

# HWiNFO64 v6.28-4200

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Content:

- [CPU](#)
- [Motherboard](#)
- [Memory](#)
- [Bus](#)
- [Video](#)
- [Monitor](#)
- [Drives](#)
- [Audio](#)
- [Network](#)
- [Ports](#)
- [Battery](#)

## MADDIN-PC

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### **[Current Computer]**

<b>Computer Name:</b>	<b>MADDIN-PC</b>
<b>Computer Brand Name:</b>	<b>MSI GE60 2PE</b>

### **[Operating System]**

Operating System:	Microsoft Windows 10 Professional (x64) Build 19042.423
UEFI Boot:	Present
Secure Boot:	Not Present

## Central Processor(s)

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### **[CPU Unit Count]**

<b>Number Of Processor Packages (Physical):</b>	<b>1</b>
<b>Number Of Processor Cores:</b>	<b>4</b>
<b>Number Of Logical Processors:</b>	<b>8</b>

## Intel Core i7-4710HQ

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### **[General Information]**

<b>Processor Name:</b>	<b>Intel Core i7-4710HQ</b>
<b>Original Processor Frequency:</b>	<b>2500.0 MHz</b>
<b>Original Processor Frequency [MHz]:</b>	<b>2500</b>

CPU ID:	000306C3
CPU Brand Name:	Intel(R) Core(TM) i7-4710HQ CPU @ 2.50GHz

CPU Vendor:	GenuineIntel
CPU Stepping:	C0
CPU Code Name:	Haswell-MB
CPU Technology:	22 nm
CPU S-Spec:	SR1PX
CPU Thermal Design Power (TDP):	47.0 W
CPU Thermal Design Current (TDC):	85.0 A
CPU Power Limits (Max):	Power = Unlimited, Time = Unlimited
CPU Power Limit 1 - Long Duration:	Power = 47.00 W, Time = 28.00 sec [Locked]
CPU Power Limit 2 - Short Duration:	Power = 58.75 W, Time = 2.44 ms [Locked]
CPU Max. Junction Temperature (Tj,max):	100 °C
CPU Type:	Production Unit
CPU Platform:	BGA1364
Microcode Update Revision:	27
Number of CPU Cores:	4
Number of Logical CPUs:	8

### **[Operating Points]**

CPU LFM (Minimum):	800.0 MHz = 8 x 100.0 MHz
CPU HFM (Base):	2500.0 MHz = 25 x 100.0 MHz
CPU Turbo Max:	3500.0 MHz = 35 x 100.0 MHz [Unlocked]
Turbo Ratio Limits:	35x (1c), 34x (2c), 33x (3-4c)
CPU Current:	3296.4 MHz = 33 x 99.9 MHz @ 1.0048 V
LLC/Ring Maximum:	3500.0 MHz = 35.00 x 100.0 MHz
LLC/Ring Current:	3296.4 MHz = 33.00 x 99.9 MHz
CPU Bus Type:	Intel Direct Media Interface (DMI) v2.0
Maximum DMI Link Speed:	5.0 GT/s
Current DMI Link Speed:	5.0 GT/s
PCI-Express Current Clock:	99.9 MHz = 1.00 x 99.9 MHz
Number of Overclocking Bins:	2

### **[IA Overclocking]**

Voltage Offset:	Supported
Voltage Override:	Supported
Ratio Overclocking:	Supported
Fused Ratio Limit:	37x
OC Ratio Limit:	N/A
Voltage Mode:	Adaptive
Voltage Offset:	0 mV

### **[GT Overclocking]**

Voltage Offset:	Supported
Voltage Override:	Supported
Ratio Overclocking:	Supported
Fused Ratio Limit:	57x
OC Ratio Limit:	N/A
Voltage Mode:	Adaptive
Voltage Offset:	0 mV

### **[CLR (CBo/LLC/Ring) Overclocking]**

Voltage Offset:	Supported
Voltage Override:	Supported

Ratio Overclocking:	Supported
Fused Ratio Limit:	37x
OC Ratio Limit:	N/A
Voltage Mode:	Adaptive
Voltage Offset:	0 mV

#### **[Uncore/SA Overclocking]**

Voltage Offset:	Supported
Voltage Override:	Not Supported
Ratio Overclocking:	Not Supported
Fused Ratio Limit:	N/A
OC Ratio Limit:	N/A
Voltage Mode:	Adaptive
Voltage Offset:	0 mV

#### **[Analog IO Overclocking]**

Voltage Offset:	Supported
Voltage Override:	Not Supported
Ratio Overclocking:	Not Supported
Fused Ratio Limit:	N/A
OC Ratio Limit:	N/A
Voltage Mode:	Adaptive
Voltage Offset:	0 mV

#### **[Digital IO Overclocking]**

Voltage Offset:	Supported
Voltage Override:	Not Supported
Ratio Overclocking:	Not Supported
Fused Ratio Limit:	N/A
OC Ratio Limit:	N/A
Voltage Mode:	Adaptive
Voltage Offset:	0 mV

#### **[Cache and TLB]**

L1 Cache:	Instruction: 4 x 32 KBytes, Data: 4 x 32 KBytes
L2 Cache:	Integrated: 4 x 256 KBytes
L3 Cache:	6 MBytes
Instruction TLB:	2MB/4MB Pages, Fully associative, 8 entries
Data TLB:	4 KB Pages, 4-way set 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	Present
Internal ACPI Support	Present
MMX Technology	Present
Fast FP Save/Restore (IA MMX-2)	Present
Streaming SIMD Extensions	Present
Streaming SIMD Extensions 2	Present
Self-Snoop	Present
Multi-Threading Capable	Present
Automatic Clock Control	Present
IA-64 Processor	Not Present
Signal Break on FERR	Present
Virtual Machine Extensions (VMX)	Present
Safer Mode Extensions (Intel TXT)	Not Present
Streaming SIMD Extensions 3	Present
Supplemental Streaming SIMD Extensions 3	Present
Streaming SIMD Extensions 4.1	Present
Streaming SIMD Extensions 4.2	Present
AVX Support	Present
Fused Multiply Add (FMA)	Present
Carryless Multiplication (PCLMULQDQ)/GFMUL	Present
CMPXCHG16B Support	Present
MOVBE Instruction	Present
POPCNT Instruction	Present
XSAVE/XRSTOR/XSETBV/XGETBV Instructions	Present
XGETBV/XSETBV OS Enabled	Present
Float16 Instructions	Present
AES Cryptography Support	Present
Random Number Read Instruction (RDRAND)	Present
Extended xAPIC	Present
MONITOR/MWAIT Support	Present
Thermal Monitor 2	Present
Enhanced SpeedStep Technology	Present
L1 Context ID	Not Present
Send Task Priority Messages Disabling	Present
Processor Context ID	Present
Direct Cache Access	Not Present
TSC-deadline Timer	Present
Performance/Debug Capability MSR	Present
IA32 Debug Interface Support	Present
64-Bit Debug Store	Present
CPL Qualified Debug Store	Present

#### **[Extended Feature Flags]**

64-bit Extensions	Present
RDTSCP and TSC_AUX Support	Present
1 GB large page support	Present
No Execute	Present
SYSCALL/SYSRET Support	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	Not Present
Software Guard Extensions (SGX) Support	Not Present
Supervisor Mode Execution Protection (SMEP)	Present
Supervisor Mode Access Prevention (SMAP)	Not 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	Present
INVPCID Instruction	Present
RDSEED Instruction	Not Present
Multi-precision Add Carry Instructions (ADX)	Not Present
PCOMMIT Instructions	Not Present
CLFLUSHOPT Instructions	Not Present
CLWB Instructions	Not Present
TSC_THREAD_OFFSET	Present
Platform Quality of Service Monitoring (PQM)	Not Present
Platform Quality of Service Enforcement (PQE)	Not Present
FPU Data Pointer updated only on x87 Exceptions	Not Present
Deprecated FPU CS and FPU DS	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	Not 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	Not 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
Control-Flow Enforcement Technology (CET) Shadow Stack	Not Present
AVX-512 BFLOAT16 Instructions	Not Present

### **[Enhanced Features]**

Thermal Monitor 1:	Supported, Enabled
Thermal Monitor 2:	Supported, Enabled
Enhanced Intel SpeedStep (GV3):	Supported, Enabled
Bi-directional PROCHOT#:	Enabled
Extended Auto-HALT State C1E:	Enabled
MLC Streamer Prefetcher	Supported, Enabled
MLC Spatial Prefetcher	Supported, Enabled

DCU Streamer Prefetcher	Supported, Enabled
DCU IP Prefetcher	Supported, Enabled
Intel Dynamic Acceleration (IDA) Technology:	Not Supported
Intel Dynamic FSB Switching:	Not Supported
Intel Turbo Boost Technology:	Supported, Enabled
Programmable Ratio Limits:	Supported, Disabled
Programmable TDC/TDP Limits:	Supported, Disabled
Hardware Duty Cycling:	Not Supported

### **[CPU SKU Features]**

Internal Graphics:	Supported
ECC:	Not Supported
VT-d:	Supported
2 DIMMs per Channel:	Supported
X2APIC:	Supported
Dual Channel:	Supported
BCLK Coarse Ratio Support (PCIe Ratio Changing):	Supported
DDR Overclocking:	Supported
Overclocking:	Not Supported
Overclocking:	Enabled
DMI Width:	x4
DMI Gen 2 Mode:	Supported
Camarillo Device:	Supported
Display HD Audio:	Supported
DDR3L:	Supported
Maximum Memory Size per Channel:	16 GB
DDR3 Frequency Support (100 MHz RefClk):	800 MHz (DDR3-1600)
Additive Graphics:	Supported
Additive Graphics:	Enabled
PCIe Gen 3:	Supported
PCIe x16 Port:	Supported
SOFTBIN:	Not Supported

### **[Voltage Regulator (SVID)]**

VCC VR:	Intersil ISL95813, VR12.6
VR Thermal Sensor:	Not Supported

### **[Memory Ranges]**

Maximum Physical Address Size:	39-bit (512 GBytes)
Maximum Virtual Address Size:	48-bit (256 TBytes)

### **[MTRRs]**

Range 0-400000000 (0MB-16384MB) Type:	Write Back (WB)
Range 400000000-420000000 (16384MB-16896MB) Type:	Write Back (WB)
Range 420000000-430000000 (16896MB-17152MB) Type:	Write Back (WB)
Range E0000000-100000000 (3584MB-4096MB) Type:	Uncacheable (UC)
Range D0000000-E0000000 (3328MB-3584MB) Type:	Uncacheable (UC)
Range CE000000-D0000000 (3296MB-3328MB) Type:	Uncacheable (UC)
Range CD000000-CE000000 (3280MB-3296MB) Type:	Uncacheable (UC)
Range 42FE0000-430000000 (17150MB-17152MB) Type:	Uncacheable (UC)

## Motherboard

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### [Computer]

Computer Brand Name: MSI GE60 2PE

### [Motherboard]

Motherboard Model: MSI MS-16GF  
Motherboard Chipset: Intel HM87 (Lynx Point)  
Motherboard Slots: 4xPCI Express x1, 1xPCI Express x16  
PCI Express Version Supported: v3.0  
USB Version Supported: v3.0  
PCH PEG/DMI Ratio: 5/5

### [BIOS]

BIOS Manufacturer: American Megatrends Inc.  
BIOS Date: 03/13/2015  
BIOS Version: E16GFIMS.52A  
UEFI BIOS: Capable  
  
Super-IO/LPC Chip: Unknown

## ACPI Devices

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### Radio Switch Device

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Device Name: Radio Switch Device

### [Assigned Resources]

Memory Location: FC0008DB - FC0008DC

### [Alternative 1]

Memory Location: FC0008DB - FC0008DC  
Memory Location: FC000000 - FC0008DA  
Memory Location: FC0008DD - FC00FFFF

## ELAN Input Device

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Device Name: ELAN Input Device

