

HWiNFO64 v6.22-4060

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PC

[Current Computer]

Computer Brand Name: GIGABYTE X570 AORUS ULTRA

[Operating System]

Operating System: Microsoft Windows 10 Professional (x64) Build 18363.693 (1909/November 2019 Update)
UEFI Boot: Present
Secure Boot: Not Present

Central Processor(s)

[CPU Unit Count]

Number Of Processor Packages (Physical): 1
Number Of Processor Cores: 12
Number Of Logical Processors: 24

AMD Ryzen 9 3900X

[General Information]

Processor Name: AMD Ryzen 9 3900X
Original Processor Frequency: 3800.0 MHz
Original Processor Frequency [MHz]: 3800

CPU ID: 00870F10
Extended CPU ID: 00870F10
CPU Brand Name: AMD Ryzen 9 3900X 12-Core Processor
CPU Vendor: AuthenticAMD
CPU Stepping: MTS-B0
CPU Code Name: Matisse

CPU Technology:	7 nm
CPU OPN:	100-000000023
CPU Thermal Design Power (TDP):	105.0 W
CPU Thermal Design Current (TDC):	Fused: 95.0 A, Limit: 95.0 A
CPU Electrical Design Current (EDC):	Fused: 140.0 A, Limit: 140.0 A
CPU Package Power Tracking (PPT):	Fused: 142.0 W, Limit: 142.0 W
CPU Max. Junction Temperature (Tj,max):	95 °C
CPU PBO Scalar (Reliability Reduction):	1.00x
CPU Thermal Trip Limit:	115.0 °C
CPU HTC Temperature Limit:	115.5 °C
CPU Type:	Production Unit
CPU Platform:	AM4
Microcode Update Revision:	8701013
SMU Firmware Revision:	46.54.0
Core Performance Order:	5, 4, 6, 3, 2, 1, 8, 7, 11, 9, 12, 10
Core Performance Order (CPPC):	4, 5, 6, 3, 1, 2, 7, 8, 9, 11, 10, 12
cLDO VDDP:	0.9002 V
cLDO VDDG:	0.9504 V
Number of CPU Cores:	12
Number of Logical CPUs:	24

[Operating Points]

CPU Minimum:	550.0 MHz = 5.50 x 100.0 MHz
CPU Base:	3800.0 MHz = 38.00 x 100.0 MHz
CPU Boost Max (Fmax):	4650.0 MHz = 46.50 x 100.0 MHz
CPU Overclocking Max:	4650.0 MHz = 46.50 x 100.0 MHz
CPU High Temperature Clock Limit:	4400 MHz >= 80 °C
CPU Automatic Overclocking Offset:	0 MHz
CPU Current:	4292.3 MHz = 43.00 x 99.8 MHz @ 1.4438 V
CPU Bus Type:	UMI

[Cache and TLB]

L1 Cache:	Instruction: 12 x 32 KBytes, Data: 12 x 32 KBytes
L2 Cache:	Integrated: 12 x 512 KBytes
L3 Cache:	4 x 16 MBytes
Instruction TLB:	Fully associative, 64 entries
Data TLB:	Fully associative, 64 entries

[Standard Feature Flags]

FPU on Chip	Present
Enhanced Virtual-86 Mode	Present
I/O Breakpoints	Present
Page Size Extensions	Present
Time Stamp Counter	Present
Pentium-style Model Specific Registers	Present
Physical Address Extension	Present
Machine Check Exception	Present
CMPXCHG8B Instruction	Present
APIC On Chip / PGE (AMD)	Present
Fast System Call	Present
Memory Type Range Registers	Present

Page Global Feature	Present
Machine Check Architecture	Present
CMOV Instruction	Present
Page Attribute Table	Present
36-bit Page Size Extensions	Present
Processor Number	Not Present
CLFLUSH Instruction	Present
Debug Trace and EMON Store	Not Present
Internal ACPI Support	Not Present
MMX Technology	Present
Fast FP Save/Restore (IA MMX-2)	Present
Streaming SIMD Extensions	Present
Streaming SIMD Extensions 2	Present
Self-Snoop	Not Present
Multi-Threading Capable	Present
Automatic Clock Control	Not Present
IA-64 Processor	Not Present
Signal Break on FERR	Not Present
Streaming SIMD Extensions 3	Present
PCLMULQDQ Instruction Support	Present
MONITOR/MWAIT Support	Present
Supplemental Streaming SIMD Extensions 3	Present
FMA Extension	Present
CMPXCHG16B Support	Present
Streaming SIMD Extensions 4.1	Present
Streaming SIMD Extensions 4.2	Present
x2APIC	Not Present
POPCNT Instruction	Present
AES Cryptography Support	Present
XSAVE/XRSTOR/XSETBV/XGETBV Instructions	Present
XGETBV/XSETBV OS Enabled	Present
AVX Support	Present
Half-Precision Convert (CVT16)	Present

[Extended Feature Flags]

FPU on Chip	Present
Enhanced Virtual-86 Mode	Present
I/O Breakpoints	Present
Page Size Extensions	Present
Time Stamp Counter	Present
AMD-style Model Specific Registers	Present
Machine Check Exception	Present
CMPXCHG8B Instruction	Present
APIC On Chip	Present
SYSCALL and SYSRET Instructions	Present
Memory Type Range Registers	Present
Page Global Feature	Present
Machine Check Architecture	Present
CMOV Instruction	Present
Page Attribute Table	Present
36-bit Page Size Extensions	Present
Multi-Processing / Brand feature	Not Present
No Execute	Present
MMX Technology	Present
MMX+ Extensions	Present
Fast FP Save/Restore	Present
Fast FP Save/Restore Optimizations	Present

1 GB large page support	Present
RDTSCP Instruction	Present
x86-64 Long Mode	Present
3DNow! Technology Extensions	Not Present
3DNow! Technology	Not Present
Bit Manipulation Instructions Set 1	Present
Bit Manipulation Instructions Set 2	Present
Advanced Vector Extensions 2 (AVX2)	Present
Advanced Vector Extensions 512 (AVX-512)	Not Present
AVX-512 Prefetch Instructions	Not Present
AVX-512 Exponential and Reciprocal Instructions	Not Present
AVX-512 Conflict Detection Instructions	Not Present
AVX-512 Doubleword and Quadword Instructions	Not Present
AVX-512 Byte and Word Instructions	Not Present
AVX-512 Vector Length Extensions	Not Present
AVX-512 52-bit Integer FMA Instructions	Not Present
Secure Hash Algorithm (SHA) Extensions	Present
Software Guard Extensions (SGX) Support	Not Present
Supervisor Mode Execution Protection (SMEP)	Present
Supervisor Mode Access Prevention (SMAP)	Present
Hardware Lock Elision (HLE)	Not Present
Restricted Transactional Memory (RTM)	Not Present
Memory Protection Extensions (MPX)	Not Present
Read/Write FS/GS Base Instructions	Present
Enhanced Performance String Instruction	Not Present
INVPCID Instruction	Not Present
RDSEED Instruction	Present
Multi-precision Add Carry Instructions (ADX)	Present
PCOMMIT Instructions	Not Present
CLFLUSHOPT Instructions	Present
CLWB Instructions	Present
TSC_THREAD_OFFSET	Not Present
Platform Quality of Service Monitoring (PQM)	Present
Platform Quality of Service Enforcement (PQE)	Present
FPU Data Pointer updated only on x87 Exceptions	Not Present
Deprecated FPU CS and FPU DS	Not Present
Intel Processor Trace	Not Present
PREFETCHWT1 Instruction	Not Present
AVX-512 Vector Bit Manipulation Instructions	Not Present
AVX-512 Vector Bit Manipulation Instructions 2	Not Present
AVX-512 Galois Fields New Instructions	Not Present
AVX-512 Vector AES	Not Present
AVX-512 Vector Neural Network Instructions	Not Present
AVX-512 Bit Algorithms	Not Present
AVX-512 Carry-Less Multiplication Quadword (VPCLMULQDQ)	Not Present
AVX-512 Vector POPCNT (VPOPCNTD/VPOPCNTQ)	Not Present
User-Mode Instruction Prevention	Present
Protection Keys for User-mode Pages	Not Present
OS Enabled Protection Keys	Not Present
Wait and Pause Enhancements (WAITPKG)	Not Present
Total Memory Encryption	Not Present
Read Processor ID	Present

Cache Line Demote	Not Present
MOVDIRI: Direct Stores	Not Present
MOVDIR64B: Direct Stores	Not Present
ENQCMD: Enqueue Stores	Not Present
SGX Launch Configuration	Not Present
AVX-512 BFLOAT16 Instructions	Not Present
LAHF/SAHF Long Mode Support	Present
Core Multi-Processing Legacy Mode	Present
Secure Virtual Machine	Present
Extended APIC Register Space	Present
LOCK MOV CR0 Support	Present
Advanced Bit Manipulation	Present
SSE4A Support	Present
Misaligned SSE Mode	Present
PREFETCH(W) Support	Present
OS Visible Work-around Support	Present
Instruction Based Sampling	Present
XOP Instruction Support	Not Present
SKINIT, STGI, and DEV Support	Present
Watchdog Timer Support	Present
TBM0 Instruction Support	Not Present
Lightweight Profiling Support	Not Present
FMA4 Instruction Support	Not Present
Translation Cache Extension	Present
NodeId Support	Not Present
Trailing Bit Manipulation	Not Present
Topology Extensions	Present
Core Performance Counter Extensions	Present
NB Performance Counter Extensions	Present
Streaming Performance Monitor Architecture	Not Present
Data Breakpoint Extension	Present
Performance Time-Stamp Counter	Not Present
L2I Performance Counter Extensions	Present
MWAITX/MONITORX Support	Present
Secure Memory Encryption	Present
Secure Encrypted Virtualization	Present

[Enhanced Features]

Core Performance Boost	Supported, Enabled
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[Memory Ranges]

Maximum Physical Address Size:	48-bit (256 TBytes)
Maximum Virtual Address Size:	48-bit (256 TBytes)

[MTRRs]

Range 0-80000000 (0MB-2048MB) Type:	Write Back (WB)
Range 80000000-C0000000 (2048MB-3072MB) Type:	Write Back (WB)
Range C0000000-E0000000 (3072MB-3584MB) Type:	Write Back (WB)
Range DC380000-DC390000 (3523MB-3523MB) Type:	Uncacheable (UC)

Motherboard

[Computer]**Computer Brand Name:****GIGABYTE X570 AORUS ULTRA****[Motherboard]****Motherboard Model:****GIGABYTE X570 AORUS ULTRA****Motherboard Chipset:****AMD X570 (Bixby)**

Motherboard Slots:

2xPCI Express x1, 3xPCI Express x4, 1xPCI Express x8,
1xPCI Express x16

PCI Express Version Supported:

v4.0

USB Version Supported:

v3.1

[BIOS]

BIOS Manufacturer:

American Megatrends

BIOS Date:

12/06/2019

BIOS Version:

F11

AMD AGESA Version:

Combo-AM4 1.0.0.4

UEFI BIOS:

Capable

Super-IO/LPC Chip:

ITE IT8688E/BX + ITE IT8792E/IT8795E/DX

ACPI Devices

AMD GPIO Controller

Device Name:

AMD GPIO Controller

[Assigned Resources]

IRQ:

7

[Alternative 1]

Memory Location:

FED81500 - FED818FF

IRQ:

7

Trusted Platform Module 2.0

Device Name:

Trusted Platform Module 2.0

[Assigned Resources]

Memory Location:

FED40000 - FED44FFF

[Alternative 1]

Memory Location:

FED40000 - FED44FFF

Programmable interrupt controller

Device Name: Programmable interrupt controller

[Assigned Resources]

I/O Port: 0020 - 0021
IRQ: 65792

[Alternative 1]

I/O Port: 0020 - 0021
I/O Port: 00A0 - 00A1

System timer

Device Name: System timer

[Assigned Resources]

I/O Port: 0040 - 0043

[Alternative 1]

I/O Port: 0040 - 0043
IRQ: 0

High precision event timer

Device Name: High precision event timer

[Assigned Resources]

IRQ: 0

[Alternative 1]

Memory Location: FED00000 - FED003FF
IRQ: 0
IRQ: 8

Direct memory access controller

Device Name: Direct memory access controller

[Assigned Resources]

I/O Port: 0089 - 008B
DMA: 4

[Alternative 1]

I/O Port:	0000 - 000F
I/O Port:	0081 - 0083
I/O Port:	0087
I/O Port:	0089 - 008B
I/O Port:	008F
I/O Port:	00C0 - 00DF
DMA:	4

System speaker

Device Name:	System speaker
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[Assigned Resources]

I/O Port:	0061
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[Alternative 1]

I/O Port:	0061
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PCI Express Root Complex

Device Name:	PCI Express Root Complex
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[Assigned Resources]

I/O Port:	0000 - FFFFFFFF
I/O Port:	03B0 - 03DF
Memory Location:	000A0000 - 0009FFFF
Memory Location:	E0000000 - FEC02FFF

[Alternative 1]

I/O Port:	0000 - 03AF
I/O Port:	03E0 - 0CF7
I/O Port:	03B0 - 03DF
I/O Port:	0D00 - FFFF
Memory Location:	000A0000 - 000BFFFF
Memory Location:	000C0000 - 000DFFFF
Memory Location:	E0000000 - FEC02FFF
Memory Location:	FEE00000 - FFFFFFFF

