

CPU-Z

Binaries

CPU-Z version1.82.1.x64

Processors

Number of sockets1
Number of threads12

APICs

Socket 0
 -- Node 0
 -- CCX 0
 -- Core 0
 -- Thread 00
 -- Thread 11
 -- Core 1
 -- Thread 02
 -- Thread 13
 -- Core 2
 -- Thread 04
 -- Thread 15
 -- CCX 1
 -- Core 4
 -- Thread 08
 -- Thread 19
 -- Core 5
 -- Thread 010
 -- Thread 111
 -- Core 6
 -- Thread 012
 -- Thread 113

Timers

ACPI timer3.580 MHz
Perf timer3.119 MHz
Sys timer1.000 KHz

Processors Information

Socket 1ID = 0
 Number of cores6 (max 6)
 Number of threads12 (max 12)
 NameAMD Ryzen 5 1600
 CodenameSummit Ridge
 SpecificationAMD Ryzen 5 1600 Six-Core Processor
 PackageSocket AM4 (1331)
 CPUIDF.1.1
 Extended CPUID17.1
 Core SteppingZP-B1

Technology	14 nm
TDP Limit	65.0 Watts
Tjmax	95.0 °C
Core Speed	3391.9 MHz
Multiplier x Bus Speed	34.0 x 99.8 MHz
Instructions sets	MMX (+), SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4.2, SSE4A, x86-64, AMD-V, AES, AVX, AVX2, FMA3, SHA
L1 Data cache	6 x 32 KBytes, 8-way set associative, 64-byte line size
L1 Instruction cache	6 x 64 KBytes, 4-way set associative, 64-byte line size
L2 cache	6 x 512 KBytes, 8-way set associative, 64-byte line size
L3 cache	2 x 8 MBytes, 16-way set associative, 64-byte line size
Max CPUID level	0000000Dh
Max CPUID ext. level	8000001Fh
Cache descriptor	Level 1, D, 32 KB, 2 thread(s)
Cache descriptor	Level 1, I, 64 KB, 2 thread(s)
Cache descriptor	Level 2, U, 512 KB, 2 thread(s)
Cache descriptor	Level 3, U, 8 MB, 6 thread(s)
FID/VID Control	yes

Package Type	0x2
Model	00
String 1	0x0
String 2	0x0
Page	0x0
Power Unit	0.0
Attached device	PCI device at bus 0, device 24, function 0
100	00000000 E0000001 00000000 00000000
110	00000003 00021001 00000000 00000000
120	00000000 00000000 00000000 00000000
130	00000000 00000000 00000000 00000000
140	00000000 00000000 00000000 00000000
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	00000000 00000000 00000000 00000000
190	00000000 00000000 00000000 00000000
1A0	00000000 00000000 00000000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000000 00000000

Attached device	PCI device at bus 0, device 24, function 1
100	00000000 00000003 00000000 00000000
110	00100000 00100020 00100020 00100000
120	00100000 00000000 00000000 00000000
130	00000000 00000000 00100000 00100020
140	00100020 00000000 00100000 00000000
150	00000000 00000000 00000000 00000000

160	00001020 00000000 00000000 00000000
170	00000000 0000810D 00000000 00008105
180	00000000 00000040 00000000 00000030
190	00000000 00000040 0000003E 00000001
1A0	48201020 00000000 00000000 00000000
1B0	0003040C 00000048 00000040 00000000
1C0	00000020 00000034 01003030 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000004 0001014E 00000048 00000000
1F0	00000000 00000000 00000000 00000000

Attached device	PCI device at bus 0, device 24, function 2
100	00000000 00000000 00000000 00000000
110	00000000 00000000 00000000 00000000
120	00000000 00000000 00000000 00000000
130	00010001 00010001 00010001 00010001
140	00010001 00010001 00010001 00010001
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	00000000 00000000 00000000 00000000
190	00000000 00000000 00000000 00000000
1A0	00000000 00000000 00000000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000000 00000000