### [Assigned Resources]

IRQ: 12

### [Alternative 1]

IRQ: 12

## Legacy device

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Device Name: Legacy device

### **[Assigned Resources]**

Memory Location: FF000000 - FFFFFFFF

### **[Alternative 1]**

Memory Location: FF000000 - FFFFFFFF

## Intel(R) Watchdog Timer Driver (Intel(R) WDT)

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Device Name: Intel(R) Watchdog Timer Driver (Intel(R) WDT)

### **[Assigned Resources]**

I/O Port: 1854 - 1857

### **[Alternative 1]**

I/O Port: 1854 - 1857

## SteelSeries PS2 Device

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Device Name: SteelSeries PS2 Device

### **[Assigned Resources]**

I/O Port: 0060

I/O Port: 0000

### **[Alternative 1]**

I/O Port: 0060

I/O Port: 0064

IRQ: 1

## Programmable interrupt controller

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Device Name: Programmable interrupt controller

### **[Assigned Resources]**

I/O Port: 0020 - 0021

I/O Port: 0030 - 0031

I/O Port: 00A0 - 00A1



I/O Port:	00B0 - 00B1
IRQ:	1114369
IRQ:	1114369
IRQ:	1114369
IRQ:	1114369

**[Alternative 1]**

I/O Port:	0020 - 0021
I/O Port:	0024 - 0025
I/O Port:	0028 - 0029
I/O Port:	002C - 002D
I/O Port:	0030 - 0031
I/O Port:	0034 - 0035
I/O Port:	0038 - 0039
I/O Port:	003C - 003D
I/O Port:	00A0 - 00A1
I/O Port:	00A4 - 00A5
I/O Port:	00A8 - 00A9
I/O Port:	00AC - 00AD
I/O Port:	00B0 - 00B1
I/O Port:	00B4 - 00B5
I/O Port:	00B8 - 00B9
I/O Port:	00BC - 00BD
I/O Port:	04D0 - 04D1

## System timer

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Device Name:	System timer
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**[Assigned Resources]**

I/O Port:	0040 - 0043
DMA:	0

**[Alternative 1]**

I/O Port:	0040 - 0043
I/O Port:	0050 - 0053
IRQ:	0

## High precision event timer

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Device Name:	High precision event timer
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**[Assigned Resources]**

Memory Location:	FED00000 - FED003FF
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**[Alternative 1]**

Memory Location:	FED00000 - FED003FF
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## Direct memory access controller

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Device Name: Direct memory access controller

### **[Assigned Resources]**

I/O Port: 0000 - 001F

### **[Alternative 1]**

I/O Port: 0000 - 001F  
I/O Port: 0081 - 0091  
I/O Port: 0093 - 009F  
I/O Port: 00C0 - 00DF  
DMA: 4

## PCI Express Root Complex

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Device Name: PCI Express Root Complex

### **[Assigned Resources]**

I/O Port: 0000 - FFFFFFFF  
Memory Location: 000A0000 - 000BFFFF  
Memory Location: 000C4000 - 000C3FFF  
Memory Location: 000CC000 - 000CFFFF  
Memory Location: 000D4000 - 000D3FFF

### **[Alternative 1]**

I/O Port: 0000 - 0CF7  
I/O Port: 0D00 - FFFF  
Memory Location: 000A0000 - 000BFFFF  
Memory Location: 000C0000 - 000C3FFF  
Memory Location: 000C4000 - 000C7FFF  
Memory Location: 000C8000 - 000CBFFF  
Memory Location: 000CC000 - 000CFFFF  
Memory Location: 000D0000 - 000D3FFF  
Memory Location: 000D4000 - 000D7FFF  
Memory Location: 000D8000 - 000DBFFF  
Memory Location: 000DC000 - 000DFFFF  
Memory Location: CF200000 - FEAFFFFFFF

## System CMOS/real time clock

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Device Name: System CMOS/real time clock

### **[Assigned Resources]**

I/O Port:	0070 - 0077
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**[Alternative 1]**

I/O Port:	0070 - 0077
IRQ:	8

## System board

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Device Name:	System board
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**[Assigned Resources]**

Memory Location:	FED40000 - FED44FFF
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**[Alternative 1]**

Memory Location:	FED40000 - FED44FFF
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## Motherboard resources

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Device Name:	Motherboard resources
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**[Assigned Resources]**

Memory Location:	FED1C000 - FED1FFFF
Memory Location:	F8000000 - FBFFFFFF
Memory Location:	FF000000 - FFFFFFFF

**[Alternative 1]**

Memory Location:	FED1C000 - FED1FFFF
Memory Location:	FED10000 - FED17FFF
Memory Location:	FED18000 - FED18FFF
Memory Location:	FED19000 - FED19FFF
Memory Location:	F8000000 - FBFFFFFF
Memory Location:	FED20000 - FED3FFFF
Memory Location:	FED90000 - FED93FFF
Memory Location:	FED45000 - FED8FFFF
Memory Location:	FF000000 - FFFFFFFF
Memory Location:	FEE00000 - FEEFFFFFF
Memory Location:	F7FDF000 - F7FDFFFF
Memory Location:	F7FE0000 - F7FEFFFF

## Motherboard resources

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Device Name:	Motherboard resources
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**[Assigned Resources]**

I/O Port:	0010 - 001F
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I/O Port:	0080
I/O Port:	0090 - 009F
Memory Location:	00000000 - 00000087

**[Alternative 1]**

I/O Port:	0010 - 001F
I/O Port:	0022 - 003F
I/O Port:	0044 - 005F
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:	00E0 - 00EF
I/O Port:	04D0 - 04D1

## Motherboard resources

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Device Name:	Motherboard resources
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**[Assigned Resources]**

I/O Port:	002E - 002F
I/O Port:	0065
I/O Port:	0000 - 006F
I/O Port:	0092
I/O Port:	FFFF
I/O Port:	0000 - 1BFF
IRQ:	1114369
IRQ:	1114369

**[Alternative 1]**

I/O Port:	002E - 002F
I/O Port:	004E - 004F
I/O Port:	0061
I/O Port:	0063
I/O Port:	0065
I/O Port:	0067
I/O Port:	0070
I/O Port:	0080
I/O Port:	0092
I/O Port:	00B2 - 00B3
I/O Port:	0680 - 069F
I/O Port:	FFFF
I/O Port:	FFFF
I/O Port:	FFFF
I/O Port:	1C00 - 1CFE
I/O Port:	1D00 - 1DFE
I/O Port:	1E00 - 1EFE

I/O Port:	1F00 - 1FFE
I/O Port:	1800 - 18FE
I/O Port:	164E - 164F

## Numeric data processor

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Device Name:	Numeric data processor
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### **[Assigned Resources]**

I/O Port:	00F0
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### **[Alternative 1]**

I/O Port:	00F0
IRQ:	13

## Microsoft ACPI-Compliant Embedded Controller

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Device Name:	Microsoft ACPI-Compliant Embedded Controller
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### **[Assigned Resources]**

I/O Port:	0062
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### **[Alternative 1]**

I/O Port:	0062
I/O Port:	0066

## SMBIOS DMI

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## OEM Strings

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\$BIOSE11100000000000000000

## BIOS

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BIOS Vendor:	American Megatrends Inc.
BIOS Version:	E16GFIMS.52A
BIOS Release Date:	03/13/2015

BIOS Start Segment:	F000
BIOS Size:	3072 KBytes
System BIOS Version:	4.6
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:	Not 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

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System Manufacturer:	Micro-Star International Co., Ltd.
Product Name:	GE60 2PE
Product Version:	REV:1.0
Product Serial Number:	FFFFFFFF
SKU Number:	To be filled by O.E.M.
Family:	To be filled by O.E.M.

## Mainboard

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Mainboard Manufacturer:	Micro-Star International Co., Ltd.
Mainboard Name:	MS-16GF
Mainboard Version:	REV:0.B
Mainboard Serial Number:	BSS-0123456789
Asset Tag:	To be filled by O.E.M.
Location in chassis:	To be filled by O.E.M.

## System Enclosure

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Manufacturer:	To Be Filled By O.E.M.
Case Type:	Desktop
Version:	To Be Filled By O.E.M.
Serial Number:	To Be Filled By O.E.M.
Asset Tag Number:	To Be Filled By O.E.M.

## On Board Device

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

## System Configuration Options

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To Be Filled By O.E.M.

## System Boot Information

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Boot Status:	No error occurred
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## Management Device

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Device Description:	LM78-1
Device Type:	National Semiconductor LM78
Device Address:	I/O: 0

## Voltage Probe

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Description:	LM78A
Location:	Unknown
Status:	Unknown
Maximum Value:	Unknown
Minimum Value:	Unknown
Resolution:	Unknown
Tolerance:	Unknown
Accuracy:	Unknown

**Management Device Threshold Data**

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**Management Device Component**

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**Temperature Probe**

---

Description:	LM78A
Location:	Unknown
Status:	Unknown
Maximum Value:	Unknown
Minimum Value:	Unknown
Resolution:	Unknown
Tolerance:	Unknown
Accuracy:	Unknown

**Management Device Threshold Data**

---

**Management Device Component**

---

**Cooling Device**

---

Type:	Unknown
Description:	Cooling Dev 1
Status:	Unknown



Management Device Threshold Data

---

Management Device Component

---

Cooling Device

---

Type:	Unknown
Description:	
Status:	Unknown

Management Device Threshold Data

---

Management Device Component

---

Electrical Current Probe

---

Description:	ABC
Location:	Unknown
Status:	Unknown
Maximum Value:	Unknown
Minimum Value:	Unknown
Resolution:	Unknown
Tolerance:	Unknown
Accuracy:	Unknown

Management Device Threshold Data

---

Management Device Component

---

## Voltage Probe

---

Description:	LM78A
Location:	Power Unit
Status:	OK
Maximum Value:	Unknown
Minimum Value:	Unknown
Resolution:	Unknown
Tolerance:	Unknown
Accuracy:	Unknown

---

## Temperature Probe

---

Description:	LM78A
Location:	Power Unit
Status:	OK
Maximum Value:	Unknown
Minimum Value:	Unknown
Resolution:	Unknown
Tolerance:	Unknown
Accuracy:	Unknown

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## Cooling Device

---

Type:	Power Supply Fan
Description:	Cooling Dev 1
Status:	OK

---

## Electrical Current Probe

---

Description:	ABC
Location:	Power Unit
Status:	OK
Maximum Value:	Unknown
Minimum Value:	Unknown
Resolution:	Unknown
Tolerance:	Unknown
Accuracy:	Unknown

## System Power Supply

---

Location:	To Be Filled By O.E.M.
Device Name:	To Be Filled By O.E.M.
Manufacturer:	To Be Filled By O.E.M.
Serial Number:	To Be Filled By O.E.M.
Asset Tag Number:	To Be Filled By O.E.M.
Model Part Number:	To Be Filled By O.E.M.
Revision Level:	To Be Filled By O.E.M.
Power Supply Status:	Present
Power Supply Type:	Switching
Power Status:	OK
Hot replaceable:	No
Unplugged from wall:	No

## On Board Device

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Device Description:	Onboard IGD
Device Type:	Video Adapter
Device Status:	Enabled

## On Board Device

---

Device Description:	Onboard LAN
Device Type:	Ethernet Adapter
Device Status:	Enabled

## On Board Device

---

Device Description:	Onboard 1394
Device Type:	Unknown
Device Status:	Enabled

## CPU Internal L1

---

Socket Designation:	CPU Internal L1
Cache State:	Enabled
Cache Location:	Internal

Cache Type:	L1
Cache Scheme:	Write-Back
Supported SRAM Type:	
Current SRAM Type:	
Cache Speed:	Unknown
Error Correction Type:	Single-bit ECC
Maximum Cache Size:	256 KBytes
Installed Cache Size:	256 KBytes
Cache Associativity:	8-way Set-Associative