System CMOS/real time clock

Device Name:	System CMOS/real time clock
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[Assigned Resources]

I/O Port:	0070 - 0071
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[Alternative 1]

I/O Port: 0070 - 0071

System board

Device Name: System board

[Assigned Resources]

Memory Location: F8000000 - FBFFFFFF

[Alternative 1]

Memory Location: F8000000 - FBFFFFFF

Motherboard resources

Device Name: Motherboard resources

[Assigned Resources]

I/O Port: 0A00 - 0A2F

[Alternative 1]

I/O Port: 0A00 - 0A2F

I/O Port: 0A30 - 0A3F

I/O Port: 0A40 - 0A4F

Motherboard resources

Device Name: Motherboard resources

[Assigned Resources]

Memory Location: FEB80000 - FEBFFFFFF

[Alternative 1]

Memory Location: FEB80000 - FEBFFFFFF

Motherboard resources

Device Name: Motherboard resources

[Assigned Resources]

Memory Location: FD000000 - FDOFFFFFF

[Alternative 1]

Memory Location: FD000000 - FD0FFFFFF

Motherboard resources

Device Name: Motherboard resources

[Assigned Resources]

I/O Port: 0010 - 001F
I/O Port: 0067 - 006F
I/O Port: 0088
I/O Port: 00B1
I/O Port: 04D6
I/O Port: 0C52
I/O Port: 0000 - 0C6E
I/O Port: 0CD2 - 0CD3
I/O Port: 0800 - 089F
Memory Location: 00000000 - 0000008F
IRQ: 1114369
IRQ: 1114369

[Alternative 1]

I/O Port: 0010 - 001F
I/O Port: 0022 - 003F
I/O Port: 0063
I/O Port: 0065
I/O Port: 0067 - 006F
I/O Port: 0072 - 007F
I/O Port: 0080
I/O Port: 0084 - 0086
I/O Port: 0088
I/O Port: 008C - 008E
I/O Port: 0090 - 009F
I/O Port: 00A2 - 00BF
I/O Port: 00B1
I/O Port: 00E0 - 00EF
I/O Port: 04D0 - 04D1
I/O Port: 040B
I/O Port: 04D6
I/O Port: 0C00 - 0C01
I/O Port: 0C14
I/O Port: 0C50 - 0C51
I/O Port: 0C52
I/O Port: 0C6C
I/O Port: 0C6F
I/O Port: 0CD0 - 0CD1
I/O Port: 0CD2 - 0CD3
I/O Port: 0CD4 - 0CD5
I/O Port: 0CD6 - 0CD7

I/O Port:	0CD8 - 0CDF
I/O Port:	0800 - 089F
I/O Port:	0B00 - 0B0F
I/O Port:	0B20 - 0B3F
I/O Port:	0900 - 090F
I/O Port:	0910 - 091F
Memory Location:	FEC00000 - FEC00FFF
Memory Location:	FEC01000 - FEC01FFF
Memory Location:	FEDC0000 - FEDC0FFF
Memory Location:	FEE00000 - FEE00FFF
Memory Location:	FED80000 - FED8FFFF
Memory Location:	FEC10000 - FEC10FFF
Memory Location:	FF000000 - FFFFFFFF

SMBIOS DMI

BIOS

BIOS Vendor:	American Megatrends Inc.
BIOS Version:	F11
BIOS Release Date:	12/06/2019
BIOS Start Segment:	F000
BIOS Size:	16 MBytes

System BIOS Version:	5.14
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ISA Support:	Not Present
MCA Support:	Not Present
EISA Support:	Not Present
PCI Support:	Present
PC Card (PCMCIA) Support:	Not Present
Plug-and-Play Support:	Not Present
APM Support:	Not Present
Flash BIOS:	Present
BIOS Shadow:	Present
VL-VESA Support:	Not Present
ESCD Support:	Not Present
Boot from CD:	Present
Selectable Boot:	Present
BIOS ROM Socketed:	Present
Boot from PC Card:	Not Present
EDD Support:	Present
NEC PC-98 Support:	Not Present
ACPI Support:	Present

USB Legacy Support:	Present
AGP Support:	Not Present
I2O Boot Support:	Not Present
LS-120 Boot Support:	Not Present
ATAPI ZIP Drive Boot Support:	Not Present
IEEE1394 Boot Support:	Not Present
Smart Battery Support:	Not Present
BIOS Boot Specification Support:	Present
Function key-initiated Network Service Boot Support:	Not Present
Targeted Content Distribution Support:	Present
UEFI Specification Support:	Present
Virtual Machine:	Not Present

System

System Manufacturer:	Gigabyte Technology Co., Ltd.
Product Name:	X570 AORUS ULTRA
Product Version:	-CF
Product Serial Number:	Default string
UUID:	{032E02B4-0499-053E-4D06-910700080009}
SKU Number:	Default string
Family:	Default string

Mainboard

Mainboard Manufacturer:	Gigabyte Technology Co., Ltd.
Mainboard Name:	X570 AORUS ULTRA
Mainboard Version:	x.x
Mainboard Serial Number:	Default string
Asset Tag:	Default string
Location in chassis:	Default string

System Enclosure

Manufacturer:	Default string
Case Type:	Desktop
Version:	Default string
Serial Number:	Default string
Asset Tag Number:	Default string

On Board Device

Device Description:	To Be Filled By O.E.M.
Device Type:	Video Adapter
Device Status:	Enabled

OEM Strings

Default string

System Configuration Options

Default string

System Boot Information

Boot Status:	No error occurred
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TPM

TPM Specification Version:	2.0
TPM Vendor:	
TPM Description:	INFINEON

L1 - Cache

Socket Designation:	L1 - Cache
Cache State:	Enabled
Cache Location:	Internal
Cache Type:	L1 Unified
Cache Scheme:	Write-Back
Supported SRAM Type:	Pipeline Burst
Current SRAM Type:	Pipeline Burst
Cache Speed:	1 ns
Error Correction Type:	Multi-bit ECC
Maximum Cache Size:	768 KBytes
Installed Cache Size:	768 KBytes
Cache Associativity:	8-way Set-Associative

L2 - Cache

Socket Designation:	L2 - Cache
Cache State:	Enabled
Cache Location:	Internal
Cache Type:	L2 Unified
Cache Scheme:	Write-Back
Supported SRAM Type:	Pipeline Burst
Current SRAM Type:	Pipeline Burst
Cache Speed:	1 ns
Error Correction Type:	Multi-bit ECC
Maximum Cache Size:	6144 KBytes
Installed Cache Size:	6144 KBytes
Cache Associativity:	8-way Set-Associative

L3 - Cache

Socket Designation:	L3 - Cache
Cache State:	Enabled
Cache Location:	Internal
Cache Type:	L3 Unified
Cache Scheme:	Write-Back
Supported SRAM Type:	Pipeline Burst
Current SRAM Type:	Pipeline Burst
Cache Speed:	1 ns
Error Correction Type:	Multi-bit ECC
Maximum Cache Size:	65536 KBytes
Installed Cache Size:	65536 KBytes
Cache Associativity:	16-way Set-Associative

Processor

Processor Manufacturer:	Advanced Micro Devices, Inc.
Processor Version:	AMD Ryzen 9 3900X 12-Core Processor
External Clock:	100 MHz
Maximum Clock Supported:	4650 MHz
Current Clock:	3800 MHz
CPU Socket:	Populated
CPU Status:	Enabled
Processor Type:	Central Processor
Processor Voltage:	1.1 V
Processor Upgrade:	Socket AM4
Socket Designation:	AM4

BIOS Language

en|US|iso8859-1 <Active>
zh|TW|unicode
zh|CN|unicode
ru|RU|iso8859-5
de|DE|iso8859-1
ja|JP|unicode
ko|KR|unicode
es|ES|iso8859-1
fr|FR|iso8859-1
it|IT|iso8859-1
pt|PT|iso8859-1
vi|VI|iso8859-1
id|ID|iso8859-1
tr|TR|iso8859-1
pl|PL|iso8859-1

On Board Device

Device Description:	RTL8111EPV
Device Type:	Ethernet Adapter
Device Status:	Disabled

Memory Devices

32-bit Memory Error Information

Physical Memory Array

Array Location:	System board
Array Use:	System memory
Error Detecting Method:	None
Memory Capacity:	128 GBytes
Memory Devices:	4

Memory Array Mapped Address

Starting Address:	00000000
Ending Address:	0037FFFF
Partition Width:	2

Memory Array Mapped Address

Starting Address:	00400000
Ending Address:	0207FFFF
Partition Width:	2

32-bit Memory Error Information

Memory Device

Total Width:	Unknown
Data Width:	Unknown
Device Size:	0 MBytes
Device Form Factor:	Unknown
Device Locator:	DIMM 0
Bank Locator:	P0 CHANNEL A
Device Type:	Unknown
Device Type Detail:	
Manufacturer:	Unknown
Serial Number:	Unknown
Part Number:	Unknown
Asset Tag:	

32-bit Memory Error Information

Memory Device

Total Width:	64 bits
Data Width:	64 bits
Device Size:	16384 MBytes

Device Form Factor:	DIMM
Device Locator:	DIMM 1
Bank Locator:	P0 CHANNEL A
Device Type:	DDR4
Device Type Detail:	Synchronous
Memory Speed:	2133 MHz
Manufacturer:	Unknown
Serial Number:	00000000
Part Number:	F4-3200C16-16GVK
Asset Tag:	

Memory Device Mapped Address

Starting Address:	00000000
Ending Address:	01FFFFFF
Partition Row Position:	Unknown
Interleave Position:	Unknown
Interleave Data Depth:	Unknown

32-bit Memory Error Information

Memory Device

Total Width:	Unknown
Data Width:	Unknown
Device Size:	0 MBytes
Device Form Factor:	Unknown
Device Locator:	DIMM 0
Bank Locator:	P0 CHANNEL B
Device Type:	Unknown
Device Type Detail:	
Manufacturer:	Unknown
Serial Number:	Unknown
Part Number:	Unknown
Asset Tag:	

32-bit Memory Error Information

Memory Device

Total Width:	64 bits
Data Width:	64 bits
Device Size:	16384 MBytes
Device Form Factor:	DIMM
Device Locator:	DIMM 1
Bank Locator:	P0 CHANNEL B
Device Type:	DDR4
Device Type Detail:	Synchronous
Memory Speed:	2133 MHz
Manufacturer:	Unknown
Serial Number:	00000000
Part Number:	F4-3200C16-16GVK
Asset Tag:	

Memory Device Mapped Address

Starting Address:	00000000
Ending Address:	01FFFFFF
Partition Row Position:	Unknown
Interleave Position:	Unknown
Interleave Data Depth:	Unknown

Port Connectors

USB

Port Type:	USB
Internal Reference:	J1500
Internal Connector Type:	None
External Reference:	USB 3.0
External Connector Type:	Access Bus (USB)

USB

Port Type:	USB
Internal Reference:	J1501
Internal Connector Type:	None
External Reference:	USB 3.0
External Connector Type:	Access Bus (USB)

USB

Port Type:	USB
Internal Reference:	J1502
Internal Connector Type:	None
External Reference:	USB-C
External Connector Type:	Access Bus (USB)

USB

Port Type:	USB
Internal Reference:	J1508
Internal Connector Type:	None
External Reference:	USB-C
External Connector Type:	Access Bus (USB)

USB

Port Type:	USB
Internal Reference:	J1506
Internal Connector Type:	None
External Reference:	USB 3.1
External Connector Type:	Access Bus (USB)

USB

Port Type:	USB
Internal Reference:	J1504
Internal Connector Type:	None
External Reference:	USB 3.1
External Connector Type:	Access Bus (USB)

Network Port

Port Type:	Network Port
Internal Reference:	J1301
Internal Connector Type:	None
External Reference:	Network
External Connector Type:	RJ-45

SATA

Port Type:	SATA
Internal Reference:	J1701
Internal Connector Type:	SAS/SATA Plug Receptacle
External Reference:	iSATA
External Connector Type:	None

SATA

Port Type:	SATA
Internal Reference:	J1702
Internal Connector Type:	SAS/SATA Plug Receptacle
External Reference:	iSATA
External Connector Type:	None

SATA

Port Type:	SATA
Internal Reference:	J1703
Internal Connector Type:	SAS/SATA Plug Receptacle
External Reference:	iSATA
External Connector Type:	None

SATA

Port Type:	SATA
Internal Reference:	J1706
Internal Connector Type:	SAS/SATA Plug Receptacle
External Reference:	iSATA
External Connector Type:	None

Video Port

Port Type:	Video Port
Internal Reference:	J1100
Internal Connector Type:	None
External Reference:	HDMI
External Connector Type:	None

Video Port

Port Type:	Video Port
Internal Reference:	J1101
Internal Connector Type:	None
External Reference:	HDMI
External Connector Type:	None

Video Port

Port Type:	Video Port
Internal Reference:	J1102
Internal Connector Type:	None
External Reference:	DP
External Connector Type:	None

Audio Port

Port Type:	Audio Port
Internal Reference:	J2100
Internal Connector Type:	None
External Reference:	Front Audio
External Connector Type:	Mini-jack (headphones)