Attached device	PCI device at bus 0, device 24, function 3
100	00000000 143F1FC2 0380FC40 00000000
110	00000000 00000000 00000000 00000000
120	00000000 00000000 00000000 00000000
130	00000000 00000000 00000000 00000000
140	00000000 00000000 00000000 00000000
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	00000000 00000000 00000000 00000000
190	00000000 00000000 00000000 00000000
1A0	00000000 00000000 00000000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000000 00000000

Attached device	PCI device at bus 0, device 24, function 4
100	00000000 0000015F 000009FF 000002BF
110	00400000 00010000 0001E000 0001FF01
120	0001FF00 00010000 0001FF02 0001FF07

130	0001FF03 00010000 0001FF02 00000000
140	00000000 00000000 00000000 00000000
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	000F0F0F 000F0F0F 001B1B1B 000F0F0F
190	000F0F0F 000F0F0F 00000000 00000000
1A0	00000000 00000000 00000000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000000 00000000

Attached device	PCI device at bus 0, device 24, function 5
100	00000000 04000000 00700281 00000000
110	00000000 00000000 00000000 00000000
120	00000000 00000000 00000000 00000000
130	00000000 00000000 00000000 00000000
140	00000000 00000000 00000000 00000000
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	00000000 00000000 00000000 00000000
190	00000008 00000100 00000000 00000000
1A0	00000000 00000040 00200000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000000 00000000

Attached device	PCI device at bus 0, device 24, function 6
100	00000000 00000000 00000000 00000000
110	00000000 00000000 00000000 00000000
120	00000000 00000000 00000000 00000000
130	00000000 00000000 FFFF0000 00000000
140	00000006 00000000 00000000 00000000
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	00000000 00000000 00000000 00000000
190	00000000 00000000 00000000 00000000
1A0	00000000 00000000 00000000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000083 90000000

Attached device	PCI device at bus 0, device 24, function 7
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100	00000000 00000000 00000000 00000000
110	00000000 00000000 00000000 00000000
120	00000000 00000000 00000000 00000000
130	00000000 00000000 00000000 00000000
140	00000000 00000000 00000000 00000000
150	00000000 00000000 00000000 00000000
160	00000000 00000000 00000000 00000000
170	00000000 00000000 00000000 00000000
180	00000000 00000000 00000000 00000000
190	00000000 00000000 00000000 00000000
1A0	00000000 00000000 00000000 00000000
1B0	00000000 00000000 00000000 00000000
1C0	00000000 00000000 00000000 00000000
1D0	00000000 00000000 00000000 00000000
1E0	00000000 00000000 00000000 00000000
1F0	00000000 00000000 00000000 00000000
SMU Version	25.82.00
TDP/TJMAX	0x41005F
TCTL Offset	0x0
Temperature 0	29 degC (83 degF) (Package (Node 0))
Voltage 0	1.29 Volts (VID)
Voltage 1	1.26 Volts (CPU VDD (Node 0))
Power 00	15.61 W (Package)
Power 01	0.54 W (Core #0)
Power 02	0.28 W (Core #1)
Power 03	0.19 W (Core #2)
Power 04	0.38 W (Core #4)
Power 05	0.38 W (Core #5)
Power 06	0.48 W (Core #6)
Power 07	2.77 W (Cores)
Clock Speed 0	3391.91 MHz (Core #0)
Clock Speed 1	3691.19 MHz (Core #1)
Clock Speed 2	3691.19 MHz (Core #2)
Clock Speed 3	3391.91 MHz (Core #4)
Clock Speed 4	3391.91 MHz (Core #5)
Clock Speed 5	3391.91 MHz (Core #6)

Chipset

Northbridge	AMD Ryzen SOC rev. 00
Southbridge	AMD A320 rev. 51
Graphic Interface	PCI-Express
PCI-E Link Width	x16
PCI-E Max Link Width	x16
Memory Type	DDR4
Memory Size	8 GBytes
Channels	Single
Memory Frequency	1197.1 MHz (1:12)

CAS# latency (CL)	17.0
RAS# to CAS# delay (tRCD)	17
RAS# Precharge (tRP)	17
Cycle Time (tRAS)	39
Bank Cycle Time (tRC)	56
Command Rate (CR)	2T
Uncore Frequency	1197.1 MHz