## Processor

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Processor Manufacturer:	Intel
Processor Version:	Intel(R) Core(TM) i7-4710HQ CPU @ 2.50GHz
External Clock:	100 MHz
Maximum Clock Supported:	3800 MHz
Current Clock:	2500 MHz
CPU Socket:	Populated
CPU Status:	Enabled
Processor Type:	Central Processor
Processor Voltage:	1.2 V
Processor Upgrade:	Socket rPGA988B
Socket Designation:	SOCKET 0

## CPU Internal L2

---

Socket Designation:	CPU Internal L2
Cache State:	Enabled
Cache Location:	Internal
Cache Type:	L2 Unified
Cache Scheme:	Write-Back
Supported SRAM Type:	
Current SRAM Type:	
Cache Speed:	Unknown
Error Correction Type:	Single-bit ECC
Maximum Cache Size:	1024 KBytes
Installed Cache Size:	1024 KBytes
Cache Associativity:	8-way Set-Associative

## CPU Internal L3

---

Socket Designation:	CPU Internal L3
Cache State:	Enabled
Cache Location:	Internal
Cache Type:	L3 Unified

Cache Scheme:	Write-Back
Supported SRAM Type:	
Current SRAM Type:	
Cache Speed:	Unknown
Error Correction Type:	Single-bit ECC
Maximum Cache Size:	6144 KBytes
Installed Cache Size:	6144 KBytes
Cache Associativity:	12-way Set-Associative

## Intel vPro

---

CPU VT-x Support:	Supported
CPU VT-x Status:	Enabled
CPU VT-x2 Support:	Not Supported
CPU VT-x2 Status:	Disabled
CPU TXT Support:	Not Supported
CPU TXT Status:	Disabled
CPU VMX Status:	Enabled
CPU SMX Status:	Disabled
Intel ME Status:	Enabled
Intel OST Firmware Support:	Not Supported
Intel ASF Firmware Support:	Not Supported
Intel AMT Pro Firmware Support:	Not Supported
Intel AMT Basic Firmware Support:	Not Supported
Intel TPM Firmware Support:	Not Supported
Intel Castle Peak Support:	Not Supported
Intel WoX Support:	Not Supported
Intel Virtualization Engine Support:	Not Supported
Intel Anti-Theft Technology Support:	Not Supported
TPM On-board:	Not Supported
Intel Anti-Theft Technology Enrolled:	Not Supported
Intel ME Version:	v9.0, Build 1482, Hotfix 30
BIOS VT-x Support:	Not Supported
BIOS VT-d Support:	Supported
BIOS TXT Support:	Supported
BIOS TPM Support:	Not Supported
BIOS ME Support:	Not Supported
BIOS VA Extensions Support:	Supported
Intel AT PBA For Recovery Support:	Supported
Intel AT WWAN Support:	Not Supported

## BIOS Language

---

en|US|iso8859-1 <Active>

## Memory Devices

---

## Physical Memory Array

---

Array Location:	System board
Array Use:	System memory
Error Detecting Method:	None
Memory Capacity:	16 GBytes
Memory Devices:	2

## Memory Device

---

Total Width:	64 bits
Data Width:	64 bits
Device Size:	8192 MBytes
Device Form Factor:	SODIMM
Device Locator:	ChannelA-DIMM0
Bank Locator:	BANK 0
Device Type:	DDR3 SDRAM
Device Type Detail:	Synchronous
Memory Speed:	1600 MHz
Manufacturer:	Kingston
Serial Number:	2F239509
Part Number:	99U5428-072.A00G
Asset Tag:	9876543210

## Memory Device Mapped Address

---

Starting Address:	00000000
Ending Address:	007FFFFF
Partition Row Position:	Unknown
Interleave Position:	Unknown
Interleave Data Depth:	Unknown

## Memory Device

---

Total Width:	64 bits
Data Width:	64 bits
Device Size:	8192 MBytes
Device Form Factor:	SODIMM
Device Locator:	ChannelB-DIMM0
Bank Locator:	BANK 2
Device Type:	DDR3 SDRAM

Device Type Detail:	Synchronous
Memory Speed:	1600 MHz
Manufacturer:	Kingston
Serial Number:	2923D409
Part Number:	99U5428-072.A00G
Asset Tag:	9876543210

## Memory Device Mapped Address

---

Starting Address:	00800000
Ending Address:	00FFFFFF
Partition Row Position:	Unknown
Interleave Position:	Unknown
Interleave Data Depth:	Unknown

## Memory Array Mapped Address

---

Starting Address:	00000000
Ending Address:	00FFFFFF
Partition Width:	2

## Port Connectors

---

### Mouse Port

---

Port Type:	Mouse Port
Internal Reference:	J1A1
Internal Connector Type:	None
External Reference:	PS2Mouse
External Connector Type:	PS/2

### Keyboard Port

---

Port Type:	Keyboard Port
Internal Reference:	J1A1
Internal Connector Type:	None
External Reference:	Keyboard
External Connector Type:	PS/2

## Port Connector

---

Port Type:	Unknown
Internal Reference:	J2A1
Internal Connector Type:	None
External Reference:	TV Out
External Connector Type:	Mini-Centronics Type-14

## Serial Port 16550A Compatible

---

Port Type:	Serial Port 16550A Compatible
Internal Reference:	J2A2A
Internal Connector Type:	None
External Reference:	COM A
External Connector Type:	DB-9 pin male

## Video Port

---

Port Type:	Video Port
Internal Reference:	J2A2B
Internal Connector Type:	None
External Reference:	Video
External Connector Type:	DB-15 pin female

## USB

---

Port Type:	USB
Internal Reference:	J3A1
Internal Connector Type:	None
External Reference:	USB1
External Connector Type:	Access Bus (USB)

## USB

---

Port Type:	USB
Internal Reference:	J3A1
Internal Connector Type:	None
External Reference:	USB2
External Connector Type:	Access Bus (USB)



USB

---

Port Type:	USB
Internal Reference:	J3A1
Internal Connector Type:	None
External Reference:	USB3
External Connector Type:	Access Bus (USB)

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9A1 - TPM HDR
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9C1 - PCIE DOCKING CONN
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J2B3 - CPU FAN
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J6C2 - EXT HDMI
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J3C1 - GMCH FAN
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J1D1 - ITP
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9E2 - MDC INTPSR
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9E4 - MDC INTPSR
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9E3 - LPC HOT DOCKING
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9E1 - SCAN MATRIX
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J9G1 - LPC SIDE BAND
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J8F1 - UNIFIED
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J6F1 - LVDS
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J2F1 - LAI FAN
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J2G1 - GFX VID
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

Port Connector

---

Port Type:	Unknown
Internal Reference:	J1G6 - AC JACK
Internal Connector Type:	Unknown
External Reference:	
External Connector Type:	None

System Slots

---

J6B2

---

Slot Designation:	J6B2
Slot Type:	PCI Express
Slot Usage:	In use
Slot Data Bus Width:	16x / x16
Slot Length:	Long

J6B1

---

Slot Designation:	J6B1
Slot Type:	PCI Express
Slot Usage:	In use
Slot Data Bus Width:	1x / x1
Slot Length:	Short

J6D1

---

Slot Designation:	J6D1
Slot Type:	PCI Express
Slot Usage:	In use
Slot Data Bus Width:	1x / x1
Slot Length:	Short

## J7B1

---

Slot Designation:	J7B1
Slot Type:	PCI Express
Slot Usage:	In use
Slot Data Bus Width:	1x / x1
Slot Length:	Short

## J8B4

---

Slot Designation:	J8B4
Slot Type:	PCI Express
Slot Usage:	In use
Slot Data Bus Width:	1x / x1
Slot Length:	Short

## Intel ME

---

### **[ME Host Status]**

ME Current Working State:	Normal
Manufacturing Mode:	Not Active
ME Current Operation Mode:	Normal

### **[Intel Manageability Engine Features]**

Intel ME Version:	9.0, Build 1482, Hot Fix 30
Intel ME Recovery Image Version:	9.0, Build 1482, Hot Fix 30
Intel ME FITC Version:	9.0, Build 1467, Hot Fix 22

### **[ME Firmware Capabilities]**

Full Network Manageability:	Not Capable
Standard Network Manageability:	Not Capable
Manageability (AMT):	Not Capable
Small Business Advantage:	Not Capable
Manageability Upgrade:	Not Capable
Intel Anti-Theft:	Capable
Capability Licensing Service:	Capable
Virtualization Engine:	Not Capable
Power Sharing Technology (MPC):	Not Capable
ICC Over Clocking:	Capable

Protected Audio Video Path (PAVP):	Capable
Identity Protection Technology (IPT):	Not Capable
Remote PC Assist (RPAT):	Not Capable
IPV6:	Not Capable
KVM Remote Control:	Not Capable
Outbreak Containment Heuristic (OCH):	Not Capable
Virtual LAN (VLAN):	Capable
Cipher Transport Layer (TLS):	Not Capable
Wireless LAN (WLAN):	Not Capable
Platform Trust Technology (PTT):	Not Capable
Near Field Communication (NFC):	Not Capable

### **[ME Firmware Feature State]**

Full Network Manageability:	Disabled
Standard Network Manageability:	Disabled
Manageability (AMT):	Disabled
Small Business Advantage:	Not Capable
Manageability Upgrade:	Not Capable
Intel Anti-Theft:	Enabled
Capability Licensing Service:	Enabled
Virtualization Engine:	Disabled
Power Sharing Technology (MPC):	Disabled
ICC Over Clocking:	Enabled
Protected Audio Video Path (PAVP):	Enabled
Identity Protection Technology (IPT):	Not Capable
Remote PC Assist (RPAT):	Disabled
IPV6:	Disabled
KVM Remote Control:	Disabled
Outbreak Containment Heuristic (OCH):	Disabled
Virtual LAN (VLAN):	Capable
Cipher Transport Layer (TLS):	Disabled
Wireless LAN (WLAN):	Disabled
Platform Trust Technology (PTT):	Disabled
Near Field Communication (NFC):	Disabled

### **[ME Firmware Platform Type]**

Platform Target Usage Type:	Mobile
SKU:	Regular SKU
ME Firmware Image Type:	1.5MB Firmware
Platform Brand:	None
Host ME Region Flash Protection Override (HMRFPD) Status:	Locked

## **Memory**

---

### **[General information]**

Total Memory Size:	16 GBytes
Total Memory Size [MB]:	16384

### **[Current Performance Settings]**

Maximum Supported Memory Clock:	800.0 MHz
Current Memory Clock:	799.1 MHz (8 : 1 ratio)
Current Timing (tCAS-tRCD-tRP-tRAS):	11-11-11-28
Memory Channels Supported:	2
Memory Channels Active:	2
Command Rate:	1T
Read to Read Delay (tRD_RD) Same Rank:	4T
Read to Read Delay (tRD_RD) Different Rank:	6T
Read to Read Delay (tRD_RD) Different DIMM:	6T
Write to Write Delay (tWR_WR) Same Rank:	4T
Write to Write Delay (tWR_WR) Different Rank:	7T
Write to Write Delay (tWR_WR) Different DIMM:	7T
Read to Write Delay (tRD_WR) Same Rank:	11T
Read to Write Delay (tRD_WR) Different Rank:	11T
Read to Write Delay (tRD_WR) Different DIMM:	11T
Write to Read Delay (tWR_RD) Same Rank (tWTR):	20T
Write to Read Delay (tWR_RD) Different Rank:	3T
Write to Read Delay (tWR_RD) Different DIMM:	4T
Read to Precharge Delay (tRTP):	6T
Write to Precharge Delay (tWTP):	24T
Write Recovery Time (tWR):	23T
RAS# to RAS# Delay (tRRD):	5T
Refresh Cycle Time (tRFC):	208T
Four Activate Window (tFAW):	24T

## Row: 0 - 8 GB PC3-12800 DDR3 SDRAM Kingston 99U5428-072.A00G

---

### [General Module Information]

Module Number:	0
<b>Module Size:</b>	<b>8 GBytes</b>
<b>Memory Type:</b>	<b>DDR3 SDRAM</b>
Module Type:	SO-DIMM
<b>Memory Speed:</b>	<b>800.0 MHz (DDR3-1600 / PC3-12800)</b>
<b>Module Manufacturer:</b>	<b>Kingston</b>
<b>Module Part Number:</b>	<b>99U5428-072.A00G</b>
Module Revision:	0
Module Serial Number:	160768815
Module Manufacturing Date:	Year: 2013, Week: 51
Module Manufacturing Location:	5