Audio Port

Port Type:	Audio Port
Internal Reference:	J2101
Internal Connector Type:	None
External Reference:	Audio Jack
External Connector Type:	Mini-jack (headphones)

System Slots

J10

Slot Designation:	J10
Slot Type:	PCI Express x16
Slot Usage:	In use
Slot Data Bus Width:	16x / x16
Slot Length:	Short

J3600 Pcie x8 slot

Slot Designation:	J3600 Pcie x8 slot
Slot Type:	PCI Express x8
Slot Usage:	Empty
Slot Data Bus Width:	8x / x8
Slot Length:	Short

J3708 PCIE x4 slot from Bixby

Slot Designation:	J3708 PCIE x4 slot from Bixby
Slot Type:	PCI Express x4
Slot Usage:	In use
Slot Data Bus Width:	4x / x4
Slot Length:	Short

Memory

[General information]

Total Memory Size:	32 GBytes
Total Memory Size [MB]:	32768

[Current Performance Settings]

Maximum Supported Memory Clock:	Unlimited
Current Memory Clock:	1064.7 MHz
Current Timing (tCAS-tRCD-tRP-tRAS):	15-15-15-36
Memory Channels Supported:	2
Memory Channels Active:	2

Command Rate:	2T
Read to Read Delay (tRD_RD) Same Rank:	3T
Read to Read Delay (tRD_RD) Different DIMM:	3T
Write to Write Delay (tWR_WR) Same Rank:	3T
Write to Write Delay (tWR_WR) Different DIMM:	5T
Read to Precharge Delay (tRTP):	8T
Write to Precharge Delay (tWTP):	27T

Write Recovery Time (tWR):	16T
Row Cycle Time (tRC):	51T
Refresh Cycle Time (tRFC):	374T
Four Activate Window (tFAW):	23T

Row: 2 - 16 GB PC4-25600 DDR4 SDRAM G Skill F4-3200C16-16GVK

[General Module Information]

Module Number:	2
Module Size:	16 GBytes
Memory Type:	DDR4 SDRAM
Module Type:	Unbuffered DIMM (UDIMM)
Memory Speed:	1600.0 MHz (DDR4-3200 / PC4-25600)
Module Manufacturer:	G Skill
Module Part Number:	F4-3200C16-16GVK
Module Revision:	0.0
Module Serial Number:	0
Module Manufacturing Date:	N/A
Module Manufacturing Location:	0
SDRAM Manufacturer:	SK Hynix
DRAM Stepping:	0.0
Error Check/Correction:	None

[Module Characteristics]

Row Address Bits:	16
Column Address Bits:	10
Module Density:	8192 Mb
Number Of Ranks:	2
Device Width:	8 bits
Bus Width:	64 bits
Die Count:	1
Module Nominal Voltage (VDD):	1.2 V
Minimum SDRAM Cycle Time (tCKAVGmin):	0.93800 ns
Maximum SDRAM Cycle Time (tCKAVGmax):	1.50000 ns
CAS# Latencies Supported:	10, 11, 12, 13, 14, 15, 16
Minimum CAS# Latency Time (tAmin):	13.750 ns
Minimum RAS# to CAS# Delay (tRCDmin):	13.750 ns
Minimum Row Precharge Time (tRPmin):	13.750 ns
Minimum Active to Precharge Time (tRASmin):	33.000 ns
Supported Module Timing at 1066.7 MHz:	15-15-15-36
Supported Module Timing at 933.3 MHz:	13-13-13-31
Supported Module Timing at 800.0 MHz:	11-11-11-27
Supported Module Timing at 666.7 MHz:	10-10-10-22

Minimum Active to Active/Refresh Time (tRCmin):	46.750 ns
Minimum Refresh Recovery Time Delay (tRFC1min):	350.000 ns
Minimum Refresh Recovery Time Delay (tRFC2min):	260.000 ns
Minimum Refresh Recovery Time Delay (tRFC4min):	160.000 ns
Minimum Four Activate Window Delay Time (tFAWmin):	21.000 ns
Minimum Active to Active Delay Time - Different Bank Group (tRRD_Smin):	3.700 ns
Minimum Active to Active Delay Time - Same Bank Group (tRRD_Lmin):	5.300 ns
Minimum CAS to CAS Delay Time - Same Bank Group (tCCD_Lmin):	5.625 ns

[Features]

Module Temperature Sensor (TSOD):	Not Supported
Module Nominal Height:	31 - 32 mm
Module Maximum Thickness (Front):	1 - 2 mm
Module Maximum Thickness (Back):	1 - 2 mm
Address Mapping from Edge Connector to DRAM:	Mirrored

[Intel Extreme Memory Profile (XMP)]

XMP Revision:	2.0
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[Certified Profile [Enabled]]

Module VDD Voltage Level:	1.35 V
Minimum SDRAM Cycle Time (tCKAVGmin):	0.62500 ns
CAS# Latencies Supported:	16
Minimum CAS# Latency Time (tAAmin):	10.000 ns
Minimum RAS# to CAS# Delay (tRCDmin):	11.250 ns
Minimum Row Precharge Time (tRPmin):	11.250 ns
Minimum Active to Precharge Time (tRASmin):	23.750 ns
Supported Module Timing at 1600.0 MHz:	16-18-18-38
Minimum Active to Active/Refresh Time (tRCmin):	35.000 ns
Minimum Refresh Recovery Time Delay (tRFC1min):	350.000 ns
Minimum Refresh Recovery Time Delay (tRFC2min):	260.000 ns
Minimum Refresh Recovery Time Delay (tRFC4min):	160.000 ns
Minimum Four Activate Window Delay Time (tFAWmin):	24.000 ns
Minimum Active to Active Delay Time - Different Bank Group (tRRD_Smin):	2.500 ns
Minimum Active to Active Delay Time - Same Bank Group (tRRD_Lmin):	4.849 ns

Row: 3 - 16 GB PC4-25600 DDR4 SDRAM G Skill F4-3200C16-16GVK

[General Module Information]

Module Number:	3
Module Size:	16 GBytes
Memory Type:	DDR4 SDRAM
Module Type:	Unbuffered DIMM (UDIMM)
Memory Speed:	1600.0 MHz (DDR4-3200 / PC4-25600)
Module Manufacturer:	G Skill
Module Part Number:	F4-3200C16-16GVK
Module Revision:	0.0
Module Serial Number:	0
Module Manufacturing Date:	N/A
Module Manufacturing Location:	0
SDRAM Manufacturer:	SK Hynix
DRAM Steppping:	0.0
Error Check/Correction:	None

[Module Characteristics]

Row Address Bits:	16
Column Address Bits:	10
Module Density:	8192 Mb
Number Of Ranks:	2
Device Width:	8 bits
Bus Width:	64 bits
Die Count:	1
Module Nominal Voltage (VDD):	1.2 V
Minimum SDRAM Cycle Time (tCKAVGmin):	0.93800 ns
Maximum SDRAM Cycle Time (tCKAVGmax):	1.50000 ns
CAS# Latencies Supported:	10, 11, 12, 13, 14, 15, 16
Minimum CAS# Latency Time (tAAmin):	13.750 ns
Minimum RAS# to CAS# Delay (tRCDmin):	13.750 ns
Minimum Row Precharge Time (tRPmin):	13.750 ns
Minimum Active to Precharge Time (tRASmin):	33.000 ns
Supported Module Timing at 1066.7 MHz:	15-15-15-36
Supported Module Timing at 933.3 MHz:	13-13-13-31
Supported Module Timing at 800.0 MHz:	11-11-11-27
Supported Module Timing at 666.7 MHz:	10-10-10-22
Minimum Active to Active/Refresh Time (tRCmin):	46.750 ns
Minimum Refresh Recovery Time Delay (tRFC1min):	350.000 ns
Minimum Refresh Recovery Time Delay (tRFC2min):	260.000 ns

Minimum Refresh Recovery Time Delay (tRFC4min):	160.000 ns
Minimum Four Activate Window Delay Time (tFAWmin):	21.000 ns
Minimum Active to Active Delay Time - Different Bank Group (tRRD_Smin):	3.700 ns
Minimum Active to Active Delay Time - Same Bank Group (tRRD_Lmin):	5.300 ns
Minimum CAS to CAS Delay Time - Same Bank Group (tCCD_Lmin):	5.625 ns

[Features]

Module Temperature Sensor (TSOD):	Not Supported
Module Nominal Height:	31 - 32 mm
Module Maximum Thickness (Front):	1 - 2 mm
Module Maximum Thickness (Back):	1 - 2 mm
Address Mapping from Edge Connector to DRAM:	Mirrored

[Intel Extreme Memory Profile (XMP)]

XMP Revision:	2.0
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[Certified Profile [Enabled]]

Module VDD Voltage Level:	1.35 V
Minimum SDRAM Cycle Time (tCKAVGmin):	0.62500 ns
CAS# Latencies Supported:	16
Minimum CAS# Latency Time (tAamin):	10.000 ns
Minimum RAS# to CAS# Delay (tRCDmin):	11.250 ns
Minimum Row Precharge Time (tRPmin):	11.250 ns
Minimum Active to Precharge Time (tRASmin):	23.750 ns
Supported Module Timing at 1600.0 MHz:	16-18-18-38
Minimum Active to Active/Refresh Time (tRCmin):	35.000 ns
Minimum Refresh Recovery Time Delay (tRFC1min):	350.000 ns
Minimum Refresh Recovery Time Delay (tRFC2min):	260.000 ns
Minimum Refresh Recovery Time Delay (tRFC4min):	160.000 ns
Minimum Four Activate Window Delay Time (tFAWmin):	24.000 ns
Minimum Active to Active Delay Time - Different Bank Group (tRRD_Smin):	2.500 ns
Minimum Active to Active Delay Time - Same Bank Group (tRRD_Lmin):	4.849 ns

Bus

PCI Bus #0

AMD Starship/Matisse/Vermeer - Root Complex

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - Root Complex
Original Device Name:	AMD Starship/Matisse/Vermeer - Root Complex
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1480&SUBSYS_14501022&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1480&SUBSYS_14501022&REV_00 \3&11583659&0&00
Location Paths	PCIROOT(0)#PCI(0000)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:1:0
PCI Latency Timer:	0

Hardware ID: PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line: N/A
Interrupt Pin: N/A

[Features]

Bus Mastering: Disabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: (Standardsystemgeräte)
Driver Description: PCI Standard-Host-CPU-Brücke
Driver Provider: Microsoft
Driver Version: 10.0.18362.267
Driver Date: 21-Jun-2006
DeviceInstanceId PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00
\3&11583659&0&08
Location Paths PCIROOT(0)#PCI(0100)

AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]

[General Information]

Device Name: AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]
Original Device Name: AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]
Device Class: PCI-to-PCI Bridge
Revision ID: 0
PCI Address (Bus:Device:Function) Number: 0:1:1
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_1483&SUBSYS_00000000&REV_00

[PCI Express]

Version: 3.0
Maximum Link Width: 4x
Current Link Width: 4x
Maximum Link Speed: 8.0 GT/s
Current Link Speed: 8.0 GT/s
Device/Port Type: Root Port of PCI Express Root Complex
Slot Implemented: Yes
Hot-Plug: Not Capable
Hot-Plug Surprise: Not Capable
Emergency Power Reduction: Not Supported
Active State Power Management (ASPM) Support: L1
Active State Power Management (ASPM) Status: Disabled
L0s Exit Latency: >4 us
L1 Exit Latency: 32 - 64 us
Maximum Payload Size Supported: 512 bytes

Maximum Payload Size: 256 bytes

[System Resources]

Interrupt Line: N/A
Interrupt Pin: N/A

[Features]

Bus Mastering: Enabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: (Standardsystemgeräte)
Driver Description: PCI Express-Stammport
Driver Provider: Microsoft
Driver Version: 10.0.18362.628
Driver Date: 21-Jun-2006
DeviceInstanceId: PCI\VEN_1022&DEV_1483&SUBSYS_14531022&REV_00
Location Paths: \000C87000000000109
PCIROOT(0)#PCI(0101)

PCI Express x4 Bus #1

Samsung NVMe PCIe SSD Controller

[General Information]

Device Name:	Samsung NVMe PCIe SSD Controller
Original Device Name:	Samsung Electronics NVMe PCIe SSD Controller
Device Class:	NVMe Controller
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	1:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_144D&DEV_A808&SUBSYS_A801144D&REV_00

[PCI Express]

Version:	3.0
Maximum Link Width:	4x
Current Link Width:	4x
Maximum Link Speed:	8.0 GT/s
Current Link Speed:	8.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us

L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7F00000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Samsung Electronics Co., Ltd
Driver Description:	Samsung NVMe Controller
Driver Provider:	Samsung Electronics Co., Ltd
Driver Version:	3.2.0.1910
Driver Date:	19-Sep-2019
DeviceInstanceId	PCI\VEN_144D&DEV_A808&SUBSYS_A801144D&REV_00 \4&197CFDBF&0&0009
Location Paths	PCIROOT(0)#PCI(0101)#PCI(0000)

AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:1:2
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1483&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	8x
Current Link Width:	4x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled

L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Express-Stammport
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1483&SUBSYS_14531022&REV_00 \000C8700000000010A
Location Paths	PCIROOT(0)#PCI(0102)

PCI Express x8 Bus #2

AMD 500-Series Chipset - Switch Upstream in PCIe

[General Information]