Memory SPD

DIMM #	1
SMBus address	0x50
Memory type	DDR4
Module format	UDIMM
Manufacturer (ID)	Crucial Technology (7F7F7F7F7F9B0000000000)
Size	8192 MBytes
Max bandwidth	DDR4-2400 (1200 MHz)
Part number	CT8G4DFD824A.C16FH
Serial number	1913C8D2
Manufacturing date	Week 40/Year 17
Nominal Voltage	1.20 Volts
EPP	no
XMP	no
AMP	no
JEDEC timings table	CL-tRCD-tRP-tRAS-tRC @ frequency
JEDEC #1	10.0-10-10-24-34 @ 727 MHz
JEDEC #2	11.0-11-11-26-37 @ 800 MHz
JEDEC #3	12.0-12-12-28-40 @ 872 MHz
JEDEC #4	13.0-14-14-31-44 @ 945 MHz
JEDEC #5	14.0-14-14-33-47 @ 1018 MHz
JEDEC #6	15.0-15-15-35-50 @ 1090 MHz
JEDEC #7	16.0-16-16-38-54 @ 1163 MHz
JEDEC #8	17.0-17-17-39-55 @ 1200 MHz
JEDEC #9	18.0-17-17-39-55 @ 1200 MHz
JEDEC #10	19.0-17-17-39-55 @ 1200 MHz
JEDEC #11	20.0-17-17-39-55 @ 1200 MHz
JEDEC #12	21.0-17-17-39-55 @ 1200 MHz

Monitoring

Mainboard Model	A320M-DGS (0x0000022E - 0x025102A4)
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LPCIO

LPCIO Vendor	Nuvoton
LPCIO Model	NCT6779
LPCIO Vendor ID	0x5CA3
LPCIO Chip ID	0xC5
LPCIO Revision ID	0x62

Hardware Monitors

Hardware monitor	Nuvoton NCT6779
Voltage 0	1.26 Volts [0x4F] (CPU VCORE)

Voltage 2	3.36 Volts [0xD2] (AVCC)
Voltage 3	3.36 Volts [0xD2] (3VCC)
Voltage 4	12.30 Volts [0xE9] (+12V)
Voltage 5	0.89 Volts [0x6F] (VDDCR_SOC)
Voltage 6	1.38 Volts [0xAC] (DRAM)
Voltage 7	0.36 Volts [0x2D] (VIN7)
Voltage 9	0.94 Volts [0x76] (VDDP)
Voltage 10	1.86 Volts [0xE9] (+1.8V)
Voltage 11	0.00 Volts [0x0] (VIN11)
Voltage 13	5.04 Volts [0xD2] (+5V)
Voltage 14	1.06 Volts [0x85] (Chipset +1.05V)
Temperature 0	31 degC (87 degF) [0x1F] (Mainboard)
Temperature 1	31 degC (86 degF) [0x3D] (CPU)
Temperature 3	40 degC (104 degF) [0x28] (TMPIN3)
Temperature 5	30 degC (86 degF) [0x1E] (TMPIN5)
Temperature 6	31 degC (87 degF) [0x1F] (TMPIN6)
Fan 0	1293 RPM [0x50D] (SYSFANIN)
Fan 1	1945 RPM [0x799] (CPUFANIN)
Fan 2	1240 RPM [0x4D8] (AUXFANIN0)

Hardware monitor	NVIDIA NVAPI
Voltage 0	0.63 Volts [0x271] (GPU)
Power 0	6.99 pc (GPU)
Temperature 0	31 degC (87 degF) [0x1F] (GPU)
Fan 0	1201 RPM [0x4B1] (GPU)
Fan PWM 0	40 pc [0x28] (FANPWMIN0)
Clock Speed 0	139.00 MHz [0x8B] (Graphics)
Clock Speed 1	405.00 MHz [0x8B] (Memory)

PCI Devices

Description	Host Bridge
Location	bus 0 (0x00), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1450
Revision ID	0x00

Description	Host Bridge
Location	bus 0 (0x00), device 1 (0x01), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1452
Revision ID	0x00

Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 1 (0x01), function 3 (0x03)
Common header	
Vendor ID	0x1022
Model ID	0x1453
Revision ID	0x00

Description	Host Bridge
Location	bus 0 (0x00), device 2 (0x02), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1452
Revision ID	0x00

Description	Host Bridge
Location	bus 0 (0x00), device 3 (0x03), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1452
Revision ID	0x00

Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 3 (0x03), function 1 (0x01)
Common header	
Vendor ID	0x1022
Model ID	0x1453
Revision ID	0x00

Description	Host Bridge
Location	bus 0 (0x00), device 4 (0x04), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1452
Revision ID	0x00

Description	Host Bridge
Location	bus 0 (0x00), device 7 (0x07), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1452
Revision ID	0x00

Description	PCI to PCI Bridge
Location	bus 0 (0x00), device 7 (0x07), function 1 (0x01)
Common header	
Vendor ID	0x1022
Model ID	0x1454
Revision ID	0x00

Description	Host Bridge
Location	bus 0 (0x00), device 8 (0x08), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1452
Revision ID	0x00

Description	PCI to PCI Bridge
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Location	bus 0 (0x00), device 8 (0x08), function 1 (0x01)
Common header	
Vendor ID	0x1022
Model ID	0x1454
Revision ID	0x00
Description	SMBus Controller
Location	bus 0 (0x00), device 20 (0x14), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x790B
Revision ID	0x59
Description	PCI to ISA Bridge
Location	bus 0 (0x00), device 20 (0x14), function 3 (0x03)
Common header	
Vendor ID	0x1022
Model ID	0x790E
Revision ID	0x51
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1460
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 1 (0x01)
Common header	
Vendor ID	0x1022
Model ID	0x1461
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 2 (0x02)
Common header	
Vendor ID	0x1022
Model ID	0x1462
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 3 (0x03)
Common header	
Vendor ID	0x1022
Model ID	0x1463
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 4 (0x04)
Common header	

Vendor ID	0x1022
Model ID	0x1464
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 5 (0x05)
Common header	
Vendor ID	0x1022
Model ID	0x1465
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 6 (0x06)
Common header	
Vendor ID	0x1022
Model ID	0x1466
Revision ID	0x00
Description	Host Bridge
Location	bus 0 (0x00), device 24 (0x18), function 7 (0x07)
Common header	
Vendor ID	0x1022
Model ID	0x1467
Revision ID	0x00
Description	USB Controller
Location	bus 3 (0x03), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x43BC
Revision ID	0x02
Description	Serial ATA Controller
Location	bus 3 (0x03), device 0 (0x00), function 1 (0x01)
Common header	
Vendor ID	0x1022
Model ID	0x43B8
Revision ID	0x02
Description	PCI to PCI Bridge
Location	bus 3 (0x03), device 0 (0x00), function 2 (0x02)
Common header	
Vendor ID	0x1022
Model ID	0x43B3
Revision ID	0x02
Description	PCI to PCI Bridge
Location	bus 4 (0x04), device 4 (0x04), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x43B4

Revision ID	0x02
Description	PCI to PCI Bridge
Location	bus 4 (0x04), device 6 (0x06), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x43B4
Revision ID	0x02
Description	PCI to PCI Bridge
Location	bus 4 (0x04), device 7 (0x07), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x43B4
Revision ID	0x02
Description	Video device
Location	bus 6 (0x06), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x14F1
Model ID	0x8880
Revision ID	0x04
Description	Ethernet Controller
Location	bus 7 (0x07), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x10EC
Model ID	0x8168
Revision ID	0x11
Description	VGA Controller
Location	bus 9 (0x09), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x10DE
Model ID	0x1C03
Revision ID	0xA1
Description	Multimedia device
Location	bus 9 (0x09), device 0 (0x00), function 1 (0x01)
Common header	
Vendor ID	0x10DE
Model ID	0x10F1
Revision ID	0xA1
Description	Non-Essential Instrumentation Device
Location	bus 17 (0x11), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x145A
Revision ID	0x00