SDRAM Manufacturer:	Unknown
Error Check/Correction:	None

### **[Module characteristics]**

Row Address Bits:	16
Column Address Bits:	10
Number Of Banks:	8
Module Density:	4096 Mb
Number Of Ranks:	2
Device Width:	8 bits
Bus Width:	64 bits
Module Nominal Voltage (VDD):	1.5 V

### **[Module timing]**

Minimum SDRAM Cycle Time (tCKmin):	1.250 ns
CAS# Latencies Supported:	6, 7, 8, 9, 10, 11
Minimum CAS# Latency Time (tAmin):	13.125 ns
Minimum RAS# to CAS# Delay (tRCDmin):	13.125 ns
Minimum Row Precharge Time (tRPmin):	13.125 ns
Minimum Active to Precharge Time (tRASmin):	35.000 ns

Supported Module Timing at 800.0 MHz: 11-11-11-28  
Supported Module Timing at 666.7 MHz: 9-9-9-24  
Supported Module Timing at 533.3 MHz: 7-7-7-19  
Supported Module Timing at 400.0 MHz: 6-6-6-14

Minimum Write Recovery Time (tWRmin):	15.000 ns
Minimum Row Active to Row Active Delay (tRRDmin):	6.000 ns
Minimum Active to Active/Refresh Time (tRCmin):	48.125 ns
Minimum Refresh Recovery Time Delay (tRFCmin):	260.000 ns
Minimum Internal Write to Read Command Delay (tWTRmin):	7.500 ns
Minimum Internal Read to Precharge Command Delay (tRTPmin):	7.500 ns
Minimum Four Activate Window Delay Time (tFAWmin):	30.000 ns

### **[Features]**

Partial Array Self Refresh (PASR):	Supported
On-die Thermal Sensor (ODTS) Readout:	Not Supported
Auto Self Refresh (ASR):	Not Supported
Extended Temperature 1X Refresh Rate:	Not Supported
Extended Temperature Range:	Supported
Module Temperature Sensor:	Not Supported
Pseudo Target Row Refresh (pTRR):	Not Supported
Module Nominal Height:	29 - 30 mm
Module Maximum Thickness (Front):	1 - 2 mm
Module Maximum Thickness (Back):	1 - 2 mm



## Row: 2 - 8 GB PC3-12800 DDR3 SDRAM Kingston 99U5428-072.A00G

---

### [General Module Information]

Module Number:	2
<b>Module Size:</b>	<b>8 GBytes</b>
<b>Memory Type:</b>	<b>DDR3 SDRAM</b>
Module Type:	SO-DIMM
<b>Memory Speed:</b>	<b>800.0 MHz (DDR3-1600 / PC3-12800)</b>
<b>Module Manufacturer:</b>	<b>Kingston</b>
<b>Module Part Number:</b>	<b>99U5428-072.A00G</b>
Module Revision:	0
Module Serial Number:	164897577
Module Manufacturing Date:	Year: 2013, Week: 51
Module Manufacturing Location:	5
SDRAM Manufacturer:	Unknown
Error Check/Correction:	None

### [Module characteristics]

Row Address Bits:	16
Column Address Bits:	10
Number Of Banks:	8
Module Density:	4096 Mb
Number Of Ranks:	2
Device Width:	8 bits
Bus Width:	64 bits
Module Nominal Voltage (VDD):	1.5 V

### [Module timing]

Minimum SDRAM Cycle Time (tCKmin):	1.250 ns
CAS# Latencies Supported:	6, 7, 8, 9, 10, 11
Minimum CAS# Latency Time (tAmin):	13.125 ns
Minimum RAS# to CAS# Delay (tRCDmin):	13.125 ns
Minimum Row Precharge Time (tRPmin):	13.125 ns
Minimum Active to Precharge Time (tRASmin):	35.000 ns

Supported Module Timing at 800.0 MHz: 11-11-11-28

Supported Module Timing at 666.7 MHz: 9-9-9-24

Supported Module Timing at 533.3 MHz: 7-7-7-19

Supported Module Timing at 400.0 MHz: 6-6-6-14

Minimum Write Recovery Time (tWRmin):	15.000 ns
Minimum Row Active to Row Active Delay (tRRDmin):	6.000 ns
Minimum Active to Active/Refresh Time (tRCmin):	48.125 ns
Minimum Refresh Recovery Time Delay (tRFCmin):	260.000 ns

Minimum Internal Write to Read Command Delay (tWTRmin):	7.500 ns
Minimum Internal Read to Precharge Command Delay (tRTPmin):	7.500 ns
Minimum Four Activate Window Delay Time (tFAWmin):	30.000 ns

#### [Features]

Partial Array Self Refresh (PASR):	Supported
On-die Thermal Sensor (ODTS) Readout:	Not Supported
Auto Self Refresh (ASR):	Not Supported
Extended Temperature 1X Refresh Rate:	Not Supported
Extended Temperature Range:	Supported
Module Temperature Sensor:	Not Supported
Pseudo Target Row Refresh (pTRR):	Not Supported
Module Nominal Height:	29 - 30 mm
Module Maximum Thickness (Front):	1 - 2 mm
Module Maximum Thickness (Back):	1 - 2 mm

## Bus

---

### PCI Bus #0

---

## Intel Haswell-MB - Host Bridge/DRAM Controller [C0]

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#### [General Information]

<b>Device Name:</b>	<b>Intel Haswell-MB - Host Bridge/DRAM Controller [C0]</b>
<b>Original Device Name:</b>	<b>Intel Haswell-MB - Host Bridge/DRAM Controller [C0]</b>
<b>Device Class:</b>	<b>Host-to-PCI Bridge</b>
Revision ID:	6 [C0]
PCI Address (Bus:Device:Function) Number:	0:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_0C04&SUBSYS_11071462&REV_06

#### [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:	Capable

### [Driver Information]

Driver Manufacturer:	INTEL
Driver Description:	Intel(R) Xeon(R) processor E3 - 1200 v3/4th Gen Core processor DRAM Controller - 0C04
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018
DeviceInstanceId	PCI\VEN_8086&DEV_0C04&SUBSYS_11071462&REV_06\3&11583659&0&00
Location Paths	PCIROOT(0)#PCI(0000)

## Intel Haswell-DT - PCI Express x16 Controller

---

### [General Information]

<b>Device Name:</b>	<b>Intel Haswell-DT - PCI Express x16 Controller</b>
<b>Original Device Name:</b>	<b>Intel Haswell-DT - PCI Express x16 Controller</b>
<b>Device Class:</b>	<b>PCI-to-PCI Bridge</b>
Revision ID:	6
PCI Address (Bus:Device:Function) Number:	0:1:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_0C01&SUBSYS_00000000&REV_06

### [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:	Root Port of PCI Express Root Complex
Slot Implemented:	Yes
Hot-Plug:	Not Capable
Hot-Plug Surprise:	Not Capable
Slot Power Limit:	75.000 W
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	128 - 256 ns
L1 Exit Latency:	4 - 8 us
Maximum Payload Size Supported:	256 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:	INTEL
Driver Description:	Intel(R) Xeon(R) processor E3 - 1200 v3/4th Gen Core processor PCI Express x16 Controller - 0C01
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018
DeviceInstanceId	PCI\VEN_8086&DEV_0C01&SUBSYS_13921462&REV_06\3&11583659&0&08
Location Paths	PCIROOT(0)#PCI(0100)

## **PCI Express x16 Bus #1**

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### **NVIDIA GeForce GTX 860M [MSI]**

---

#### **[General Information]**

<b>Device Name:</b>	<b>NVIDIA GeForce GTX 860M [MSI]</b>
<b>Original Device Name:</b>	<b>NVIDIA GeForce GTX 860M (GM107M)</b>
<b>Device Class:</b>	<b>3D Adapter</b>
Revision ID:	A2
PCI Address (Bus:Device:Function) Number:	1:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_10DE&DEV_1392&SUBSYS_11071462&REV_A2

#### **[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:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F6000000
Memory Base Address 1	E0000000

Memory Base Address 3	F0000000
I/O Base Address 5	0

#### [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 860M
Driver Provider:	NVIDIA
Driver Version:	27.21.14.5167 (GeForce 451.67)
Driver Date:	05-Jul-2020
DCH/UWD Driver:	Not Capable
DeviceInstanceId	PCI\VEN_10DE&DEV_1392&SUBSYS_11071462&REV_A2\4&3386A5B7&0&0008
Location Paths	PCIROOT(0)#PCI(0100)#PCI(0000)

## Intel Haswell-MB GT2 - Integrated Graphics

---

#### [General Information]

<b>Device Name:</b>	<b>Intel Haswell-MB GT2 - Integrated Graphics</b>
<b>Original Device Name:</b>	<b>Intel Haswell-MB GT2 - Integrated Graphics</b>
<b>Device Class:</b>	<b>VGA Compatible Adapter</b>
Revision ID:	6
PCI Address (Bus:Device:Function) Number:	0:2:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_0416&SUBSYS_11071462&REV_06

#### [System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7400000
Memory Base Address 2	D0000000
I/O Base Address 4	F000

#### [Features]

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

#### [Driver Information]

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) HD Graphics 4600
Driver Provider:	Intel Corporation
Driver Version:	20.19.15.5126
Driver Date:	21-Jan-2020
DCH/UWD Driver:	Not Capable
DeviceInstanceId	PCI\VEN_8086&DEV_0416&SUBSYS_11071462&REV_06\3&11583659&0&10
Location Paths	PCIROOT(0)#PCI(0200)

## Intel Haswell - Mini HD Audio Controller

---

### [General Information]

<b>Device Name:</b>	<b>Intel Haswell - Mini HD Audio Controller</b>
<b>Original Device Name:</b>	<b>Intel Haswell - Mini HD Audio Controller</b>
<b>Device Class:</b>	<b>High Definition Audio</b>
Revision ID:	6
PCI Address (Bus:Device:Function) Number:	0:3:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_0C0C&SUBSYS_11071462&REV_06

### [PCI Express]

Version:	1.1
Current Link Width:	Not negotiated
Device/Port Type:	Root Complex Integrated Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	None
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 bytes

### [System Resources]

Interrupt Line:	IRQ16
Interrupt Pin:	INTA#
Memory Base Address 0	FEAFC000

### [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:	10.0.19041.1
Driver Date:	06-Dec-2019
DeviceInstanceId	PCI\VEN_8086&DEV_0C0C&SUBSYS_11071462&REV_06\3&11583659&0&18
Location Paths	PCIROOT(0)#PCI(0300)

## Intel Lynx Point PCH - USB 3.0 xHCI Host Controller [C2]

---

### **[General Information]**

<b>Device Name:</b>	<b>Intel Lynx Point PCH - USB 3.0 xHCI Host Controller [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - USB 3.0 xHCI Host Controller [C2]</b>
<b>Device Class:</b>	<b>USB xHCI Controller</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:20:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C31&SUBSYS_11071462&REV_05

### **[System Resources]**

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7B00000

### **[Features]**

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

USB Version Supported:	3.0
------------------------	-----

### **[Driver Information]**

Driver Manufacturer:	Generischer USB-xHCI-Hostcontroller
Driver Description:	USB-xHCI-kompatibler Hostcontroller
Driver Provider:	Microsoft
Driver Version:	10.0.19041.423
Driver Date:	27-Jul-2020
DeviceInstanceId	PCI\VEN_8086&DEV_8C31&SUBSYS_11071462&REV_05\3&11583659&0&A0
Location Paths	PCIROOT(0)#PCI(1400)

## **USB Root Hub**

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### **[Port1] : No Device Connected**

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### **[Port2] : No Device Connected**