Device Name:	AMD 500-Series Chipset - Switch Upstream in PCIe
Original Device Name:	AMD 500-Series Chipset - Switch Upstream in PCIe
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	2:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_57AD&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	8x
Current Link Width:	4x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Upstream Port of PCI Express Switch
Slot Implemented:	No
Emergency Power Reduction:	Not Supported

Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	256 - 512 ns
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	IRQ10
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	Upstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57AD&SUBSYS_00000000&REV_00 \4&151AB312&0&000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)

PCI Express x8 Bus #3

AMD 500-Series Chipset - PCIe GPP Bridge

[General Information]

Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Original Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	3:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_57A3&SUBSYS_00000000&REV_00

[PCI Express]

Version:	3.0
Maximum Link Width:	4x
Current Link Width:	2x
Maximum Link Speed:	8.0 GT/s
Current Link Speed:	8.0 GT/s
Device/Port Type:	Downstream Port of PCI Express Switch

Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	Downstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57A3&SUBSYS_14531022&REV_00 \000C87000000000100
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0000)

PCI Express x4 Bus #4

Samsung NVMe PCIe SSD Controller

[General Information]

Device Name:	Samsung NVMe PCIe SSD Controller
Original Device Name:	Samsung Electronics NVMe PCIe SSD Controller
Device Class:	NVMe Controller
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	4:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_144D&DEV_A808&SUBSYS_A801144D&REV_00

[PCI Express]

Version:	3.0
Maximum Link Width:	4x

Current Link Width:	2x
Maximum Link Speed:	8.0 GT/s
Current Link Speed:	8.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7900000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Samsung Electronics Co., Ltd
Driver Description:	Samsung NVMe Controller
Driver Provider:	Samsung Electronics Co., Ltd
Driver Version:	3.2.0.1910
Driver Date:	19-Sep-2019
DeviceInstanceId	PCI\VEN_144D&DEV_A808&SUBSYS_A801144D&REV_00 \6&388E5A87&0&0000000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0000)#PCI(0000)

AMD 500-Series Chipset - PCIe GPP Bridge

[General Information]

Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Original Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	3:1:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_57A3&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	4x
Current Link Width:	4x
Maximum Link Speed:	16.0 GT/s

Current Link Speed:	8.0 GT/s
Device/Port Type:	Downstream Port of PCI Express Switch
Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standard)systemgeräte
Driver Description:	Downstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57A3&SUBSYS_14531022&REV_00 \000C87000000000108
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0100)

PCI Express x4 Bus #5

Samsung NVMe PCIe SSD Controller

[General Information]

Device Name:	Samsung NVMe PCIe SSD Controller
Original Device Name:	Samsung Electronics NVMe PCIe SSD Controller
Device Class:	NVMe Controller
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	5:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_144D&DEV_A808&SUBSYS_A801144D&REV_00

[PCI Express]

Version:	3.0
Maximum Link Width:	4x
Current Link Width:	4x
Maximum Link Speed:	8.0 GT/s
Current Link Speed:	8.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7800000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Samsung Electronics Co., Ltd
Driver Description:	Samsung NVMe Controller
Driver Provider:	Samsung Electronics Co., Ltd
Driver Version:	3.2.0.1910
Driver Date:	19-Sep-2019
DeviceInstanceId	PCI\VEN_144D&DEV_A808&SUBSYS_A801144D&REV_00 \6&9F6A9B6&0&0008000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0100)#PCI(0000)

AMD 500-Series Chipset - PCIe GPP Bridge

[General Information]

Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Original Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	3:3:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_57A3&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	1x

Current Link Width:	1x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	5.0 GT/s
Device/Port Type:	Downstream Port of PCI Express Switch
Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	Downstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57A3&SUBSYS_14531022&REV_00 \000C870000000000118
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0300)

PCI Express x1 Bus #6

Intel Wi-Fi 6 AX200 160MHz

[General Information]

Device Name:	Intel Wi-Fi 6 AX200 160MHz
Original Device Name:	Intel Wi-Fi 6 AX200 (Cyclone Peak 2)
Device Class:	Other Network Adapter
Revision ID:	1A
PCI Address (Bus:Device:Function) Number:	6:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_2723&SUBSYS_00848086&REV_1A

[PCI Express]

Version:	2.0
Maximum Link Width:	1x
Current Link Width:	1x
Maximum Link Speed:	5.0 GT/s
Current Link Speed:	5.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	2 - 4 us
L1 Exit Latency:	4 - 8 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F77FC000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) Wi-Fi 6 AX200 160MHz
Driver Provider:	Intel
Driver Version:	21.40.2.2
Driver Date:	01-Sep-2019
DeviceInstanceId	PCI\VEN_8086&DEV_2723&SUBSYS_00848086&REV_1A \6&598046A&0&0018000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0300)#PCI(0000)

AMD 500-Series Chipset - PCIe GPP Bridge

[General Information]

Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Original Device Name:	AMD 500-Series Chipset - PCIe GPP Bridge
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	3:4:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_57A3&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	1x
Current Link Width:	1x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	2.5 GT/s
Device/Port Type:	Downstream Port of PCI Express Switch
Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	Downstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57A3&SUBSYS_14531022&REV_00 \000C87000000000120
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0400)

PCI Express x1 Bus #7

Intel I211AT Copper (Pearsonville) Network Adapter

[General Information]

Device Name:	Intel I211AT Copper (Pearsonville) Network Adapter
Original Device Name:	Intel I211AT Copper (Pearsonville) Network Adapter
Device Class:	Ethernet Adapter
Revision ID:	3

PCI Address (Bus:Device:Function) Number:	7:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_1539&SUBSYS_E0001458&REV_03

[PCI Express]

Version:	1.1
Maximum Link Width:	1x
Current Link Width:	1x
Maximum Link Speed:	2.5 GT/s
Current Link Speed:	2.5 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	1 - 2 us
L1 Exit Latency:	8 - 16 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7600000
I/O Base Address 2	0
Memory Base Address 3	F7620000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Intel
Driver Description:	Intel(R) I211 Gigabit Network Connection
Driver Provider:	Intel
Driver Version:	12.15.184.1
Driver Date:	11-Jan-2019
DeviceInstanceId	PCI\VEN_8086&DEV_1539&SUBSYS_E0001458&REV_03 \B42E99FFFF3E4D9100
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0400)#PCI(0000)

AMD 500-Series Chipset - Internal PCIe GPP Bridge

[General Information]

Device Name:	AMD 500-Series Chipset - Internal PCIe GPP Bridge
Original Device Name:	AMD 500-Series Chipset - Internal PCIe GPP Bridge
Device Class:	PCI-to-PCI Bridge
Revision ID:	0

PCI Address (Bus:Device:Function) Number: 3:8:0
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_57A4&SUBSYS_00000000&REV_00

[PCI Express]

Version: 4.0
Maximum Link Width: 16x
Current Link Width: 16x
Maximum Link Speed: 16.0 GT/s
Current Link Speed: 16.0 GT/s
Device/Port Type: Downstream Port of PCI Express Switch
Slot Implemented: No
Emergency Power Reduction: Not Supported
Active State Power Management (ASPM) Support: L0s and L1
Active State Power Management (ASPM) Status: L0s Entry
L0s Exit Latency: < 64 ns
L1 Exit Latency: < 1 us
Maximum Payload Size Supported: 512 bytes
Maximum Payload Size: 128 bytes

[System Resources]

Interrupt Line: IRQ10
Interrupt Pin: INTA#

[Features]

Bus Mastering: Enabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: (Standardsystemgeräte)
Driver Description: Downstream-Switchport für PCI-Express
Driver Provider: Microsoft
Driver Version: 10.0.18362.628
Driver Date: 21-Jun-2006
DeviceInstanceId: PCI\VEN_1022&DEV_57A4&SUBSYS_14841022&REV_00
\5&4BF4A56&0&40000A
Location Paths: PCIRoot(0)#PCI(0102)#PCI(0000)#PCI(0800)

PCI Express x16 Bus #8

AMD Starship/Matisse/Vermeer - SSP

[General Information]

Device Name: AMD Starship/Matisse/Vermeer - SSP
Original Device Name: AMD Starship/Matisse/Vermeer - SSP

Device Class:

Revision ID: 0
PCI Address (Bus:Device:Function) Number: 8:0:0
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_1485&SUBSYS_14851022&REV_00

Non-Essential Instrumentation Function**[PCI Express]**

Version: 4.0
Maximum Link Width: 16x
Current Link Width: 16x
Maximum Link Speed: 16.0 GT/s
Current Link Speed: 16.0 GT/s
Device/Port Type: PCI Express Endpoint
Slot Implemented: No
Emergency Power Reduction: Not Supported
Active State Power Management (ASPM) Support: L0s and L1
Active State Power Management (ASPM) Status: L0s Entry
L0s Exit Latency: < 64 ns
L1 Exit Latency: < 1 us
Maximum Payload Size Supported: 256 bytes
Maximum Payload Size: 128 bytes

[System Resources]

Interrupt Line: N/A
Interrupt Pin: N/A

[Features]

Bus Mastering: Enabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: Advanced Micro Devices
Driver Description: AMD PCI
Driver Provider: Advanced Micro Devices
Driver Version: 1.0.0.74
Driver Date: 10-Sep-2019
DeviceInstanceId PCI\VEN_1022&DEV_1485&SUBSYS_14851022&REV_00
\6&2425ECD&0&0040000A
Location Paths PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0800)#PCI(0000)

AMD Matisse/Vermeer - USB3 XHCI Controller

[General Information]

Device Name: AMD Matisse/Vermeer - USB3 XHCI Controller
Original Device Name: AMD Matisse/Vermeer - USB3 XHCI Controller
Device Class: USB xHCI Controller
Revision ID: 0
PCI Address (Bus:Device:Function) Number: 8:0:1

PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_149C&SUBSYS_14861022&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7300000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Generischer USB-xHCI-Hostcontroller
Driver Description:	USB-xHCI-kompatibler Hostcontroller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	20-Feb-2020
DeviceInstanceId	PCI\VEN_1022&DEV_149C&SUBSYS_14861022&REV_00 \6&2425ECD&0&0140000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0800)#PCI(0001)

AMD Matisse/Vermeer - USB3 XHCI Controller

[General Information]

Device Name:	AMD Matisse/Vermeer - USB3 XHCI Controller
Original Device Name:	AMD Matisse/Vermeer - USB3 XHCI Controller
Device Class:	USB xHCI Controller
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	8:0:3
PCI Latency Timer:	0

Hardware ID: PCI\VEN_1022&DEV_149C&SUBSYS_148C1022&REV_00

[PCI Express]

Version: 4.0
Maximum Link Width: 16x
Current Link Width: 16x
Maximum Link Speed: 16.0 GT/s
Current Link Speed: 16.0 GT/s
Device/Port Type: PCI Express Endpoint
Slot Implemented: No
Emergency Power Reduction: Not Supported
Active State Power Management (ASPM) Support: L0s and L1
Active State Power Management (ASPM) Status: L0s Entry
L0s Exit Latency: < 64 ns
L1 Exit Latency: < 1 us
Maximum Payload Size Supported: 256 bytes
Maximum Payload Size: 128 bytes

[System Resources]

Interrupt Line: N/A
Interrupt Pin: INTC#
Memory Base Address 0: F7200000

[Features]

Bus Mastering: Enabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: Generischer USB-xHCI-Hostcontroller
Driver Description: USB-xHCI-kompatibler Hostcontroller
Driver Provider: Microsoft
Driver Version: 10.0.18362.693
Driver Date: 20-Feb-2020
DeviceInstanceId: PCI\VEN_1022&DEV_149C&SUBSYS_148C1022&REV_00
\6&2425ECD&0&0340000A
Location Paths: PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0800)#PCI(0003)

AMD 500-Series Chipset - Internal PCIe GPP Bridge

[General Information]

Device Name: AMD 500-Series Chipset - Internal PCIe GPP Bridge
Original Device Name: AMD 500-Series Chipset - Internal PCIe GPP Bridge
Device Class: PCI-to-PCI Bridge
Revision ID: 0
PCI Address (Bus:Device:Function) Number: 3:9:0
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_57A4&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Downstream Port of PCI Express Switch
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	IRQ4
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	Downstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57A4&SUBSYS_14841022&REV_00 \5&4BF4A56&0&48000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0900)

PCI Express x16 Bus #9

AMD FCH - SATA AHCI Controller (MS)

[General Information]

Device Name:	AMD FCH - SATA AHCI Controller (MS)
Original Device Name:	AMD FCH - SATA AHCI Controller (MS)
Device Class:	SATA AHCI Controller
Revision ID:	51

PCI Address (Bus:Device:Function) Number: 9:0:0
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_7901&SUBSYS_79011022&REV_51

[PCI Express]

Version: 4.0
Maximum Link Width: 16x
Current Link Width: 16x
Maximum Link Speed: 16.0 GT/s
Current Link Speed: 16.0 GT/s
Device/Port Type: PCI Express Endpoint
Slot Implemented: No
Emergency Power Reduction: Not Supported
Active State Power Management (ASPM) Support: L0s and L1
Active State Power Management (ASPM) Status: L0s Entry
L0s Exit Latency: < 64 ns
L1 Exit Latency: < 1 us
Maximum Payload Size Supported: 256 bytes
Maximum Payload Size: 128 bytes

