

# Guide HWINFO

- Objet : Obtenir de l'information sur les composants matériels d'un ordinateur avec l'utilitaire **hwinfo**.
- Niveau requis :  
[débutant](#), [avisé](#)
- Commentaires : *Utile pour le dépannage, le soutien technique et la configuration du noyau.*
- Débutant, à savoir : [Utiliser GNU/Linux en ligne de commande, tout commence là !](#) 😊

## Introduction

L'utilitaire HWINFO est conçu pour explorer les composants matériels d'un PC. L'information générée est fort utile pour du soutien technique. On peut s'en servir comme référence lors de la configuration du noyau. Si vous ne trouvez pas tout ce que vous cherchez sur l'usage de la commande, consultez le manuel pour en savoir plus.

```
man hwinfo
```

## Utilisation

Cette section du tutoriel se divise en plusieurs sous-sections, chacune présentant un aspect précis de l'usage de la commande `hwinfo`.



La commande `hwinfo` oblige son exécution avec les droits d'administrateur (root).

Les informations générées par la commande `hwinfo` peuvent être enregistrées dans un fichier journal. Utilisez l'option **--log** suivi du nom du fichier où sauvegarder le résultat.



Il s'agit d'exemples. L'information obtenue variera selon votre configuration matérielle.

## BIOS

```
hwinfo --bios
```

```
01: None 00.0: 10105 BIOS
  [Created at bios.186]
  Unique ID: rdCR.lZF+r4EgHp4
  Hardware Class: bios
  BIOS Keyboard LED Status:
    Scroll Lock: off
    Num Lock: on
```

```
Caps Lock: off
Base Memory: 625 kB
PnP BIOS: @@@0000
MP spec rev 1.4 info:
  OEM id: "INTEL"
  Product id: "Calpella CRB"
  2 CPUs (0 disabled)
BIOS32 Service Directory Entry: 0xfdb60
SMBIOS Version: 2.6
Type 218 Record: #55808
  Data 00: da dd 00 da b2 00 d2 1b 0f 36 40 7d 00 00 00 00
  Data 10: 00 80 01 16 00 01 00 7f 01 16 00 00 00 52 01 17
  Data 20: 00 01 00 53 01 17 00 00 00 7c 01 18 00 01 00 7b
  Data 30: 01 18 00 00 00 75 01 75 01 01 00 76 01 76 01 01
  Data 40: 00 2e 00 25 00 00 00 6e 00 25 00 01 00 2d 00 25
  Data 50: 00 02 00 8a 01 48 00 01 00 89 01 48 00 00 00 9b
  Data 60: 00 23 00 01 00 9c 00 23 00 00 00 14 01 46 00 00
  Data 70: 00 15 01 46 00 01 00 16 01 46 00 02 00 8e 01 68
  Data 80: 00 01 00 8d 01 68 00 00 00 94 01 47 00 01 00 93
  Data 90: 01 47 00 00 00 ea 00 67 00 01 00 eb 00 67 00 00
  Data a0: 00 00 fe 00 00 00 00 01 fe 00 00 01 00 a0 fe 00
  Data b0: 00 00 00 a1 fe 00 00 01 00 e1 01 01 00 00 00 e2
  Data c0: 01 01 00 01 00 e3 01 01 00 02 00 dc 01 02 00 00
  Data d0: 00 dd 01 02 00 01 00 ff ff 00 00 00 00
BIOS Info: #1
  Vendor: "Dell Inc."
  Version: "A05"
  Date: "07/14/2010"
  Start Address: 0xe0cf0
  ROM Size: 2048 kB
  Features: 0x0793001300007dcbda80
    PCI supported
    PnP supported
    BIOS flashable
    BIOS shadowing allowed
    ESCD supported
    CD boot supported
    Selectable boot supported
    BIOS ROM socketed
    EDD spec supported
    360kB Floppy supported
    1.2MB Floppy supported
    720kB Floppy supported
    Print Screen supported
    8042 Keyboard Services supported
    Serial Services supported
    Printer Services supported
    CGA/Mono Video supported
    ACPI supported
    USB Legacy supported
    LS-120 boot supported
```

```
Smart Battery supported
BIOS Boot Spec supported
F12 Network boot supported
System Info: #2