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### **[Port3] : No Device Connected**

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**[Port4] : No Device Connected**

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**[Port5] : No Device Connected**

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**[Port6] : No Device Connected**

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**[Port7] : No Device Connected**

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**[Port8] : No Device Connected**

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**[Port9] : No Device Connected**

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**[Port10] : No Device Connected**

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**[Port11] : No Device Connected**

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**[Port12] : No Device Connected**

---

**[Port13] : No Device Connected**

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**[Port14] : No Device Connected**

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**[Port15] : Device General Failure**

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**[Port16] : No Device Connected**

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**[Port17] : No Device Connected**

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**[Port18] : No Device Connected**

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**[Port19] : No Device Connected**

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**[Port20] : No Device Connected**

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**[Port21] : No Device Connected**

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**Intel Lynx Point PCH - Host Embedded Controller Interface 1  
(HECI1) [C1/C2]**

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***[General Information]***

**Device Name:**

	<b>Intel Lynx Point PCH - Host Embedded Controller Interface 1 (HECI1) [C1/C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - Host Embedded Controller Interface 1 (HECI1) [C1/C2]</b>
<b>Device Class:</b>	<b>Other Communication Device</b>
Revision ID:	4 [C1/C2]
PCI Address (Bus:Device:Function) Number:	0:22:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C3A&SUBSYS_11071462&REV_04

#### [System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTA#
Memory Base Address 0	F7B1E000

#### [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) Management Engine Interface
Driver Provider:	Intel
Driver Version:	11.7.0.1057
Driver Date:	19-Nov-2017
DeviceInstanceId	PCI\VEN_8086&DEV_8C3A&SUBSYS_11071462&REV_04\3&11583659&0&B0
Location Paths	PCIROOT(0)#PCI(1600)

## Intel Lynx Point PCH - USB 2.0 EHCI Host Controller #2 [C2]

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#### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - USB 2.0 EHCI Host Controller #2 [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - USB 2.0 EHCI Host Controller #2 [C2]</b>
<b>Device Class:</b>	<b>USB EHCI Controller</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:26:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C2D&SUBSYS_11071462&REV_05

#### [System Resources]

Interrupt Line:	IRQ16
Interrupt Pin:	INTA#
Memory Base Address 0	F7B1C000

#### [Features]

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

USB Version Supported:	2.0
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### **[Driver Information]**

Driver Manufacturer:	Intel
Driver Description:	Intel(R) 8 Series/C220 Series USB EHCI #2 - 8C2D
Driver Provider:	Intel
Driver Version:	9.4.0.1025
Driver Date:	31-Jul-2013
DeviceInstanceId	PCI\VEN_8086&DEV_8C2D&SUBSYS_11071462&REV_05\3&11583659&0&D0
Location Paths	PCIROOT(0)#PCI(1A00)

## **USB Root Hub**

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### **[Port1] : Intel Integrated Rate Matching Hub**

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#### **[Device Information]**

Device Manufacturer:	Intel
Product Name:	Intel Integrated Rate Matching Hub
Serial Number:	-
USB Version Supported:	2.00
USB Device Speed:	USB 2.0 High-speed
Driver Description:	Generic USB Hub
Hardware ID:	USB\VID_8087&PID_8008

#### **[Driver Information]**

Driver Manufacturer:	(Generic USB Hub)
Driver Description:	Generic USB Hub
Driver Provider:	Microsoft
Driver Version:	10.0.19041.1
Driver Date:	21-Jun-2006
DeviceInstanceId	USB\VID_8087&PID_8008\5&368CAB37&0&1
Location Paths	PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)

### **[Port1] : No Device Connected**

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### **[Port2] : Microsoft USB Wireless Mouse (IntelliPoint)**

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#### **[Device Information]**

Device Manufacturer:	Microsoft
Product Name:	Microsoft® 2.4GHz Transceiver v7.0
Serial Number:	N/A
USB Version Supported:	2.00

USB Device Speed:	USB 1.1 Full-speed
Driver Description:	Microsoft Mouse and Keyboard Detection Driver (USB)
Hardware ID:	USB\VID_045E&PID_0745

#### **[Driver Information]**

Driver Manufacturer:	Microsoft
Driver Description:	Microsoft Mouse and Keyboard Detection Driver (USB)
Driver Provider:	Microsoft
Driver Version:	12.78.137.0
Driver Date:	25-Mar-2019
DeviceInstanceId	USB\VID_045E&PID_0745\6&19F9463&0&2
Location Paths	PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)#USB(2)

### **[Port3] : Intel Bluetooth V4.0 Module**

---

#### **[Device Information]**

Device Manufacturer:	Intel
Product Name:	Intel Bluetooth V4.0 Module
Serial Number:	-
USB Version Supported:	2.00
USB Device Speed:	USB 1.1 Full-speed
Driver Description:	Intel(R) Wireless Bluetooth(R)
Hardware ID:	USB\VID_8087&PID_07DC

#### **[Driver Information]**

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) Wireless Bluetooth(R)
Driver Provider:	Intel Corporation
Driver Version:	20.100.5.1
Driver Date:	17-Apr-2019
DeviceInstanceId	USB\VID_8087&PID_07DC\6&19F9463&0&3
Location Paths	PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)#USB(3)

### **[Port4] : No Device Connected**

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### **[Port5] : No Device Connected**

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### **[Port6] : No Device Connected**

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## [Port2] : No Device Connected

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### Intel Lynx Point PCH - High Definition Audio Controller [C2]

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#### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - High Definition Audio Controller [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - High Definition Audio Controller [C2]</b>
<b>Device Class:</b>	<b>High Definition Audio</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:27:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C20&SUBSYS_11071462&REV_05

#### [PCI Express]

Version:	1.1
Current Link Width:	Not negotiated
Device/Port Type:	Root Complex Integrated Endpoint
Slot Implemented:	No
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	None
Active State Power Management (ASPM) Status:	Disabled
L0s Exit Latency:	< 64 ns
L1 Exit Latency:	< 1 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 bytes

#### [System Resources]

Interrupt Line:	IRQ22
Interrupt Pin:	INTA#
Memory Base Address 0	FEAF8000

#### [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:	10.0.19041.1
Driver Date:	06-Dec-2019
DeviceInstanceId	PCI\VEN_8086&DEV_8C20&SUBSYS_11071462&REV_05\3&11583659&0&D8
Location Paths	PCIROOT(0)#PCI(1B00)

## Intel Lynx Point PCH - PCI Express Root Port 1 [C2]

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### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 1 [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 1 [C2]</b>
<b>Device Class:</b>	<b>PCI-to-PCI Bridge</b>
Revision ID:	D5 [C2]
PCI Address (Bus:Device:Function) Number:	0:28:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C10&SUBSYS_00000000&REV_D5

### [PCI Express]

Version:	2.0
Maximum Link Width:	1x
Current Link Width:	Not negotiated
Maximum Link Speed:	5.0 GT/s
Current Link Speed:	2.5 GT/s
Device/Port Type:	Root Port of PCI Express Root Complex
Slot Implemented:	Yes
Hot-Plug:	Capable
Hot-Plug Surprise:	Capable
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s and L1 Entry
L0s Exit Latency:	512 ns - 1 us
L1 Exit Latency:	2 - 4 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 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:	INTEL
Driver Description:	Intel(R) 8 Series/C220 Series PCI Express Root Port #1 - 8C10
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018
DeviceInstanceId	PCI\VEN_8086&DEV_8C10&SUBSYS_11071462&REV_D5\3&11583659&0&E0
Location Paths	PCIROOT(0)#PCI(1C00)

## PCI Express x1 Bus #2

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## Intel Lynx Point PCH - PCI Express Root Port 4 [C2]

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### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 4 [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 4 [C2]</b>
<b>Device Class:</b>	<b>PCI-to-PCI Bridge</b>
Revision ID:	D5 [C2]
PCI Address (Bus:Device:Function) Number:	0:28:3
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C16&SUBSYS_00000000&REV_D5

### [PCI Express]

Version:	2.0
Maximum Link Width:	1x
Current Link Width:	1x
Maximum Link Speed:	5.0 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
Slot Power Limit:	10.000 W
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L0s and L1 Entry
L0s Exit Latency:	256 - 512 ns
L1 Exit Latency:	8 - 16 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 bytes

### [System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTD#

### [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) 8 Series/C220 Series PCI Express Root Port #4 - 8C16
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018

DeviceInstanceId  
Location Paths

PCI\VEN\_8086&DEV\_8C16&SUBSYS\_11071462&REV\_D5\3&11583659&0&E3  
PCIROOT(0)#PCI(1C03)

## PCI Express x1 Bus #3

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## Qualcomm/Atheros e2200 PCI-E Gigabit Ethernet Controller

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### [General Information]

<b>Device Name:</b>	<b>Qualcomm/Atheros e2200 PCI-E Gigabit Ethernet Controller</b>
<b>Original Device Name:</b>	<b>Qualcomm/Atheros e2200 PCI-E Gigabit Ethernet Controller</b>
<b>Device Class:</b>	<b>Ethernet Adapter</b>
Revision ID:	13
PCI Address (Bus:Device:Function) Number:	3:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_1969&DEV_E091&SUBSYS_11071462&REV_13

### [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:	L0s and L1 Entry
L0s Exit Latency:	>4 us
L1 Exit Latency:	>64 us
Maximum Payload Size Supported:	4096 bytes
Maximum Payload Size:	128 bytes

### [System Resources]

Interrupt Line:	IRQ19
Interrupt Pin:	INTA#
Memory Base Address 0	F7A00000
I/O Base Address 2	D000

### [Features]

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

### [Driver Information]

Driver Manufacturer:	Rivet Networks
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Driver Description:	Killer E2200 Gigabit Ethernet Controller
Driver Provider:	Rivet Networks
Driver Version:	9.0.0.49
Driver Date:	20-Sep-2018
DeviceInstanceId	PCI\VEN_1969&DEV_E091&SUBSYS_11071462&REV_13\4&1FE702EE&0&00E3
Location Paths	PCIROOT(0)#PCI(1C03)#PCI(0000)

## Intel Lynx Point PCH - PCI Express Root Port 5 [C2]

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### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 5 [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 5 [C2]</b>
<b>Device Class:</b>	<b>PCI-to-PCI Bridge</b>
Revision ID:	D5 [C2]
PCI Address (Bus:Device:Function) Number:	0:28:4
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C18&SUBSYS_00000000&REV_D5

### [PCI Express]

Version:	2.0
Maximum Link Width:	1x
Current Link Width:	1x
Maximum Link Speed:	5.0 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
Slot Power Limit:	10.000 W
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L1 Entry
L0s Exit Latency:	256 - 512 ns
L1 Exit Latency:	8 - 16 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 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:	INTEL
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Driver Description:	Intel(R) 8 Series/C220 Series PCI Express Root Port #5 - 8C18
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018
DeviceInstanceId	PCI\VEN_8086&DEV_8C18&SUBSYS_11071462&REV_D5\3&11583659&0&E4
Location Paths	PCIROOT(0)#PCI(1C04)

## PCI Express x1 Bus #4

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## RealTek Semiconductor RTS5249 PCI-E Card Reader

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### [General Information]

<b>Device Name:</b>	<b>RealTek Semiconductor RTS5249 PCI-E Card Reader</b>
<b>Original Device Name:</b>	<b>RealTek Semiconductor RTS5249 PCI-E Card Reader</b>
<b>Device Class:</b>	<b>Unknown</b>
Revision ID:	1
PCI Address (Bus:Device:Function) Number:	4:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_10EC&DEV_5249&SUBSYS_11071462&REV_01

### [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:	L1 Entry
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:	INTA#
Memory Base Address 0	F79FF000

### [Features]

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

### [Driver Information]

Driver Manufacturer:	Realtek Semiconductor Corp.
Driver Description:	Realtek PCIE CardReader
Driver Provider:	Realtek Semiconductor Corp.
Driver Version:	10.0.17134.21306
Driver Date:	03-Dec-2018
DeviceInstanceId	PCI\VEN_10EC&DEV_5249&SUBSYS_11071462&REV_01\4&2B4B2779&0&00E4
Location Paths	PCIROOT(0)#PCI(1C04)#PCI(0000)