[System Resources]

Interrupt Line: N/A
Interrupt Pin: INTA#
Memory Base Address 5: F7500000

[Features]

Bus Mastering: Disabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[SATA Host Controller]

Interface Speed Supported: Gen3 6.0 Gbps
Number Of Ports: 2
External SATA Support: Capable
Aggressive Link Power Management: Capable
Staggered Spin-up: Not Capable
Mechanical Presence Switch: Capable
Command Queue Acceleration: Capable
64-bit Addressing: Capable
AHCI Status: Enabled
AHCI Version: 1.31
Ports Implemented: 2, 3

[SATA Port#2]

Port Status: No Device Present
External SATA Port: Capable
Hot Plug: Not Capable

[SATA Port#3]

Port Status: No Device Present
External SATA Port: Capable
Hot Plug: Not Capable

[Driver Information]

Driver Manufacturer:	Standardmäßiger SATA AHCI- Controller
Driver Description:	Standardmäßiger SATA AHCI- Controller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_7901&SUBSYS_79011022&REV_51 \6&247227CD&0&0048000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0900)#PCI(0000)

AMD 500-Series Chipset - Internal PCIe GPP Bridge

[General Information]

Device Name:	AMD 500-Series Chipset - Internal PCIe GPP Bridge
Original Device Name:	AMD 500-Series Chipset - Internal PCIe GPP Bridge
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	3:10:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_57A4&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Downstream Port of PCI Express Switch
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	IRQ5
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
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Driver Description:	Downstream-Switchport für PCI-Express
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_57A4&SUBSYS_14841022&REV_00 \5&4BF4A56&0&50000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0A00)

PCI Express x16 Bus #10

AMD FCH - SATA AHCI Controller (MS)

[General Information]

Device Name:	AMD FCH - SATA AHCI Controller (MS)
Original Device Name:	AMD FCH - SATA AHCI Controller (MS)
Device Class:	SATA AHCI Controller
Revision ID:	51
PCI Address (Bus:Device:Function) Number:	10:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_7901&SUBSYS_79011022&REV_51

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	128 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 5	F7400000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[SATA Host Controller]

Interface Speed Supported:	Gen3 6.0 Gbps
Number Of Ports:	4
External SATA Support:	Capable
Aggressive Link Power Management:	Capable
Staggered Spin-up:	Not Capable
Mechanical Presence Switch:	Capable
Command Queue Acceleration:	Capable
64-bit Addressing:	Capable
AHCI Status:	Enabled
AHCI Version:	1.31
Ports Implemented:	0, 1, 4, 5

[SATA Port#0]

Port Status:	Device Present, Phy communication established
Current Interface Speed:	Gen3 6.0 Gbps
External SATA Port:	Capable
Hot Plug:	Not Capable
Device Type:	SATA

[SATA Port#1]

Port Status:	Device Present, Phy communication established
Current Interface Speed:	Gen3 6.0 Gbps
External SATA Port:	Capable
Hot Plug:	Not Capable
Device Type:	SATA

[SATA Port#4]

Port Status:	Device Present, Phy communication established
Current Interface Speed:	Gen3 6.0 Gbps
External SATA Port:	Capable
Hot Plug:	Not Capable
Device Type:	SATA

[SATA Port#5]

Port Status:	Device Present, Phy communication established
Current Interface Speed:	Gen3 6.0 Gbps
External SATA Port:	Capable
Hot Plug:	Not Capable
Device Type:	SATA

[Driver Information]

Driver Manufacturer:	Standardmäßiger SATA AHCI- Controller
Driver Description:	Standardmäßiger SATA AHCI- Controller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_7901&SUBSYS_79011022&REV_51 \6&E2C86E&0&0050000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0A00)#PCI(0000)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:2:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00 \3&11583659&0&10
Location Paths	PCIROOT(0)#PCI(0200)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:3:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardssystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00 \3&11583659&0&18
Location Paths	PCIROOT(0)#PCI(0300)

AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe GPP Bridge[7:0]
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:3:1
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1483&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	2.5 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	>4 us
L1 Exit Latency:	32 - 64 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Express-Stammpport
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1483&SUBSYS_14531022&REV_00
Location Paths	\000C87000000000119
	PCIROOT(0)#PCI(0301)

PCI Express x16 Bus #11

NVIDIA GeForce GTX 1080 Founders Edition (PG413)

[General Information]

Device Name:	NVIDIA GeForce GTX 1080 Founders Edition (PG413)
Original Device Name:	NVIDIA GeForce GTX 1080 (GP104-400)
Device Class:	VGA Compatible Adapter
Revision ID:	A1
PCI Address (Bus:Device:Function) Number:	11:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_10DE&DEV_1B80&SUBSYS_119E10DE&REV_A1

[PCI Express]

Version:	3.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	8.0 GT/s
Current Link Speed:	2.5 GT/s
Device/Port Type:	Legacy PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	256 - 512 ns
L1 Exit Latency:	8 - 16 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	IRQ54
Interrupt Pin:	INTA#
Memory Base Address 0	F6000000
Memory Base Address 1	E0000000

Memory Base Address 3	F0000000
I/O Base Address 5	E000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	NVIDIA
Driver Description:	NVIDIA GeForce GTX 1080
Driver Provider:	NVIDIA
Driver Version:	26.21.14.3648 (GeForce 436.48)
Driver Date:	26-Sep-2019
DCH/UWD Driver:	Not Capable
DeviceInstanceId	PCI\VEN_10DE&DEV_1B80&SUBSYS_119E10DE&REV_A1 \4&31AC7A68&0&0019
Location Paths	PCIROOT(0)#PCI(0301)#PCI(0000)

NVIDIA GP104 - High Definition Audio Controller

[General Information]

Device Name:	NVIDIA GP104 - High Definition Audio Controller
Original Device Name:	NVIDIA GP104 - High Definition Audio Controller
Device Class:	High Definition Audio
Revision ID:	A1
PCI Address (Bus:Device:Function) Number:	11:0:1
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_10DE&DEV_10F0&SUBSYS_119E10DE&REV_A1

[PCI Express]

Version:	3.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	8.0 GT/s
Current Link Speed:	2.5 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	256 - 512 ns
L1 Exit Latency:	2 - 4 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	IRQ55
Interrupt Pin:	INTB#

Memory Base Address 0 F7080000

[Features]

Bus Mastering: Enabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: Microsoft
Driver Description: High Definition Audio-Controller
Driver Provider: Microsoft
Driver Version: 10.0.18362.693
Driver Date: 20-Feb-2020
DeviceInstanceId PCI\VEN_10DE&DEV_10F0&SUBSYS_119E10DE&REV_A1
Location Paths \4&31AC7A68&0&0119
PCIROOT(0)#PCI(0301)#PCI(0001)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name: AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name: AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class: Host-to-PCI Bridge
Revision ID: 0
PCI Address (Bus:Device:Function) Number: 0:4:0
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line: N/A
Interrupt Pin: N/A

[Features]

Bus Mastering: Disabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: (Standardsystemgeräte)
Driver Description: PCI Standard-Host-CPU-Brücke
Driver Provider: Microsoft
Driver Version: 10.0.18362.267
Driver Date: 21-Jun-2006
DeviceInstanceId PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00
Location Paths \3&11583659&0&20
PCIROOT(0)#PCI(0400)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:5:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00 \3&11583659&0&28
Location Paths	PCIROOT(0)#PCI(0500)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:7:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardssystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00 \3&11583659&0&38
Location Paths	PCIROOT(0)#PCI(0700)

AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Original Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:7:1
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1484&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Express-Stammpport
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1484&SUBSYS_14841022&REV_00
Location Paths	\3&11583659&0&39
	PCIROOT(0)#PCI(0701)

PCI Express x16 Bus #12

AMD Starship/Matisse/Vermeer - PCIe Dummy Function

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Function
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Function
Device Class:	Non-Essential Instrumentation Function
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	12:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_148A&SUBSYS_148A1022&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Advanced Micro Devices
Driver Description:	AMD PCI
Driver Provider:	Advanced Micro Devices
Driver Version:	1.0.0.74
Driver Date:	10-Sep-2019
DeviceInstanceId	PCI\VEN_1022&DEV_148A&SUBSYS_148A1022&REV_00 \4&D573D7&0&0039
Location Paths	PCIROOT(0)#PCI(0701)#PCI(0000)

AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Original Device Name:	AMD Starship/Matisse/Vermeer - PCIe Dummy Host Bridge
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:8:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1482&SUBSYS_00000000&REV_00 \3&11583659&0&40
Location Paths	PCIROOT(0)#PCI(0800)

AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Original Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:8:1
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1484&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Express-Stammpport
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1484&SUBSYS_14841022&REV_00 \3&11583659&0&41
Location Paths	PCIROOT(0)#PCI(0801)

PCI Express x16 Bus #13

AMD Starship/Matisse/Vermeer - SSP

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - SSP
Original Device Name:	AMD Starship/Matisse/Vermeer - SSP
Device Class:	Non-Essential Instrumentation Function
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	13:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1485&SUBSYS_14851022&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Advanced Micro Devices
Driver Description:	AMD PCI
Driver Provider:	Advanced Micro Devices
Driver Version:	1.0.0.74
Driver Date:	10-Sep-2019
DeviceInstanceId	PCI\VEN_1022&DEV_1485&SUBSYS_14851022&REV_00 \4&1FDE7688&0&0041
Location Paths	PCIROOT(0)#PCI(0801)#PCI(0000)

AMD Starship/Matisse/Vermeer - Cryptographic Coprocessor PSPCPP

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - Cryptographic Coprocessor PSPCPP
Original Device Name:	AMD Starship/Matisse/Vermeer - Cryptographic Coprocessor PSPCPP
Device Class:	Other Encryption/Decryption
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	13:0:1
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1486&SUBSYS_14861022&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 2	F7C00000
Memory Base Address 5	F7BFE000

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Advanced Micro Devices Inc.
Driver Description:	AMD PSP 11.0 Device
Driver Provider:	Advanced Micro Devices Inc.
Driver Version:	4.11.0.0
Driver Date:	19-Jun-2019
DeviceInstanceId	PCI\VEN_1022&DEV_1486&SUBSYS_14861022&REV_00 \4&1FDE7688&0&0141
Location Paths	PCIROOT(0)#PCI(0801)#PCI(0001)

AMD Matisse/Vermeer - USB3 XHCI Controller

[General Information]

Device Name:	AMD Matisse/Vermeer - USB3 XHCI Controller
Original Device Name:	AMD Matisse/Vermeer - USB3 XHCI Controller
Device Class:	USB xHCI Controller
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	13:0:3
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_149C&SUBSYS_50071458&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTC#
Memory Base Address 0	F7A00000

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Generischer USB-xHCI-Hostcontroller
Driver Description:	USB-xHCI-kompatibler Hostcontroller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	20-Feb-2020
DeviceInstanceId	PCI\VEN_1022&DEV_149C&SUBSYS_50071458&REV_00 \4&1FDE7688&0&0341
Location Paths	PCIROOT(0)#PCI(0801)#PCI(0003)

AMD Starship/Matisse/Vermeer - HD Audio Controller

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - HD Audio Controller
Original Device Name:	AMD Starship/Matisse/Vermeer - HD Audio Controller
Device Class:	High Definition Audio
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	13:0:4
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1487&SUBSYS_A0C31458&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	IRQ36
Interrupt Pin:	INTD#
Memory Base Address 0	F7BF0000

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Microsoft
Driver Description:	High Definition Audio-Controller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	20-Feb-2020
DeviceInstanceId	PCI\VEN_1022&DEV_1487&SUBSYS_A0C31458&REV_00 \4&1FDE7688&0&0441
Location Paths	PCIROOT(0)#PCI(0801)#PCI(0004)

AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Original Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:8:2
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1484&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Express-Stammpport
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1484&SUBSYS_14841022&REV_00 \3&11583659&0&42
Location Paths	PCIROOT(0)#PCI(0802)

PCI Express x16 Bus #14

AMD FCH - SATA AHCI Controller (MS)

[General Information]

Device Name:	AMD FCH - SATA AHCI Controller (MS)
Original Device Name:	AMD FCH - SATA AHCI Controller (MS)
Device Class:	SATA AHCI Controller
Revision ID:	51
PCI Address (Bus:Device:Function) Number:	14:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_7901&SUBSYS_B0021458&REV_51

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 5	F7E00000

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[SATA Host Controller]

Interface Speed Supported:	Gen3 6.0 Gbps
Number Of Ports:	1
External SATA Support:	Not Capable
Aggressive Link Power Management:	Capable
Staggered Spin-up:	Not Capable
Mechanical Presence Switch:	Capable
Command Queue Acceleration:	Capable
64-bit Addressing:	Capable
AHCI Status:	Enabled
AHCI Version:	1.31
Ports Implemented:	0

[SATA Port#0]

Port Status:	No Device Present
External SATA Port:	Not Capable
Hot Plug:	Not Capable

[Driver Information]

Driver Manufacturer:	Standardmäßiger SATA AHCI- Controller
Driver Description:	Standardmäßiger SATA AHCI- Controller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_7901&SUBSYS_B0021458&REV_51 \4&3298272D&0&0042
Location Paths	PCIROOT(0)#PCI(0802)#PCI(0000)

AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]

[General Information]

Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Original Device Name:	AMD Starship/Matisse/Vermeer - Internal PCIe GPP Bridge 0 to bus[E:B]
Device Class:	PCI-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:8:3
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1484&SUBSYS_00000000&REV_00

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	512 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Express-Stammport
Driver Provider:	Microsoft
Driver Version:	10.0.18362.628
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1484&SUBSYS_14841022&REV_00 \3&11583659&0&43
Location Paths	PCIROOT(0)#PCI(0803)

PCI Express x16 Bus #15

AMD FCH - SATA AHCI Controller (MS)

[General Information]

Device Name:	AMD FCH - SATA AHCI Controller (MS)
Original Device Name:	AMD FCH - SATA AHCI Controller (MS)
Device Class:	SATA AHCI Controller
Revision ID:	51
PCI Address (Bus:Device:Function) Number:	15:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_7901&SUBSYS_B0021458&REV_51

[PCI Express]

Version:	4.0
Maximum Link Width:	16x
Current Link Width:	16x
Maximum Link Speed:	16.0 GT/s
Current Link Speed:	16.0 GT/s
Device/Port Type:	PCI Express Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s Entry
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	256 bytes
Maximum Payload Size:	256 bytes

[System Resources]

Interrupt Line:	N/A
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Interrupt Pin:	INTA#
Memory Base Address 5	F7D00000

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[SATA Host Controller]

Interface Speed Supported:	Gen3 6.0 Gbps
Number Of Ports:	1
External SATA Support:	Not Capable
Aggressive Link Power Management:	Capable
Staggered Spin-up:	Not Capable
Mechanical Presence Switch:	Capable
Command Queue Acceleration:	Capable
64-bit Addressing:	Capable
AHCI Status:	Enabled
AHCI Version:	1.31
Ports Implemented:	0

[SATA Port#0]

Port Status:	No Device Present
External SATA Port:	Not Capable
Hot Plug:	Not Capable

[Driver Information]

Driver Manufacturer:	Standardmäßiger SATA AHCI- Controller
Driver Description:	Standardmäßiger SATA AHCI- Controller
Driver Provider:	Microsoft
Driver Version:	10.0.18362.693
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_7901&SUBSYS_B0021458&REV_51 \4&9B70DCB&0&0043
Location Paths	PCIROOT(0)#PCI(0803)#PCI(0000)

AMD RV/RN/Bixby FCH - SMBus and ACPI Controller

[General Information]

Device Name:	AMD RV/RN/Bixby FCH - SMBus and ACPI Controller
Original Device Name:	AMD RV/RN/Bixby FCH - SMBus and ACPI Controller
Device Class:	SMBus (System Management Bus)
Revision ID:	61
PCI Address (Bus:Device:Function) Number:	0:20:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_790B&SUBSYS_50011458&REV_61

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	Advanced Micro Devices, Inc
Driver Description:	AMD SMBus
Driver Provider:	Advanced Micro Devices, Inc
Driver Version:	5.12.0.38
Driver Date:	21-Aug-2019
DeviceInstanceId	PCI\VEN_1022&DEV_790B&SUBSYS_50011458&REV_61 \3&11583659&0&A0
Location Paths	PCIROOT(0)#PCI(1400)

AMD Promontory/Bixby FCH - LPC Bridge

[General Information]

Device Name:	AMD Promontory/Bixby FCH - LPC Bridge
Original Device Name:	AMD Promontory/Bixby FCH - LPC Bridge
Device Class:	PCI-to-ISA Bridge
Revision ID:	51
PCI Address (Bus:Device:Function) Number:	0:20:3
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_790E&SUBSYS_50011458&REV_51

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-ISA-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_790E&SUBSYS_50011458&REV_51 \3&11583659&0&A3
Location Paths	PCIROOT(0)#PCI(1403)

AMD Matisse/Vermeer - Data Fabric: Function 0

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 0
Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 0

Device Class:

Revision ID: 0
PCI Address (Bus:Device:Function) Number: 0:24:0
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_1440&SUBSYS_00000000&REV_00

Host-to-PCI Bridge**[System Resources]**

Interrupt Line: N/A
Interrupt Pin: N/A

[Features]

Bus Mastering: Disabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: (Standardsystemgeräte)
Driver Description: PCI Standard-Host-CPU-Brücke
Driver Provider: Microsoft
Driver Version: 10.0.18362.267
Driver Date: 21-Jun-2006
DeviceInstanceId: PCI\VEN_1022&DEV_1440&SUBSYS_00000000&REV_00
\3&11583659&0&C0
Location Paths: PCIROOT(0)#PCI(1800)

AMD Matisse/Vermeer - Data Fabric: Function 1

[General Information]

Device Name: AMD Matisse/Vermeer - Data Fabric: Function 1
Original Device Name: AMD Matisse/Vermeer - Data Fabric: Function 1
Device Class: Host-to-PCI Bridge
Revision ID: 0
PCI Address (Bus:Device:Function) Number: 0:24:1
PCI Latency Timer: 0
Hardware ID: PCI\VEN_1022&DEV_1441&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line: N/A
Interrupt Pin: N/A

[Features]

Bus Mastering: Disabled
Running At 66 MHz: Not Capable
Fast Back-to-Back Transactions: Not Capable

[Driver Information]

Driver Manufacturer: (Standardsystemgeräte)
Driver Description: PCI Standard-Host-CPU-Brücke
Driver Provider: Microsoft
Driver Version: 10.0.18362.267
Driver Date: 21-Jun-2006

DeviceInstanceId	PCI\VEN_1022&DEV_1441&SUBSYS_00000000&REV_00 \3&11583659&0&C1
Location Paths	PCIROOT(0)#PCI(1801)

AMD Matisse/Vermeer - Data Fabric: Function 2

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 2
Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 2
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:24:2
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1442&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1442&SUBSYS_00000000&REV_00 \3&11583659&0&C2
Location Paths	PCIROOT(0)#PCI(1802)

AMD Matisse/Vermeer - Data Fabric: Function 3

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 3
Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 3
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:24:3
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1443&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1443&SUBSYS_00000000&REV_00 \3&11583659&0&C3
Location Paths	PCIROOT(0)#PCI(1803)

AMD Matisse/Vermeer - Data Fabric: Function 4

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 4
Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 4
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:24:4
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1444&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1444&SUBSYS_00000000&REV_00 \3&11583659&0&C4
Location Paths	PCIROOT(0)#PCI(1804)

AMD Matisse/Vermeer - Data Fabric: Function 5

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 5
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Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 5
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:24:5
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1445&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1445&SUBSYS_00000000&REV_00 \3&11583659&0&C5
Location Paths	PCIROOT(0)#PCI(1805)

AMD Matisse/Vermeer - Data Fabric: Function 6

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 6
Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 6
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:24:6
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1446&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267

Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1446&SUBSYS_00000000&REV_00 \3&11583659&0&C6
Location Paths	PCIROOT(0)#PCI(1806)

AMD Matisse/Vermeer - Data Fabric: Function 7

[General Information]

Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 7
Original Device Name:	AMD Matisse/Vermeer - Data Fabric: Function 7
Device Class:	Host-to-PCI Bridge
Revision ID:	0
PCI Address (Bus:Device:Function) Number:	0:24:7
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1022&DEV_1447&SUBSYS_00000000&REV_00

[System Resources]

Interrupt Line:	N/A
Interrupt Pin:	N/A

[Features]

Bus Mastering:	Disabled
Running At 66 MHz:	Not Capable
Fast Back-to-Back Transactions:	Not Capable

[Driver Information]

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	PCI Standard-Host-CPU-Brücke
Driver Provider:	Microsoft
Driver Version:	10.0.18362.267
Driver Date:	21-Jun-2006
DeviceInstanceId	PCI\VEN_1022&DEV_1447&SUBSYS_00000000&REV_00 \3&11583659&0&C7
Location Paths	PCIROOT(0)#PCI(1807)

Drives

(S)ATA/ATAPI Drives

Samsung SSD 970 EVO Plus 1TB

[General Information]

Drive Controller:	NVMe (PCIe 4x 8.0 GT/s)
Host Controller:	Samsung NVMe PCIe SSD Controller
Drive Model:	Samsung SSD 970 EVO Plus 1TB
Drive Serial Number:	S4EWNG0M508866X
Drive Firmware Revision:	2B2QEXM7
NVMe Version Supported:	v1.3
Drive Capacity:	953,869 MBytes (1000 GB)
Drive Capacity [MB]:	953869

[Capabilities]

Volatile Write Cache:	Present
Compare Command:	Supported
Write Uncorrectable Command:	Supported
Dataset Management:	Supported
Write Zeroes:	Supported
Save field set to a non-zero value:	Supported
Reservations:	Not Supported
Timestamp:	Supported
Autonomous Power State Transitions:	Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

Available Space Below Threshold:	OK
Temperature Exceeded Critical Threshold:	OK
Device Reliability Degraded:	OK
Media In Read Only Mode:	OK
Volatile Memory Backup Device Failed:	OK
Drive Temperature:	37 °C
Warning Temperature Threshold:	85 °C
Critical Temperature Threshold:	85 °C
Time Above Warning Temperature Threshold:	0 minutes
Time Above Critical Temperature Threshold:	0 minutes
Spare Capacity Available:	100%
Device Health:	100%
Power Cycles:	186
Power On Hours:	492 hours
Unsafe Shutdowns:	16
Media Errors:	0
Total Host Reads:	16241 GBytes
Total Host Writes:	4274 GBytes

Samsung SSD 970 EVO Plus 1TB

[General Information]

Drive Controller:	NVMe (PCIe 2x 8.0 GT/s)
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Host Controller:	Samsung NVMe PCIe SSD Controller
Drive Model:	Samsung SSD 970 EVO Plus 1TB
Drive Serial Number:	S4EWNF0M600281F
Drive Firmware Revision:	2B2QEXM7
NVMe Version Supported:	v1.3
Drive Capacity:	953,869 MBytes (1000 GB)
Drive Capacity [MB]:	953869

[Capabilities]

Volatile Write Cache:	Present
Compare Command:	Supported
Write Uncorrectable Command:	Supported
Dataset Management:	Supported
Write Zeroes:	Supported
Save field set to a non-zero value:	Supported
Reservations:	Not Supported
Timestamp:	Supported
Autonomous Power State Transitions:	Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

Available Space Below Threshold:	OK
Temperature Exceeded Critical Threshold:	OK
Device Reliability Degraded:	OK
Media In Read Only Mode:	OK
Volatile Memory Backup Device Failed:	OK
Drive Temperature:	33 °C
Warning Temperature Threshold:	85 °C
Critical Temperature Threshold:	85 °C
Time Above Warning Temperature Threshold:	0 minutes
Time Above Critical Temperature Threshold:	0 minutes
Spare Capacity Available:	100%
Device Health:	100%
Power Cycles:	180
Power On Hours:	58 hours
Unsafe Shutdowns:	13
Media Errors:	0
Total Host Reads:	3006 GBytes
Total Host Writes:	4565 GBytes

Samsung SSD 970 EVO Plus 1TB

[General Information]

Drive Controller:	NVMe (PCIe 4x 8.0 GT/s)
Host Controller:	Samsung NVMe PCIe SSD Controller
Drive Model:	Samsung SSD 970 EVO Plus 1TB

Drive Serial Number:	S4EWNF0M600336H
Drive Firmware Revision:	2B2QEXM7
NVMe Version Supported:	v1.3
Drive Capacity:	953,869 MBytes (1000 GB)
Drive Capacity [MB]:	953869

[Capabilities]

Volatile Write Cache:	Present
Compare Command:	Supported
Write Uncorrectable Command:	Supported
Dataset Management:	Supported
Write Zeroes:	Supported
Save field set to a non-zero value:	Supported
Reservations:	Not Supported
Timestamp:	Supported
Autonomous Power State Transitions:	Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

Available Space Below Threshold:	OK
Temperature Exceeded Critical Threshold:	OK
Device Reliability Degraded:	OK
Media In Read Only Mode:	OK
Volatile Memory Backup Device Failed:	OK
Drive Temperature:	36 °C
Warning Temperature Threshold:	85 °C
Critical Temperature Threshold:	85 °C
Time Above Warning Temperature Threshold:	0 minutes
Time Above Critical Temperature Threshold:	0 minutes
Spare Capacity Available:	100%
Device Health:	100%
Power Cycles:	185
Power On Hours:	42 hours
Unsafe Shutdowns:	15
Media Errors:	0
Total Host Reads:	2943 GBytes
Total Host Writes:	4185 GBytes

WDC WD100EFAX-68LHPN0

[General Information]

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	AMD FCH - SATA AHCI Controller (MS)
Drive Model:	WDC WD100EFAX-68LHPN0
Drive Firmware Revision:	83.H0A83
Drive Serial Number:	JEJBYU4M

World Wide Name:	5000CCA267E19EFF
Drive Capacity:	9,537,536 MBytes (10000 GB)
Drive Capacity [MB]:	9537536
Media Rotation Rate:	5400 RPM
Nominal Form Factor:	3.5"
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS, ACS-2
ATA Minor Version Supported:	ATA8-ACS version 4
ATA Transport Version Supported:	SATA 3.2

[Drive Geometry]