Description	Encryption Device
Location	bus 17 (0x11), device 0 (0x00), function 2 (0x02)
Common header	
Vendor ID	0x1022
Model ID	0x1456
Revision ID	0x00
Description	USB Controller
Location	bus 17 (0x11), device 0 (0x00), function 3 (0x03)
Common header	
Vendor ID	0x1022
Model ID	0x145C
Revision ID	0x00
Description	Non-Essential Instrumentation Device
Location	bus 18 (0x12), device 0 (0x00), function 0 (0x00)
Common header	
Vendor ID	0x1022
Model ID	0x1455
Revision ID	0x00
Description	Serial ATA Controller
Location	bus 18 (0x12), device 0 (0x00), function 2 (0x02)
Common header	
Vendor ID	0x1022
Model ID	0x7901
Revision ID	0x51
Description	Multimedia device
Location	bus 18 (0x12), device 0 (0x00), function 3 (0x03)
Common header	
Vendor ID	0x1022
Model ID	0x1457
Revision ID	0x00

DMI

DMI BIOS	
vendor	American Megatrends Inc.
version	P3.30
date	11/03/2017
ROM size	16384 KB
DMI System Information	
manufacturer	To Be Filled By O.E.M.
product	To Be Filled By O.E.M.
version	To Be Filled By O.E.M.
serial	To Be Filled By O.E.M.
UUID	{55C28570-FE26-0000-0000-000000000000}
SKU	To Be Filled By O.E.M.
family	To Be Filled By O.E.M.

DMI Baseboard	
vendor	ASRock
model	A320M-DGS
revision	unknown
serial	M80-A8017300213
DMI System Enclosure	
manufacturer	To Be Filled By O.E.M.
chassis type	Desktop
chassis serial	To Be Filled By O.E.M.
DMI Extension Slot	
designation	PCIE1
type	A5
populated	yes
DMI Extension Slot	
designation	PCIE2
type	A5
populated	yes
DMI Extension Slot	
designation	PCIE3_M2_1
type	A5
populated	no
DMI OEM Strings	
string[0]	To Be Filled By O.E.M.
DMI Additional Information Device	
string #	1
string[0]	MORDOR
DMI Physical Memory Array	
location	Motherboard
usage	System Memory
correction	None
max capacity	65536 MBytes
max# of devices	2
DMI Processor	
manufacturer	Advanced Micro Devices Inc.
model	AMD Ryzen 5 1600 Six-Core Processor
clock speed	3200.0 MHz
FSB speed	100.0 MHz
multiplier	32.0x
DMI Memory Device	
designation	DIMM 0
format	DIMM

type	unknown
total width	64 bits
data width	64 bits
size	8192 MBytes
DMI Memory Device	
designation	DIMM 0
format	unknown
type	unknown
Graphics	
Number of adapters	1
Graphic APIs	
API	NVIDIA I/O
API	NVIDIA NVAPI
Display Adapters	
Display adapter 0	
ID	0x1090306
Name	NVIDIA GeForce GTX 1060 6GB
Board Manufacturer	ZOTAC International Ltd.
Revision	A1
Codename	GP106
Technology	16 nm
Memory size	6 GB
Memory type	GDDR5
PCI device	bus 9 (0x9), device 0 (0x0), function 0 (0x0)
Vendor ID	0x10DE (0x19DA)
Model ID	0x1C03 (0x1438)
Performance Level	0
Core clock	139.0 MHz
Memory clock	405.0 MHz
Win32_VideoController	AdapterRAM = 0xFFF00000 (4293918720)
Win32_VideoController	DriverVersion = 23.21.13.8871
Win32_VideoController	DriverDate = 12/15/2017
Monitor 0	
Model	2778G5 (AOC International)
ID	AOC2778
Serial	
Manufacturing Date	Week 23, Year 2017
Size	27.2 inches
Max Resolution	1920 x 1080 @ 60 Hz
Horizontal Freq. Range	83-83 kHz
Vertical Freq. Range	48-76 Hz
Max Pixel Clock	170 MHz
Gamma Factor	2.2

Software

Windows Version	Microsoft Windows 10 (10.0) Professional 64-bit (Build 16299)
DirectX Version	12.0