## Intel Lynx Point PCH - PCI Express Root Port 6 [C2]

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### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 6 [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - PCI Express Root Port 6 [C2]</b>
<b>Device Class:</b>	<b>PCI-to-PCI Bridge</b>
Revision ID:	D5 [C2]
PCI Address (Bus:Device:Function) Number:	0:28:5
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C1A&SUBSYS_00000000&REV_D5

### [PCI Express]

Version:	2.0
Maximum Link Width:	1x
Current Link Width:	1x
Maximum Link Speed:	5.0 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
Slot Power Limit:	10.000 W
Emergency Power Reduction:	Not Supported
Active State Power Management (ASPM) Support:	L0s and L1
Active State Power Management (ASPM) Status:	L1 Entry
L0s Exit Latency:	256 - 512 ns
L1 Exit Latency:	8 - 16 us
Maximum Payload Size Supported:	128 bytes
Maximum Payload Size:	128 bytes

### [System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTB#

### [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) 8 Series/C220 Series PCI Express Root Port #6 - 8C1A
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018
DeviceInstanceId	PCI\VEN_8086&DEV_8C1A&SUBSYS_11071462&REV_D5\3&11583659&0&E5
Location Paths	PCIROOT(0)#PCI(1C05)

## **PCI Express x1 Bus #5**

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## **Intel Dual Band Wireless-AC 3160 HMC WiFi Adapter**

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### **[General Information]**

<b>Device Name:</b>	<b>Intel Dual Band Wireless-AC 3160 HMC WiFi Adapter</b>
<b>Original Device Name:</b>	<b>Intel Wireless 3160 WiFi Adapter</b>
<b>Device Class:</b>	<b>Other Network Adapter</b>
Revision ID:	83
PCI Address (Bus:Device:Function) Number:	5:0:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_08B3&SUBSYS_00708086&REV_83

### **[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:	L1 Entry
L0s Exit Latency:	2 - 4 us
L1 Exit Latency:	16 - 32 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	F78FE000

### [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) Dual Band Wireless-AC 3160
Driver Provider:	Intel
Driver Version:	18.33.17.1
Driver Date:	29-Apr-2019
DeviceInstanceId	PCI\VEN_8086&DEV_08B3&SUBSYS_00708086&REV_83\4&84239F2&0&00E5
Location Paths	PCIROOT(0)#PCI(1C05)#PCI(0000)

## Intel Lynx Point PCH - USB 2.0 EHCI Host Controller #1 [C2]

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### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - USB 2.0 EHCI Host Controller #1 [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - USB 2.0 EHCI Host Controller #1 [C2]</b>
<b>Device Class:</b>	<b>USB EHCI Controller</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:29:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C26&SUBSYS_11071462&REV_05

### [System Resources]

Interrupt Line:	IRQ23
Interrupt Pin:	INTA#
Memory Base Address 0	F7B1B000

### [Features]

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

USB Version Supported:	2.0
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### [Driver Information]

Driver Manufacturer:	Intel
Driver Description:	Intel(R) 8 Series/C220 Series USB EHCI #1 - 8C26
Driver Provider:	Intel
Driver Version:	9.4.0.1025
Driver Date:	31-Jul-2013
DeviceInstanceId	PCI\VEN_8086&DEV_8C26&SUBSYS_11071462&REV_05\3&11583659&0&E8
Location Paths	PCIROOT(0)#PCI(1D00)

## USB Root Hub

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## **[Port1] : Intel Integrated Rate Matching Hub**

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### **[Device Information]**

Device Manufacturer:	Intel
Product Name:	Intel Integrated Rate Matching Hub
Serial Number:	
USB Version Supported:	2.00
USB Device Speed:	USB 2.0 High-speed
Driver Description:	Generic USB Hub
Hardware ID:	USB\VID_8087&PID_8000

### **[Driver Information]**

Driver Manufacturer:	(Generic USB Hub)
Driver Description:	Generic USB Hub
Driver Provider:	Microsoft
Driver Version:	10.0.19041.1
Driver Date:	21-Jun-2006
DeviceInstanceId	USB\VID_8087&PID_8000\5&3230E7A&0&1
Location Paths	PCIROOT(0)#PCI(1D00)#USBROOT(0)#USB(1)

## **[Port1] : No Device Connected**

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## **[Port2] : No Device Connected**

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## **[Port3] : No Device Connected**

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## **[Port4] : precisionWave, PID=EF35**

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### **[Device Information]**

Device Manufacturer:	precisionWave
Product Name:	precisionWave, PID=EF35
Serial Number:	-
USB Version Supported:	1.10
USB Device Speed:	USB 1.1 Full-speed
Driver Description:	USB-Eingabegerät
Hardware ID:	USB\VID_1770&PID_FF00

### **[Driver Information]**

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	USB-Eingabegerät
Driver Provider:	Microsoft
Driver Version:	10.0.19041.1
Driver Date:	21-Jun-2006
DeviceInstanceId	USB\VID_1770&PID_FF00\MSI_EPF_USB
Location Paths	PCIROOT(0)#PCI(1D00)#USBROOT(0)#USB(1)#USB(4)

### **[Port5] : No Device Connected**

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### **[Port6] : No Device Connected**

---

### **[Port7] : No Device Connected**

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### **[Port8] : No Device Connected**

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### **[Port2] : No Device Connected**

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### **Intel HM87 Express Chipset - LPC Interface Controller [C2]**

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#### **[General Information]**

<b>Device Name:</b>	<b>Intel HM87 Express Chipset - LPC Interface Controller [C2]</b>
<b>Original Device Name:</b>	<b>Intel HM87 Express Chipset - LPC Interface Controller [C2]</b>
<b>Device Class:</b>	<b>PCI-to-ISA Bridge</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:31:0
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C4B&SUBSYS_11071462&REV_05

#### **[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:	INTEL
Driver Description:	Intel(R) HM87 LPC Controller - 8C4B
Driver Provider:	INTEL
Driver Version:	10.1.1.45
Driver Date:	02-Jan-2018
DeviceInstanceId	PCI\VEN_8086&DEV_8C4B&SUBSYS_11071462&REV_05\3&11583659&0&F8
Location Paths	PCIROOT(0)#PCI(1F00)

## Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]

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### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]</b>
<b>Device Class:</b>	<b>SATA AHCI Controller</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:31:2
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C03&SUBSYS_11071462&REV_05

### [System Resources]

Interrupt Line:	N/A
Interrupt Pin:	INTB#
I/O Base Address 0	F0B0
I/O Base Address 1	F0A0
I/O Base Address 2	F090
I/O Base Address 3	F080
I/O Base Address 4	F060
Memory Base Address 5	F7B1A000

### [Features]

Bus Mastering:	Enabled
Running At 66 MHz:	Capable
Fast Back-to-Back Transactions:	Capable

### [SATA Host Controller]

Interface Speed Supported:	Gen3 6.0 Gbps
Number Of Ports:	6
External SATA Support:	Not Capable
Aggressive Link Power Management:	Capable
Staggered Spin-up:	Not Capable
Mechanical Presence Switch:	Not Capable
Command Queue Acceleration:	Capable
64-bit Addressing:	Capable



AHCI Status:	Enabled
AHCI Version:	1.30
Ports Implemented:	0, 1, 4, 5

#### [SATA Port#0]

Port Status:	Device Present, Phy communication not established
Current Interface Speed:	Gen1 1.5 Gbps
External SATA Port:	Not Capable
Hot Plug:	Not Capable
Device Type:	ATAPI

#### [SATA Port#1]

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

#### [SATA Port#4]

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

#### [SATA Port#5]

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

#### [Driver Information]

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) 8 Series Chipset Family SATA AHCI Controller
Driver Provider:	Intel Corporation
Driver Version:	14.8.16.1063
Driver Date:	10-Apr-2017
DeviceInstanceId	PCI\VEN_8086&DEV_8C03&SUBSYS_11071462&REV_05\3&11583659&0&FA
Location Paths	PCIROOT(0)#PCI(1F02)

## Intel Lynx Point PCH - SMBus Controller [C2]

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#### [General Information]

<b>Device Name:</b>	<b>Intel Lynx Point PCH - SMBus Controller [C2]</b>
<b>Original Device Name:</b>	<b>Intel Lynx Point PCH - SMBus Controller [C2]</b>
<b>Device Class:</b>	<b>SMBus (System Management Bus)</b>
Revision ID:	5 [C2]
PCI Address (Bus:Device:Function) Number:	0:31:3
PCI Latency Timer:	0
Hardware ID:	PCI\VEN_8086&DEV_8C22&SUBSYS_11071462&REV_05

### **[System Resources]**

Interrupt Line:	IRQ18
Interrupt Pin:	INTC#
Memory Base Address 0	F7B19000
I/O Base Address 4	F040

### **[Features]**

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

### **[Driver Information]**

Driver Manufacturer:	Synaptics
Driver Description:	Synaptics SMBus Driver
Driver Provider:	Synaptics
Driver Version:	19.5.10.20
Driver Date:	04-Jul-2018
DeviceInstanceId	PCI\VEN_8086&DEV_8C22&SUBSYS_11071462&REV_05\3&11583659&0&FB
Location Paths	PCIROOT(0)#PCI(1F03)

## **Video Adapter**

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## **Intel HD Graphics 4600**

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### **[Video chipset]**

<b>Video Chipset:</b>	<b>Intel HD Graphics 4600</b>
<b>Video Chipset Codename:</b>	<b>Haswell GT2</b>
Video Memory:	1024 MBytes

### **[Video Card]**

<b>Video Card:</b>	<b>Intel Haswell-MB GT2 - Integrated Graphics [MSI]</b>
Video Bus:	Integrated
Video RAMDAC:	Internal

### **[Performance]**

Graphics Processor Clock:	599.3 MHz
Graphics Memory Clock:	799.0 MHz

Hardware ID:	PCI\VEN_8086&DEV_0416&SUBSYS_11071462&REV_06
PCI Location (Bus:Dev:Fnc):	0:02:0

### **[Driver Information]**

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) HD Graphics 4600
Driver Provider:	Intel Corporation
Driver Version:	20.19.15.5126
Driver Date:	21-Jan-2020
DCH/UWD Driver:	Not Capable

DeviceInstanceId  
Location Paths

PCI\VEN\_8086&DEV\_0416&SUBSYS\_11071462&REV\_06\3&11583659&0&10  
PCIROOT(0)#PCI(0200)

## NVIDIA GeForce GTX 860M

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### [Video chipset]

<b>Video Chipset:</b>	<b>NVIDIA GeForce GTX 860M</b>
<b>Video Chipset Codename:</b>	<b>GM107M</b>
<b>Video Memory:</b>	2048 MBytes of GDDR5 SDRAM [Hynix]

### [Video Card]

<b>Video Card:</b>	<b>NVIDIA GeForce GTX 860M [MSI]</b>
<b>Video Bus:</b>	PCIe v3.0 x16 (8.0 GT/s) @ x16 (2.5 GT/s)
<b>Video BIOS Version:</b>	82.07.34.00.03
<b>Video Chipset Revision:</b>	A2

### [Performance]

<b>Graphics Processor Clock:</b>	135.0 MHz
<b>Video Unit Clock:</b>	405.0 MHz
<b>Graphics Memory Clock:</b>	202.5 MHz (Effective 810.0 MHz)
<b>Graphics Memory Bus Width:</b>	128-bit
<b>Number Of ROPs:</b>	16
<b>Number Of Unified Shaders:</b>	640
<b>Number Of TMUs (Texture Mapping Units):</b>	40

<b>ASIC Quality:</b>	82.8 %
<b>NVIDIA SLI Status:</b>	Not Present

<b>Hardware ID:</b>	PCI\VEN_10DE&DEV_1392&SUBSYS_11071462&REV_A2
<b>PCI Location (Bus:Dev:Fnc):</b>	1:00:0