Number of Cylinders:	16383
Number of Heads:	16
Sectors Per Track:	63
Number Of ECC Bytes:	56
Number of Sectors:	16514064
Total 32-bit LBA Sectors:	268435455
Total 48-bit LBA Sectors:	19532873728
Logical Sector Size:	512 Bytes
Cache Buffer Size:	N/A
Controller Type:	Dual Ported, Multiple Sector Buffer, Read Cache

[Transfer Modes]

Sectors Per Interrupt:	Total: 16, Active: 16
Max. PIO Transfer Mode:	4
Multiword DMA Mode:	Total: 2, Active: -
Singleword DMA Mode:	Total: -, Active: -
Ultra-DMA Mode:	Total: 6 (ATA-133), Active: 6 (ATA-133)
Max. Multiword DMA Transfer Rate:	16.7 MBytes/s
Max. PIO with IORDY Transfer Rate:	16.7 MBytes/s
Max. PIO w/o IORDY Transfer Rate:	16.7 MBytes/s
Native Command Queuing:	Supported, Max. Depth: 32
TRIM Command:	Not Supported

[Device flags]

Fixed Drive:	Present
Removable Drive:	Not Present
Magnetic Storage:	Present
LBA Mode:	Supported
DMA Mode:	Supported
IORDY:	Supported
IORDY Disableable:	Supported

[Features]

Write Cache:	Present, Active
S.M.A.R.T. Feature:	Present, Active
Security Feature:	Present, Inactive
Removable Media Feature:	Not Present, Disabled
Power Management:	Present, Active
Advanced Power Management:	Present, Active
Packet Interface:	Not Present, Disabled
Look-Ahead Buffer:	Present, Active
Host Protected Area:	Present, Enabled
Power-Up In Standby:	Supported, Inactive
Automatic Acoustic Management:	Not Supported, Inactive
48-bit LBA:	Supported, Active

Host-Initiated Link Power Management:	Supported
Device-Initiated Link Power Management:	Supported, Disabled
In-Order Data Delivery:	Supported, Disabled
Hardware Feature Control:	Not Supported
Software Settings Preservation:	Supported, Enabled
NCQ Autosense:	Supported
Link Power State Device Sleep:	Not Supported
Hybrid Information Feature:	Not Supported
Rebuild Assist:	Supported, Disabled
Power Disable:	Not Supported
All Write Cache Non-Volatile:	Not Supported
Extended Number of User Addressable Sectors:	Supported
CFast Specification:	Not Supported
NCQ Priority Information:	Supported
Host Automatic Partial to Slumber Transitions:	Not Supported
Device Automatic Partial to Slumber Transitions:	Not Supported
NCQ Streaming:	Supported
NCQ Queue Management Command:	Supported
DevSleep to Reduced Power State:	Not Supported
Out Of Band Management Interface:	Not Supported
Extended Power Conditions Feature:	Supported, Disabled
Sense Data Reporting Feature:	Supported, Disabled
Free-Fall Control Feature:	Not Supported
Write-Read-Verify Feature:	Not Supported

[Security]

Security Feature:	Supported
Security Status:	Disabled
Security Locked:	Disabled
Security Frozen:	Enabled
Enhanced Security Erase:	Not Supported
Sanitize Feature:	Supported
Sanitize Device - Crypto Scramble:	Not Supported
Sanitize Device - Overwrite:	Supported
Sanitize Device - Block Erase:	Not Supported
Sanitize Device - Antifreeze Lock:	Not Supported
Device Encrypts All User Data:	Not Supported
Trusted Computing:	Not Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

[01] Raw Read Error Rate:	100/16, Worst: 100
[02] Throughput Performance:	127/54, Worst: 127 (Data = 120,0)
[03] Spin Up Time:	145/24, Worst: 145 (Data = 29753796,9)
[04] Start/Stop Count:	100/Always OK, Worst: 100 (Data = 244,0)
[05] Reallocated Sector Count:	100/5, Worst: 100
[07] Seek Error Rate:	100/67, Worst: 100
[08] Seek Time Performance:	128/20, Worst: 128 (Data = 18,0)
[09] Power-On Hours/Cycle Count:	100/Always OK, Worst: 100 (902 hours / 37.6 days)
[0A] Spin Retry Count:	100/60, Worst: 100
[0C] Power Cycle Count:	100/Always OK, Worst: 100 (Data = 202,0)
[16] Unknown	100/25, Worst: 100 (Data = 100,0)
[C0] Power-Off Retract Count:	100/Always OK, Worst: 100 (Data = 347,0)
[C1] Load/Unload Cycle Count:	100/Always OK, Worst: 100 (Data = 347,0)
[C2] Temperature	14/Always OK, Worst: 14 (24.0 °C)
[C4] Reallocation Event Count:	100/Always OK, Worst: 100

[C5] Current Pending Sector Count:	100/Always OK, Worst: 100
[C6] Off-Line Uncorrectable Sector Count:	100/Always OK, Worst: 100
[C7] UltraDMA/SATA CRC Error Rate:	200/Always OK, Worst: 200

[Device Statistics]

Lifetime Power-On Resets:	202
Power-on Hours:	902
Logical Sectors Written:	15253803926
Logical Sectors Read:	57054170219
Number of Write Commands:	60490122
Number of Read Commands:	271097109

Spindle Motor Power-on Hours:	885
Head Flying Hours:	885
Head Load Events:	347
Number of Reallocated Logical Sectors:	0
Read Recovery Attempts:	0
Number of Mechanical Start Failures:	0

Number of Reported Uncorrectable Errors:	32
Resets Between Command Acceptance and Completion:	0

Current Temperature:	24 °C
Average Short Term Temperature:	29 °C
Average Long Term Temperature :	28 °C
Operating Temperature Range:	0 - 65 °C
Lifetime Temperature:	13 - 54 °C
Lifetime Average Short Term Temperature:	22 - 49 °C
Lifetime Average Long Term Temperature:	25 - 48 °C
Time in Under-Temperature:	0 minutes
Time in Over-Temperature:	0 minutes

Number of Hardware Resets:	2
Number of ASR Events:	138
Number of Interface CRC Errors:	0

WDC WD100EFAX-68LHPN0

[General Information]

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	AMD FCH - SATA AHCI Controller (MS)
Drive Model:	WDC WD100EFAX-68LHPN0
Drive Firmware Revision:	83.H0A83
Drive Serial Number:	JEJBZ75M
World Wide Name:	5000CCA267E1A093
Drive Capacity:	9,537,536 MBytes (10000 GB)
Drive Capacity [MB]:	9537536
Media Rotation Rate:	5400 RPM
Nominal Form Factor:	3.5"
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS, ACS-2

ATA Minor Version Supported:	ATA8-ACS version 4
ATA Transport Version Supported:	SATA 3.2

[Drive Geometry]

Number of Cylinders:	16383
Number of Heads:	16
Sectors Per Track:	63
Number Of ECC Bytes:	56
Number of Sectors:	16514064
Total 32-bit LBA Sectors:	268435455
Total 48-bit LBA Sectors:	19532873728
Logical Sector Size:	512 Bytes
Cache Buffer Size:	N/A
Controller Type:	Dual Ported, Multiple Sector Buffer, Read Cache

[Transfer Modes]

Sectors Per Interrupt:	Total: 16, Active: 16
Max. PIO Transfer Mode:	4
Multiword DMA Mode:	Total: 2, Active: -
Singleword DMA Mode:	Total: -, Active: -
Ultra-DMA Mode:	Total: 6 (ATA-133), Active: 6 (ATA-133)
Max. Multiword DMA Transfer Rate:	16.7 MBytes/s
Max. PIO with IORDY Transfer Rate:	16.7 MBytes/s
Max. PIO w/o IORDY Transfer Rate:	16.7 MBytes/s
Native Command Queuing:	Supported, Max. Depth: 32
TRIM Command:	Not Supported

[Device flags]

Fixed Drive:	Present
Removable Drive:	Not Present
Magnetic Storage:	Present
LBA Mode:	Supported
DMA Mode:	Supported
IORDY:	Supported
IORDY Disableable:	Supported

[Features]

Write Cache:	Present, Active
S.M.A.R.T. Feature:	Present, Active
Security Feature:	Present, Inactive
Removable Media Feature:	Not Present, Disabled
Power Management:	Present, Active
Advanced Power Management:	Present, Active
Packet Interface:	Not Present, Disabled
Look-Ahead Buffer:	Present, Active
Host Protected Area:	Present, Enabled
Power-Up In Standby:	Supported, Inactive
Automatic Acoustic Management:	Not Supported, Inactive
48-bit LBA:	Supported, Active
Host-Initiated Link Power Management:	Supported
Device-Initiated Link Power Management:	Supported, Disabled
In-Order Data Delivery:	Supported, Disabled
Hardware Feature Control:	Not Supported
Software Settings Preservation:	Supported, Enabled
NCQ Autosense:	Supported

Link Power State Device Sleep:	Not Supported
Hybrid Information Feature:	Not Supported
Rebuild Assist:	Supported, Disabled
Power Disable:	Not Supported
All Write Cache Non-Volatile:	Not Supported
Extended Number of User Addressable Sectors:	Supported
CFast Specification:	Not Supported
NCQ Priority Information:	Supported
Host Automatic Partial to Slumber Transitions:	Not Supported
Device Automatic Partial to Slumber Transitions:	Not Supported
NCQ Streaming:	Supported
NCQ Queue Management Command:	Supported
DevSleep to Reduced Power State:	Not Supported
Out Of Band Management Interface:	Not Supported
Extended Power Conditions Feature:	Supported, Disabled
Sense Data Reporting Feature:	Supported, Disabled
Free-Fall Control Feature:	Not Supported
Write-Read-Verify Feature:	Not Supported

[Security]

Security Feature:	Supported
Security Status:	Disabled
Security Locked:	Disabled
Security Frozen:	Enabled
Enhanced Security Erase:	Not Supported
Sanitize Feature:	Supported
Sanitize Device - Crypto Scramble:	Not Supported
Sanitize Device - Overwrite:	Supported
Sanitize Device - Block Erase:	Not Supported
Sanitize Device - Antifreeze Lock:	Not Supported
Device Encrypts All User Data:	Not Supported
Trusted Computing:	Not Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

[01] Raw Read Error Rate:	100/16, Worst: 100
[02] Throughput Performance:	133/54, Worst: 133 (Data = 100,0)
[03] Spin Up Time:	142/24, Worst: 142 (Data = 30540239,9)
[04] Start/Stop Count:	100/Always OK, Worst: 100 (Data = 244,0)
[05] Reallocated Sector Count:	100/5, Worst: 100
[07] Seek Error Rate:	100/67, Worst: 100
[08] Seek Time Performance:	128/20, Worst: 128 (Data = 18,0)
[09] Power-On Hours/Cycle Count:	100/Always OK, Worst: 100 (884 hours / 36.8 days)
[0A] Spin Retry Count:	100/60, Worst: 100
[0C] Power Cycle Count:	100/Always OK, Worst: 100 (Data = 197,0)
[16] Unknown	100/25, Worst: 100 (Data = 100,0)
[C0] Power-Off Retract Count:	100/Always OK, Worst: 100 (Data = 320,0)
[C1] Load/Unload Cycle Count:	100/Always OK, Worst: 100 (Data = 320,0)
[C2] Temperature	253/Always OK, Worst: 253 (23.0 °C)
[C4] Reallocation Event Count:	100/Always OK, Worst: 100
[C5] Current Pending Sector Count:	100/Always OK, Worst: 100
[C6] Off-Line Uncorrectable Sector Count:	100/Always OK, Worst: 100
[C7] UltraDMA/SATA CRC Error Rate:	200/Always OK, Worst: 200

[Device Statistics]

Lifetime Power-On Resets:	197
Power-on Hours:	884
Logical Sectors Written:	11730122928
Logical Sectors Read:	5184150472
Number of Write Commands:	44535479
Number of Read Commands:	26508815

Spindle Motor Power-on Hours:	863
Head Flying Hours:	863
Head Load Events:	320
Number of Reallocated Logical Sectors:	0
Read Recovery Attempts:	0
Number of Mechanical Start Failures:	0

Number of Reported Uncorrectable Errors:	29
Resets Between Command Acceptance and Completion:	0

Current Temperature:	23 °C
Average Short Term Temperature:	28 °C
Average Long Term Temperature :	27 °C
Operating Temperature Range:	0 - 65 °C
Lifetime Temperature:	12 - 51 °C
Lifetime Average Short Term Temperature:	24 - 46 °C
Lifetime Average Long Term Temperature:	25 - 45 °C
Time in Under-Temperature:	0 minutes
Time in Over-Temperature:	0 minutes

Number of Hardware Resets:	2
Number of ASR Events:	139
Number of Interface CRC Errors:	0

WDC WD40EZRZ-00GXCBO

[General Information]

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	AMD FCH - SATA AHCI Controller (MS)
Drive Model:	WDC WD40EZRZ-00GXCBO
Drive Firmware Revision:	80.00A80
Drive Serial Number:	WD-WCC7K2RHSHY2
World Wide Name:	50014EE2E5AC774
Drive Capacity:	3,815,447 MBytes (4000 GB)
Drive Capacity [MB]:	3815447
Media Rotation Rate:	5400 RPM
Nominal Form Factor:	3.5"
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS, ACS-2, ACS-3
ATA Minor Version Supported:	ACS-3 Revision 5
ATA Transport Version Supported:	SATA 3.1

[Drive Geometry]

