB-9 male
DMI Port Connector	
designation	J2A2B (internal)
designation	Video (external)
port type	Video Port
connector	DB-15 female
DMI Port Connector	
designation	J3A1 (internal)
designation	USB1 (external)
port type	USB
connector	Access Bus (USB)
DMI Port Connector	
designation	J9A1 - TPM HDR (internal)
DMI Port Connector	
designation	J9C1 - PCIE DOCKING CONN (internal)
DMI Port Connector	
designation	J2B3 - CPU FAN (internal)
DMI Port Connector	
designation	J6C2 - EXT HDMI (internal)
DMI Port Connector	
designation	J3C1 - GMCH FAN (internal)
DMI Port Connector	
designation	J1D1 - ITP (internal)
DMI Port Connector	
designation	J9E2 - MDC INTPSR (internal)
DMI Port Connector	
designation	J9E4 - MDC INTPSR (internal)
DMI Port Connector	
designation	J9E3 - LPC HOT DOCKING (internal)
DMI Port Connector	
designation	J9E1 - SCAN MATRIX (internal)
DMI Port Connector	
designation	J9G1 - LPC SIDE BAND (internal)
DMI Port Connector	
designation	J8F1 - UNIFIED (internal)
DMI Port Connector	
designation	J6F1 - LVDS (internal)
DMI Port Connector	
designation	J2F1 - LAI FAN (internal)

DMI Port Connector designation	J2G1 - GFX VID (internal)
DMI Port Connector designation	J1G6 - AC JACK (internal)
DMI Extension Slot designation	J6B2
type	A5
populated	yes
DMI Extension Slot designation	J6B1
type	A5
populated	yes
DMI Extension Slot designation	J6D1
type	A5
populated	yes
DMI Extension Slot designation	J7B1
type	A5
populated	yes
DMI Extension Slot designation	J8B4
type	A5
populated	yes
DMI Extension Slot designation	J8D1
type	A5
populated	yes
DMI Extension Slot designation	J8B3
type	PCI
width	32 bits
populated	yes
DMI OEM Strings string[0]	Default string
DMI Processor manufacturer	Intel(R) Corporation
model	Intel(R) Core(TM) i7-6700K CPU @ 4.00GHz
clock speed	4000.0 MHz
FSB speed	100.0 MHz
multiplier	40.0x
DMI Physical Memory Array location	Motherboard
usage	System Memory
correction	None

max capacity	64 GB
max# of devices	4
DMI Memory Device	
designation	ChannelA-DIMM0
format	unknown
type	unknown
DMI Memory Device	
designation	ChannelA-DIMM1
format	DIMM
type	DDR4
total width	64 bits
data width	64 bits
size	8 GB
DMI Memory Device	
designation	ChannelB-DIMM0
format	unknown
type	unknown
DMI Memory Device	
designation	ChannelB-DIMM1
format	DIMM
type	DDR4
total width	64 bits
data width	64 bits
size	8 GB

Graphics

Number of adapters	1
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Graphic APIs

API	D3D
API	NVIDIA I/O
API	NVIDIA NVAPI

Display Adapters

Display adapter 0	
ID	0x1090304
Name	NVIDIA GeForce GTX 1070
Board Manufacturer	ASUSTeK Computer Inc.
Revision	A1
Codename	GP104
Core family	0x134 (GP104)
Technology	16 nm
Memory size	8 GB
Memory type	GDDR5
Memory vendor	Samsung
PCI device	bus 1 (0x1), device 0 (0x0), function 0 (0x0)
Vendor ID	0x10DE (0x1043)
Model ID	0x1B81 (0x8599)
Revision ID	0xA1
Performance Level	0
Core clock	1050.0 MHz

Memory clock 4006.8 MHz

Win32_VideoController AdapterRAM = 0xFFF00000 (4293918720)
Win32_VideoController DriverVersion = 26.21.14.3086
Win32_VideoController DriverDate = 05/22/2019

Monitor 0

Model VW246 ()
ID ACI24F2
Serial 8BLMQS023196
Manufacturing Date Week 49, Year 2008
Size 24.0 inches
Max Resolution 1920 x 1080 @ 60 Hz
Horizontal Freq. Range 31-83 kHz
Vertical Freq. Range 56-76 Hz
Max Pixel Clock 170 MHz
Gamma Factor 2.2

Monitor 1

Model ZOWIE XL LCD ()
ID BNQ7F45
Serial 91H02361SL0
Manufacturing Date Week 3, Year 2017
Size 27.2 inches
Max Resolution 2560 x 1440 @ 59 Hz
Horizontal Freq. Range 222-222 kHz
Vertical Freq. Range 40-144 Hz
Max Pixel Clock 600 MHz
Gamma Factor 2.2

Software

Windows Version Microsoft Windows 10 (10.0) Professional 64-bit (Build 18362)
DirectX Version 12.0