### [Driver Information]

<b>Driver Manufacturer:</b>	NVIDIA
<b>Driver Description:</b>	NVIDIA GeForce GTX 860M
<b>Driver Provider:</b>	NVIDIA
<b>Driver Version:</b>	27.21.14.5167 (GeForce 451.67)
<b>Driver Date:</b>	05-Jul-2020
<b>DCH/UWD Driver:</b>	Not Capable
<b>DeviceInstanceId</b>	PCI\VEN_10DE&DEV_1392&SUBSYS_11071462&REV_A2\4&3386A5B7&0&0008
<b>Location Paths</b>	PCIROOT(0)#PCI(0100)#PCI(0000)

## Monitor

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## PHILIPS [Unknown Model: PHL9507]

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### **[General information]**

<b>Monitor Name:</b>	<b>PHILIPS [Unknown Model: PHL9507]</b>
<b>Monitor Name (Manuf):</b>	<b>Philips FTV</b>
Serial Number:	16843009
Date Of Manufacture:	Week: 43, Year: 2014
Monitor Hardware ID:	Monitor\PHL9507
Max. Vertical Size:	72 cm
Max. Horizontal Size:	128 cm
Horizontal Frequency:	15 - 70 kHz
Vertical Frequency:	48 - 62 Hz
Maximum Pixel Clock:	150 MHz

### **[Advanced parameters]**

Input Signal:	Digital
Gamma Factor:	2.20

### **[DPMS Modes]**

Standby:	Not Supported
Suspend:	Not Supported
Active Off:	Not Supported
Standard Colour Space (sRGB) Default:	Not Supported
Preferred Timing Mode:	Supported
Default GTF (Continuous Frequency):	Not Supported
DFP 1.x Compatible:	No

### **[Supported Video Modes]**

1680 x 1050	60 Hz
1440 x 900	60 Hz
1600 x 1200	60 Hz
1400 x 1050	60 Hz
1280 x 800	60 Hz
1280 x 1024	60 Hz
1280 x 960	60 Hz
1920 x 1080	1280 x 720 mm, Pixel Clock 148.50 MHz
1920 x 1080	1280 x 720 mm, Pixel Clock 148.50 MHz

## **SAMSUNG [Unknown Model: SDC324C]**

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### **[General information]**

<b>Monitor Name:</b>	<b>SAMSUNG [Unknown Model: SDC324C]</b>
<b>Monitor Name (Manuf):</b>	<b>SAMSUNG 156HL01-102</b>
Serial Number:	Unknown
Date Of Manufacture:	Week: 0, Year: 2013
Monitor Hardware ID:	Monitor\SDC324C
Max. Vertical Size:	19 cm
Max. Horizontal Size:	34 cm

### **[Advanced parameters]**

Input Signal:	Digital
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Color Bit Depth:	6 Bits per Primary Color
Digital Video Interface Standard Supported:	DisplayPort
Gamma Factor:	2.20

**[DPMS Modes]**

Standby:	Not Supported
Suspend:	Not Supported
Active Off:	Not Supported
Standard Colour Space (sRGB) Default:	Not Supported
Preferred Timing Mode:	Supported
Default GTF (Continuous Frequency):	Not Supported
DFP 1.x Compatible:	Yes

**[Supported Video Modes]**

1920 x 1080	344 x 194 mm, Pixel Clock 143.00 MHz
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**Drives**

**(S)ATA/ATAPI Drives**

**KINGSTON SMS200S3120G**

**[General Information]**

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]
<b>Drive Model:</b>	<b>KINGSTON SMS200S3120G</b>
Drive Firmware Revision:	507ABBF0
Drive Serial Number:	50026B723B0BC201
World Wide Name:	50026B723B0BC201
<b>Drive Capacity:</b>	<b>114,473 MBytes (120 GB)</b>
<b>Drive Capacity [MB]:</b>	<b>114473</b>
<b>Media Rotation Rate:</b>	<b>SSD Drive (Non-rotating)</b>
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS
ATA Minor Version Supported:	ACS-2 Revision 3
ATA Transport Version Supported:	SATA 3.0

**[Drive Geometry]**

Number of Cylinders:	16383
Number of Heads:	16
Sectors Per Track:	63
Number Of ECC Bytes:	4
Number of Sectors:	16514064
Total 32-bit LBA Sectors:	234441648
Total 48-bit LBA Sectors:	234441648
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:	Supported (Deterministic Read After TRIM, Any Value)

### **[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, Inactive
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, Enabled
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:	Not Supported
Host Automatic Partial to Slumber Transitions:	Not Supported
Device Automatic Partial to Slumber Transitions:	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:	Supported, Disabled

### **[Security]**

Security Feature:	Supported
Security Status:	Disabled
Security Locked:	Disabled
Security Frozen:	Enabled
Enhanced Security Erase:	Not 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:	104/50, Worst: 104 (Data = 8182205,0)
[05] Reallocated Sector Count:	100/3, Worst: 100
[09] Power-On Hours/Cycle Count:	88/Always OK, Worst: 88 (10541 hours / 1.20 years)
[0C] Power Cycle Count:	97/Always OK, Worst: 97 (Data = 3817,0)
[AB] Program Fail Count (Total):	0/Always OK, Worst: 0
[AC] Erase Fail Count (Total):	0/Always OK, Worst: 0
[AE] Unexpected Power Loss Count:	0/Always OK, Worst: 0 (Data = 172,0)
[B1] Wear Range Delta:	0/Always OK, Worst: 0 (Data = 5,0)
[B5] Program Fail Count (Total):	0/Always OK, Worst: 0
[B6] Erase Fail Count (Total):	0/Always OK, Worst: 0
[BB] Uncorrectable Error Count:	100/Always OK, Worst: 100
[C2] Temperature	39/Always OK, Worst: 90 (39.0 °C)
[C3] On-the-Fly ECC Uncorrectable Error Count:	120/Always OK, Worst: 120 (Data = 8182205,0)
[C4] Reallocation Event Count:	100/3, Worst: 100
[C9] Uncorrectable Soft Read Error Rate:	120/Always OK, Worst: 120 (Data = 8182205,0)
[CC] Soft ECC Correction Rate:	120/Always OK, Worst: 120 (Data = 8182205,0)
[E6] Life Curve Status:	100/Always OK, Worst: 100 (100 ms)
[E7] SSD Life Left:	97/10, Worst: 97
[E9] Remaining Life:	0/Always OK, Worst: 0 (Data = 22007,0)
[EA] Unknown	0/Always OK, Worst: 0 (Data = 30361,0)
[F1] Total Host Writes:	0/Always OK, Worst: 0 (Data = 30361,0)
[F2] Total Host Reads:	0/Always OK, Worst: 0 (Data = 24512,0)
Drive Remaining Life	97%

## **ST2000LM003 HN-M201RAD**

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### **[General Information]**

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]
<b>Drive Model:</b>	<b>Seagate ST2000LM003 HN-M201RAD</b>
Drive Firmware Revision:	2BC10001
Drive Serial Number:	S321J9DF800561

World Wide Name:	50004CF2DC1CBD9
<b>Drive Capacity:</b>	<b>1,907,729 MBytes (2000 GB)</b>
<b>Drive Capacity [MB]:</b>	<b>1907729</b>
<b>Media Rotation Rate:</b>	<b>5400 RPM</b>
Nominal Form Factor:	2.5"
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS
ATA Minor Version Supported:	ATA8-ACS version 6
ATA Transport Version Supported:	SATA 3.0

### **[Drive Geometry]**

Number of Cylinders:	16383
Number of Heads:	16
Sectors Per Track:	63
Number Of ECC Bytes:	4
Number of Sectors:	16514064
Total 32-bit LBA Sectors:	268435455
Total 48-bit LBA Sectors:	3907029168
Logical Sector Size:	512 Bytes
Cache Buffer Size:	32768 KBytes

### **[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:	Supported, Inactive
48-bit LBA:	Supported, Active
Host-Initiated Link Power Management:	Not Supported
Device-Initiated Link Power Management:	Supported, Enabled
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:	100/51, Worst: 100 (Data = 184,0)
[02] Throughput Performance:	252/Always OK, Worst: 252
[03] Spin Up Time:	92/25, Worst: 91 (Data = 2622,0)
[04] Start/Stop Count:	65/Always OK, Worst: 65 (Data = 35877,0)
[05] Reallocated Sector Count:	252/10, Worst: 252
[07] Seek Error Rate:	252/51, Worst: 252
[08] Seek Time Performance:	252/15, Worst: 252
[09] Power-On Hours/Cycle Count:	100/Always OK, Worst: 100 (8291 hours / 345.5 days)
[0A] Spin Retry Count:	252/51, Worst: 252
[0C] Power Cycle Count:	97/Always OK, Worst: 97 (Data = 3374,0)
[BF] G-Sense Error Rate:	100/Always OK, Worst: 100 (Data = 14,0)
[C0] Power-Off Retract Count:	252/Always OK, Worst: 252
[C2] Temperature	64/Always OK, Worst: 47 (33.0 °C)
[C3] Hardware ECC Recovered:	100/Always OK, Worst: 100
[C4] Reallocation Event Count:	252/Always OK, Worst: 252
[C5] Current Pending Sector Count:	252/Always OK, Worst: 100
[C6] Off-Line Uncorrectable Sector Count:	252/Always OK, Worst: 252
[C7] UltraDMA/SATA CRC Error Rate:	200/Always OK, Worst: 200
[C8] Write/Multi-Zone Error Rate:	100/Always OK, Worst: 100 (Data = 38,0)
[DF] Load/Unload Retry Count:	100/Always OK, Worst: 100 (Data = 369,0)

[E1] Load/Unload Cycle Count:

83/Always OK, Worst: 83 (Data = 180370,0)

## Samsung SSD 860 EVO mSATA 1TB

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### [General Information]

Drive Controller:	Serial ATA 6Gb/s @ 6Gb/s
Host Controller:	Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]
<b>Drive Model:</b>	<b>Samsung SSD 860 EVO mSATA 1TB</b>
Drive Firmware Revision:	RVT44B6Q
Drive Serial Number:	S41PNW0K900248R
World Wide Name:	5002538E700A439B
<b>Drive Capacity:</b>	<b>953,869 MBytes (1000 GB)</b>
<b>Drive Capacity [MB]:</b>	<b>953869</b>
<b>Media Rotation Rate:</b>	<b>SSD Drive (Non-rotating)</b>
Nominal Form Factor:	mSATA
ATA Major Version Supported:	ATA/ATAPI-5, ATA/ATAPI-6, ATA/ATAPI-7, ATA8-ACS, ACS-4
ATA Minor Version Supported:	ACS-4 Revision 5
ATA Transport Version Supported:	SATA 3.2

### [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:	1953525168
Logical Sector Size:	512 Bytes
Cache Buffer Size:	N/A

### [Transfer Modes]

Sectors Per Interrupt:	Total: 1, Active: 1
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:	Supported (Deterministic Read After TRIM, Words = 0)

### [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
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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:	Not Supported, Inactive
Automatic Acoustic Management:	Not Supported, Inactive
48-bit LBA:	Supported, Active
Host-Initiated Link Power Management:	Not Supported
Device-Initiated Link Power Management:	Supported, Enabled
In-Order Data Delivery:	Not Supported
Hardware Feature Control:	Supported, Enabled
Software Settings Preservation:	Supported, Enabled
NCQ Autosense:	Not Supported
Link Power State Device Sleep:	Supported, Disabled
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:	Not 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:	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:	Supported, Disabled

### **[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:	Supported
Trusted Computing:	Supported

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

[05] Reallocated Sector Count:	100/10, Worst: 100
[09] Power-On Hours/Cycle Count:	99/Always OK, Worst: 99 (2164 hours / 90.2 days)
[0C] Power Cycle Count:	99/Always OK, Worst: 99 (Data = 783,0)
[B1] Wear Leveling Count:	99/Always OK, Worst: 99 (Data = 2,0)
[B3] Used Reserved Block Count (Total):	100/10, Worst: 100
[B5] Program Fail Count (Total):	100/10, Worst: 100