Number of Cylinders:	16383
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Number of Heads:	16
Sectors Per Track:	63
Number of Sectors:	16514064
Total 32-bit LBA Sectors:	268435455
Total 48-bit LBA Sectors:	7814037168
Logical Sector Size:	512 Bytes
Cache Buffer Size:	N/A

[Transfer Modes]

Sectors Per Interrupt:	Total: 16, Active: 16
Max. PIO Transfer Mode:	4
Multiword DMA Mode:	Total: 2, Active: -
Singleword DMA Mode:	Total: -, Active: -
Ultra-DMA Mode:	Total: 6 (ATA-133), Active: 6 (ATA-133)
Max. Multiword DMA Transfer Rate:	16.7 MBytes/s
Max. PIO with IORDY Transfer Rate:	16.7 MBytes/s
Max. PIO w/o IORDY Transfer Rate:	16.7 MBytes/s
Native Command Queuing:	Supported, Max. Depth: 32
TRIM Command:	Not Supported

[Device flags]

Fixed Drive:	Present
Removable Drive:	Not Present
Magnetic Storage:	Present
LBA Mode:	Supported
DMA Mode:	Supported
IORDY:	Supported
IORDY Disableable:	Supported

[Features]

Write Cache:	Present, Active
S.M.A.R.T. Feature:	Present, Active
Security Feature:	Present, Inactive
Removable Media Feature:	Not Present, Disabled
Power Management:	Present, Active
Advanced Power Management:	Not Present, Inactive
Packet Interface:	Not Present, Disabled
Look-Ahead Buffer:	Present, Active
Host Protected Area:	Present, Enabled
Power-Up In Standby:	Supported, Inactive
Automatic Acoustic Management:	Not Supported, Inactive
48-bit LBA:	Supported, Active
Host-Initiated Link Power Management:	Supported
Device-Initiated Link Power Management:	Supported, Disabled
In-Order Data Delivery:	Not Supported
Hardware Feature Control:	Not Supported
Software Settings Preservation:	Supported, Enabled
NCQ Autosense:	Not Supported
Link Power State Device Sleep:	Not Supported
Hybrid Information Feature:	Not Supported
Rebuild Assist:	Not Supported
Power Disable:	Not Supported
All Write Cache Non-Volatile:	Not Supported
Extended Number of User Addressable Sectors:	Not Supported
CFast Specification:	Not Supported

NCQ Priority Information:	Supported
Host Automatic Partial to Slumber Transitions:	Not Supported
Device Automatic Partial to Slumber Transitions:	Not Supported
NCQ Streaming:	Not Supported
NCQ Queue Management Command:	Not Supported
DevSleep to Reduced Power State:	Not Supported
Out Of Band Management Interface:	Not Supported
Extended Power Conditions Feature:	Not Supported
Sense Data Reporting Feature:	Not Supported
Free-Fall Control Feature:	Not Supported
Write-Read-Verify Feature:	Not Supported

[Security]

Security Feature:	Supported
Security Status:	Disabled
Security Locked:	Disabled
Security Frozen:	Enabled
Enhanced Security Erase:	Supported
Sanitize Feature:	Not Supported
Sanitize Device - Crypto Scramble:	Not Supported
Sanitize Device - Overwrite:	Not Supported
Sanitize Device - Block Erase:	Not Supported
Sanitize Device - Antifreeze Lock:	Not Supported
Device Encrypts All User Data:	Not Supported
Trusted Computing:	Not Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

[01] Raw Read Error Rate:	200/51, Worst: 200
[03] Spin Up Time:	163/21, Worst: 162 (Data = 6825,0)
[04] Start/Stop Count:	99/Always OK, Worst: 99 (Data = 1999,0)
[05] Reallocated Sector Count:	200/140, Worst: 200
[07] Seek Error Rate:	200/Always OK, Worst: 200
[09] Power-On Hours/Cycle Count:	94/Always OK, Worst: 94 (4483 hours / 186.8 days)
[0A] Spin Retry Count:	100/Always OK, Worst: 100
[0B] Calibration Retry Count:	100/Always OK, Worst: 100
[0C] Power Cycle Count:	99/Always OK, Worst: 99 (Data = 1132,0)
[C0] Power-Off Retract Count:	200/Always OK, Worst: 200 (Data = 149,0)
[C1] Load/Unload Cycle Count:	185/Always OK, Worst: 185 (Data = 46038,0)
[C2] Temperature	132/Always OK, Worst: 118 (18.0 °C)
[C4] Reallocation Event Count:	200/Always OK, Worst: 200
[C5] Current Pending Sector Count:	200/Always OK, Worst: 200
[C6] Off-Line Uncorrectable Sector Count:	200/Always OK, Worst: 200
[C7] UltraDMA/SATA CRC Error Rate:	200/Always OK, Worst: 200
[C8] Write/Multi-Zone Error Rate:	200/Always OK, Worst: 200

[Device Statistics]

Lifetime Power-On Resets:	1132
Power-on Hours:	4483
Logical Sectors Written:	42106292622
Logical Sectors Read:	43859751163
Number of Write Commands:	165537454
Number of Read Commands:	302431289
Spindle Motor Power-on Hours:	4454
Head Flying Hours:	1013

Head Load Events:	46188
Number of Reallocated Logical Sectors:	0
Read Recovery Attempts:	0
Number of Mechanical Start Failures:	0
Number of Reallocation Candidate Logical Sectors:	0
Number of High Priority Unload Events:	149
Number of Reported Uncorrectable Errors:	0
Resets Between Command Acceptance and Completion:	0
Current Temperature:	18 °C
Average Short Term Temperature:	20 °C
Average Long Term Temperature :	20 °C
Operating Temperature Range:	0 - 60 °C
Lifetime Temperature:	14 - 32 °C
Lifetime Average Short Term Temperature:	18 - 29 °C
Lifetime Average Long Term Temperature:	19 - 24 °C
Time in Under-Temperature:	0 minutes
Time in Over-Temperature:	0 minutes
Number of Hardware Resets:	2251
Number of ASR Events:	749
Number of Interface CRC Errors:	0

WDC WD60EFRX-68MYMN1

[General Information]

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	AMD FCH - SATA AHCI Controller (MS)
Drive Model:	WDC WD60EFRX-68MYMN1
Drive Firmware Revision:	82.00A82
Drive Serial Number:	WD-WX11D4409492
World Wide Name:	50014EE2B550791
Drive Capacity:	5,723,166 MBytes (6001 GB)
Drive Capacity [MB]:	5723166
Media Rotation Rate:	5700 RPM
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS, ACS-2
ATA Minor Version Supported:	ACS-3 Revision 3b
ATA Transport Version Supported:	SATA 3.1

[Drive Geometry]

Number of Cylinders:	16383
Number of Heads:	16
Sectors Per Track:	63
Number of Sectors:	16514064
Total 32-bit LBA Sectors:	268435455
Total 48-bit LBA Sectors:	11721045168
Logical Sector Size:	512 Bytes
Cache Buffer Size:	N/A

[Transfer Modes]

Sectors Per Interrupt:	Total: 16, Active: 16
Max. PIO Transfer Mode:	4
Multiword DMA Mode:	Total: 2, Active: -
Singleword DMA Mode:	Total: -, Active: -
Ultra-DMA Mode:	Total: 6 (ATA-133), Active: 6 (ATA-133)
Max. Multiword DMA Transfer Rate:	16.7 MBytes/s
Max. PIO with IORDY Transfer Rate:	16.7 MBytes/s
Max. PIO w/o IORDY Transfer Rate:	16.7 MBytes/s
Native Command Queuing:	Supported, Max. Depth: 32
TRIM Command:	Not Supported

[Device flags]

Fixed Drive:	Present
Removable Drive:	Not Present
Magnetic Storage:	Present
LBA Mode:	Supported
DMA Mode:	Supported
IORDY:	Supported
IORDY Disableable:	Supported

[Features]

Write Cache:	Present, Active
S.M.A.R.T. Feature:	Present, Active
Security Feature:	Present, Inactive
Removable Media Feature:	Not Present, Disabled
Power Management:	Present, Active
Advanced Power Management:	Not Present, Inactive
Packet Interface:	Not Present, Disabled
Look-Ahead Buffer:	Present, Active
Host Protected Area:	Present, Enabled
Power-Up In Standby:	Supported, Inactive
Automatic Acoustic Management:	Not Supported, Inactive
48-bit LBA:	Supported, Active
Host-Initiated Link Power Management:	Supported
Device-Initiated Link Power Management:	Supported, Disabled
In-Order Data Delivery:	Not Supported
Hardware Feature Control:	Not Supported
Software Settings Preservation:	Supported, Enabled
NCQ Autosense:	Not Supported
Link Power State Device Sleep:	Not Supported
Hybrid Information Feature:	Not Supported
Rebuild Assist:	Not Supported
Power Disable:	Not Supported
All Write Cache Non-Volatile:	Not Supported
Extended Number of User Addressable Sectors:	Not Supported
CFast Specification:	Not Supported
NCQ Priority Information:	Supported
Host Automatic Partial to Slumber Transitions:	Not Supported
Device Automatic Partial to Slumber Transitions:	Not Supported
NCQ Streaming:	Not Supported
NCQ Queue Management Command:	Not Supported
DevSleep to Reduced Power State:	Not Supported

Out Of Band Management Interface:	Not Supported
Extended Power Conditions Feature:	Not Supported
Sense Data Reporting Feature:	Not Supported
Free-Fall Control Feature:	Not Supported
Write-Read-Verify Feature:	Not Supported

[Security]

Security Feature:	Supported
Security Status:	Disabled
Security Locked:	Disabled
Security Frozen:	Enabled
Enhanced Security Erase:	Supported
Sanitize Feature:	Not Supported
Sanitize Device - Crypto Scramble:	Not Supported
Sanitize Device - Overwrite:	Not Supported
Sanitize Device - Block Erase:	Not Supported
Sanitize Device - Antifreeze Lock:	Not Supported
Device Encrypts All User Data:	Not Supported
Trusted Computing:	Not Supported

[Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)]

[01] Raw Read Error Rate:	200/51, Worst: 198
[03] Spin Up Time:	205/21, Worst: 200 (Data = 8708,0)
[04] Start/Stop Count:	96/Always OK, Worst: 96 (Data = 4199,0)
[05] Reallocated Sector Count:	200/140, Worst: 200
[07] Seek Error Rate:	200/Always OK, Worst: 200
[09] Power-On Hours/Cycle Count:	87/Always OK, Worst: 87 (9902 hours / 1.13 years)
[0A] Spin Retry Count:	100/Always OK, Worst: 100
[0B] Calibration Retry Count:	100/Always OK, Worst: 100
[0C] Power Cycle Count:	98/Always OK, Worst: 98 (Data = 2329,0)
[C0] Power-Off Retract Count:	200/Always OK, Worst: 200 (Data = 129,0)
[C1] Load/Unload Cycle Count:	195/Always OK, Worst: 195 (Data = 17421,0)
[C2] Temperature	131/Always OK, Worst: 115 (21.0 °C)
[C4] Reallocation Event Count:	200/Always OK, Worst: 200
[C5] Current Pending Sector Count:	200/Always OK, Worst: 200
[C6] Off-Line Uncorrectable Sector Count:	100/Always OK, Worst: 253
[C7] UltraDMA/SATA CRC Error Rate:	200/Always OK, Worst: 200
[C8] Write/Multi-Zone Error Rate:	100/Always OK, Worst: 253

Network

Intel Wi-Fi 6 AX200 160MHz

[General information]

Network Card:	Intel Wi-Fi 6 AX200 160MHz
Vendor Description:	Microsoft
MAC Address:	DC-71-96-85-DE-3C

[Capabilities]

Maximum Link Speed:	1 Mbps
Transmit Buffer Size:	9 Bytes
Receive Buffer Size:	9 Bytes
Hardware ID:	PCI\VEN_8086&DEV_2723&SUBSYS_00848086&REV_1A

[Driver Information]

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) Wi-Fi 6 AX200 160MHz
Driver Provider:	Intel
Driver Version:	21.40.2.2
Driver Date:	01-Sep-2019
DeviceInstanceId	PCI\VEN_8086&DEV_2723&SUBSYS_00848086&REV_1A \6&598046A&0&0018000A
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0300)#PCI(0000)

Intel I211AT Copper (Pearsonville) Network Adapter

[General information]

Network Card:	Intel I211AT Copper (Pearsonville) Network Adapter
Vendor Description:	Intel(R) I211 Gigabit Network Connection
MAC Address:	B4-2E-99-3E-4D-91

[Capabilities]

Maximum Link Speed:	1000 Mbps
Transmit Buffer Size:	1550336 Bytes
Receive Buffer Size:	779264 Bytes
Hardware ID:	PCI\VEN_8086&DEV_1539&SUBSYS_E0001458&REV_03

[Driver Information]

Driver Manufacturer:	Intel
Driver Description:	Intel(R) I211 Gigabit Network Connection
Driver Provider:	Intel
Driver Version:	12.15.184.1
Driver Date:	11-Jan-2019
DeviceInstanceId	PCI\VEN_8086&DEV_1539&SUBSYS_E0001458&REV_03 \B42E99FFFF3E4D9100
Location Paths	PCIROOT(0)#PCI(0102)#PCI(0000)#PCI(0400)#PCI(0000)