[B6] Erase Fail Count (Total):	100/10, Worst: 100
[B7] Runtime Bad Block (Total):	100/10, Worst: 100
[BB] Uncorrectable Error Count:	100/Always OK, Worst: 100
[BE] Airflow Temperature:	62/Always OK, Worst: 17 (38.0 °C)
[C3] ECC Error Rate:	200/Always OK, Worst: 200
[C7] SATA CRC Error Count:	100/Always OK, Worst: 100
[EB] POR Recovery Count:	99/Always OK, Worst: 99 (Data = 27,0)
[F1] Total Host Writes:	99/Always OK, Worst: 99 (Data = 3660077052,0)

Drive Remaining Life	99%
----------------------	-----

### [Device Statistics]

Lifetime Power-On Resets:	783
Power-on Hours:	2164
Logical Sectors Written:	3660077052
Logical Sectors Read:	7869381677
Number of Write Commands:	32115273
Number of Read Commands:	85860922

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

Current Temperature:	38 °C
Maximum Operating Temperature:	70 °C
Lifetime Temperature:	26 - 83 °C

Number of Hardware Resets:	1071
Number of ASR Events:	0
Number of Interface CRC Errors:	0

Used Endurance Indicator:	0%
---------------------------	----

## TSSTcorp BDDVDW SN-506AB

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### [General Information]

<b>Drive Model:</b>	<b>TSSTcorp BDDVDW SN-506AB</b>
Drive Firmware Revision:	SB00
Drive Serial Number:	R8S76GRC4001PG
Serial Number:	R8S76GRC4001PG
Drive Type:	BD-RE
Drive Controller:	Serial ATA 1.5Gb/s @ 1.5Gb/s
Host Controller:	Intel Lynx Point-M PCH - SATA AHCI Controller (Ports 0-5) [C2]

### [Transfer Modes]

Max. PIO Transfer Mode:	4
Multiword DMA Mode:	Total: 2, Active: -
Singleword DMA Mode:	Total: -, Active: -
Ultra-DMA Mode:	Total: 5 (ATA-100), Active: 5 (ATA-100)
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

### [Device flags]

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

### [Device capabilities]

Drive can read:	CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW, DVD+R DL, BD, BD-RE
Drive can write:	CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW, DVD+R DL, BD, BD-RE

## Audio

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### Intel Haswell - Mini HD Audio Controller

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<b>Audio Adapter:</b>	<b>Intel Haswell - Mini HD Audio Controller</b>
Audio Controller Hardware ID:	PCI\VEN_8086&DEV_0C0C&SUBSYS_11071462&REV_06

### Intel Lynx Point PCH - High Definition Audio Controller [C2]

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<b>Audio Adapter:</b>	<b>Intel Lynx Point PCH - High Definition Audio Controller [C2]</b>
Audio Controller Hardware ID:	PCI\VEN_8086&DEV_8C20&SUBSYS_11071462&REV_05

High Definition Audio Codec:	RealTek ALC892
Audio Codec Hardware ID:	HDAUDIO\FUNC_01&VEN_10EC&DEV_0892&SUBSYS_14621107&REV_1003

### [Driver Information]

Driver Manufacturer:	Realtek
Driver Description:	Realtek High Definition Audio
Driver Provider:	Realtek Semiconductor Corp.
Driver Version:	6.0.1.8581
Driver Date:	27-Nov-2018
DeviceInstanceId	HDAUDIO\FUNC_01&VEN_10EC&DEV_0892&SUBSYS_14621107&REV_1003\4&2F5315B6&0&0001

## Network

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## Qualcomm/Atheros e2200 PCI-E Gigabit Ethernet Controller

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### [General information]

<b>Network Card:</b>	<b>Qualcomm/Atheros e2200 PCI-E Gigabit Ethernet Controller</b>
<b>Vendor Description:</b>	<b>Qualcomm Atheros Ar81xx series PCI-E Ethernet Controller</b>
MAC Address:	44-8A-5B-EF-8C-4E

### [Capabilities]

Maximum Link Speed:	1000 Mbps
Transmit Buffer Size:	1558528 Bytes
Receive Buffer Size:	1558528 Bytes
Hardware ID:	PCI\VEN_1969&DEV_E091&SUBSYS_11071462&REV_13

### [Driver Information]

Driver Manufacturer:	Rivet Networks
Driver Description:	Killer E2200 Gigabit Ethernet Controller
Driver Provider:	Rivet Networks
Driver Version:	9.0.0.49
Driver Date:	20-Sep-2018
DeviceInstanceId	PCI\VEN_1969&DEV_E091&SUBSYS_11071462&REV_13\4&1FE702EE&0&00E3
Location Paths	PCIROOT(0)#PCI(1C03)#PCI(0000)

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## Intel Dual Band Wireless-AC 3160 HMC WiFi Adapter

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### [General information]

<b>Network Card:</b>	<b>Intel Dual Band Wireless-AC 3160 HMC WiFi Adapter</b>
<b>Vendor Description:</b>	<b>Microsoft</b>
MAC Address:	30-3A-64-52-8E-CE

### [Capabilities]

Maximum Link Speed:	260 Mbps
Transmit Buffer Size:	6201344 Bytes
Receive Buffer Size:	6201344 Bytes
Hardware ID:	PCI\VEN_8086&DEV_08B3&SUBSYS_00708086&REV_83

### [Driver Information]

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) Dual Band Wireless-AC 3160
Driver Provider:	Intel
Driver Version:	18.33.17.1
Driver Date:	29-Apr-2019
DeviceInstanceId	PCI\VEN_8086&DEV_08B3&SUBSYS_00708086&REV_83\4&84239F2&0&00E5
Location Paths	PCIROOT(0)#PCI(1C05)#PCI(0000)

## Ports

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## Serial Ports

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## USB

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### Intel(R) 8 Series/C220 Series USB EHCI #2 - 8C2D

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## Root Hub

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### [Port1] : Intel Integrated Rate Matching Hub

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**[Device Information]**

Device Manufacturer:	Intel
Product Name:	Intel Integrated Rate Matching Hub
Serial Number:	
USB Version Supported:	2.00
USB Device Speed:	USB 2.0 High-speed
Driver Description:	Generic USB Hub
Hardware ID:	USB\VID_8087&PID_8008

**[Driver Information]**

Driver Manufacturer:	(Generic USB Hub)
Driver Description:	Generic USB Hub
Driver Provider:	Microsoft
Driver Version:	10.0.19041.1
Driver Date:	21-Jun-2006
DeviceInstanceId	USB\VID_8087&PID_8008\5&368CAB37&0&1
Location Paths	PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)

### [Port1] : No Device Connected

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## **[Port2] : Microsoft USB Wireless Mouse (IntelliPoint)**

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### **[Device Information]**

Device Manufacturer:	Microsoft
Product Name:	Microsoft® 2.4GHz Transceiver v7.0
Serial Number:	N/A
USB Version Supported:	2.00
USB Device Speed:	USB 1.1 Full-speed
Driver Description:	Microsoft Mouse and Keyboard Detection Driver (USB)
Hardware ID:	USB\VID_045E&PID_0745

### **[Driver Information]**

Driver Manufacturer:	Microsoft
Driver Description:	Microsoft Mouse and Keyboard Detection Driver (USB)
Driver Provider:	Microsoft
Driver Version:	12.78.137.0
Driver Date:	25-Mar-2019
DeviceInstanceId	USB\VID_045E&PID_0745\6&19F9463&0&2
Location Paths	PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)#USB(2)

## **[Port3] : Intel Bluetooth V4.0 Module**

---

### **[Device Information]**

Device Manufacturer:	Intel
Product Name:	Intel Bluetooth V4.0 Module
Serial Number:	-
USB Version Supported:	2.00
USB Device Speed:	USB 1.1 Full-speed
Driver Description:	Intel(R) Wireless Bluetooth(R)
Hardware ID:	USB\VID_8087&PID_07DC

### **[Driver Information]**

Driver Manufacturer:	Intel Corporation
Driver Description:	Intel(R) Wireless Bluetooth(R)
Driver Provider:	Intel Corporation
Driver Version:	20.100.5.1
Driver Date:	17-Apr-2019
DeviceInstanceId	USB\VID_8087&PID_07DC\6&19F9463&0&3
Location Paths	PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)#USB(3)

## **[Port4] : No Device Connected**

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**[Port5] : No Device Connected**

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**[Port6] : No Device Connected**

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**[Port2] : No Device Connected**

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**Intel(R) USB 3.0 eXtensible-Hostcontroller – 1.0 (Microsoft)**

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**Root Hub**

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**[Port1] : No Device Connected**

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**[Port2] : No Device Connected**

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**[Port3] : No Device Connected**

---

**[Port4] : No Device Connected**

---

**[Port5] : No Device Connected**

---

**[Port6] : No Device Connected**

---

**[Port7] : No Device Connected**

---

**[Port8] : No Device Connected**

---

**[Port9] : No Device Connected**

---

**[Port10] : No Device Connected**

---

**[Port11] : No Device Connected**

---

**[Port12] : No Device Connected**

---

**[Port13] : No Device Connected**

---

**[Port14] : No Device Connected**

---

**[Port15] : Device General Failure**

---

**[Port16] : No Device Connected**

---

**[Port17] : No Device Connected**

---

**[Port18] : No Device Connected**

---

**[Port19] : No Device Connected**

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**[Port20] : No Device Connected**

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**[Port21] : No Device Connected**

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**Intel(R) 8 Series/C220 Series USB EHCI #1 - 8C26**

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**Root Hub**

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**[Port1] : Intel Integrated Rate Matching Hub**

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***[Device Information]***

Device Manufacturer:

Intel

Product Name:	Intel Integrated Rate Matching Hub
Serial Number:	
USB Version Supported:	2.00
USB Device Speed:	USB 2.0 High-speed
Driver Description:	Generic USB Hub
Hardware ID:	USB\VID_8087&PID_8000

**[Driver Information]**

Driver Manufacturer:	(Generic USB Hub)
Driver Description:	Generic USB Hub
Driver Provider:	Microsoft
Driver Version:	10.0.19041.1
Driver Date:	21-Jun-2006
DeviceInstanceId	USB\VID_8087&PID_8000\5&3230E7A&0&1
Location Paths	PCIROOT(0)#PCI(1D00)#USBROOT(0)#USB(1)

**[Port1] : No Device Connected**

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**[Port2] : No Device Connected**

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**[Port3] : No Device Connected**

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**[Port4] : precisionWave, PID=EF35**

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**[Device Information]**

Device Manufacturer:	precisionWave
Product Name:	precisionWave, PID=EF35
Serial Number:	-
USB Version Supported:	1.10
USB Device Speed:	USB 1.1 Full-speed
Driver Description:	USB-Eingabegerät
Hardware ID:	USB\VID_1770&PID_FF00

**[Driver Information]**

Driver Manufacturer:	(Standardsystemgeräte)
Driver Description:	USB-Eingabegerät
Driver Provider:	Microsoft
Driver Version:	10.0.19041.1
Driver Date:	21-Jun-2006
DeviceInstanceId	USB\VID_1770&PID_FF00\MSI_EPF_USB

## [Port5] : No Device Connected

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## [Port6] : No Device Connected

---

## [Port7] : No Device Connected

---

## [Port8] : No Device Connected

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## [Port2] : No Device Connected

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## Smart Battery

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## Battery #0

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### [General Properties]

Device Name:	PC-VP-BP77
Manufacturer Name:	MSI
Serial Number:	
Unique ID:	MSIPC-VP-BP77
Chemistry:	Lithium Ion
Designed Capacity:	48840 mWh
Full Charged Capacity:	40959 mWh
Wear Level:	16.1 %

### [Current Power Status]

Power Status:	On AC Power
Current Capacity:	39139 mWh (95.6 %)

Current Voltage:

12.382 V