Manufacturer: "Dell Inc."
Product: "Studio 1749"
Serial: "42063L1"
UUID: undefined, but settable
Wake-up: 0x06 (Power Switch)
Board Info: #3
Manufacturer: "Dell Inc."
Product: "029DYC"
Serial: ".42063L1.CN1296102J0182."
Asset Tag: "1234567890"
Type: 0x0a (Motherboard)
Features: 0x09
  Hosting Board
  Replaceable
Location: "Not Applicable"
Chassis: #3
Contained Objects: #0
Chassis Info: #4
Manufacturer: "Dell Inc."
Serial: "42063L1"
Asset Tag: "1234567890"
Type: 0x08 (Portable)
Bootup State: 0x03 (Safe)
Power Supply State: 0x03 (Safe)
Thermal State: 0x03 (Safe)
Security Status: 0x03 (None)
Processor Info: #5
Socket: "U2E1"
Socket Type: 0x04 (ZIF Socket)
Socket Status: Populated
Type: 0x03 (CPU)
Family: 0x0b (Pentium)
Manufacturer: "Intel"
Version: "CPU Version"
Processor ID: 0xbfefbfff00020652
Status: 0x01 (Enabled)
Voltage: 1.4 V
External Clock: 1333 MHz
Max. Speed: 2400 MHz
Current Speed: 2400 MHz
L1 Cache: #6
L2 Cache: #7
L3 Cache: #8
Cache Info: #6
Designation: "L1 Cache"
Level: L1
State: Enabled
```

```
Mode: 0x01 (Write Back)
Location: 0x00 (Internal, Socketed)
ECC: 0x05 (Single-bit)
Type: 0x04 (Data)
Associativity: 0x07 (8-way Set-Associative)
Max. Size: 64 kB
Current Size: 64 kB
Supported SRAM Types: 0x0058 (Burst, Pipeline Burst, Asynchronous)
Current SRAM Type: 0x0040 (Asynchronous)
Cache Info: #7
Designation: "L2 Cache"
Level: L2
State: Enabled
Mode: 0x01 (Write Back)
Location: 0x00 (Internal, Socketed)
ECC: 0x05 (Single-bit)
Type: 0x05 (Unified)
Associativity: 0x07 (8-way Set-Associative)
Max. Size: 4096 kB
Current Size: 256 kB
Supported SRAM Types: 0x0058 (Burst, Pipeline Burst, Asynchronous)
Current SRAM Type: 0x0008 (Burst)
Cache Info: #8
Designation: "L3 Cache"
Level: L3
State: Enabled
Mode: 0x01 (Write Back)
Location: 0x00 (Internal, Socketed)
ECC: 0x05 (Single-bit)
Type: 0x05 (Unified)
Associativity: 0x01 (Other)
Max. Size: 8192 kB
Current Size: 3072 kB
Supported SRAM Types: 0x0058 (Burst, Pipeline Burst, Asynchronous)
Current SRAM Type: 0x0008 (Burst)
Port Connector: #9
Type: 0x10 (USB)
Internal Designator: "USB"
External Connector: 0x12 (Access Bus [USB])
Port Connector: #10
Type: 0x1c (Video Port)
Internal Designator: "MONITOR"
External Connector: 0x07 (DB-15 pin female)
Port Connector: #11
Type: 0x11 (FireWire [IEEE P1394])
Internal Designator: "FireWire"
External Connector: 0x21 (1394)
Port Connector: #12
Type: 0x1f (Network Port)
Internal Designator: "Ethernet"
External Connector: 0x0b (RJ-45)
```

```
System Slot: #13
  Designation: "0Z888GS0"
  Type: 0xa5 (Other)
  Bus Width: 0x05 (32 bit)
  Status: 0x03 (Available)
  Length: 0x04 (Long)
  Slot ID: 6
  Characteristics: 0x0006 (5.0 V, 3.3 V)
On Board Devices: #14
  Sound: "HD-Audio" (disabled)
OEM Strings: #15
  Dell System
  1[041B]
  13[PP36S]
System Config Options (Jumpers & Switches) #16:
  Jumper settings can be described here.
Type 15 Record: #17
  Data 00: 0f 1d 11 00 00 00 00 00 00 00 04 00 00 00 00
  Data 10: 00 00 00 00 00 03 02 08 04 01 02 02 02
Physical Memory Array: #18
  Use: 0x03 (System memory)
  Location: 0x03 (Motherboard)
  Slots: 2
  Max. Size: 8 GB
  ECC: 0x03 (None)
Memory Device: #19
  Location: "M1"
  Bank: "Bank 0"
  Manufacturer: "02FE"
  Serial: "075E2576"
  Asset Tag: "0951"
  Part Number: "EBJ21UE8BDS0-DJ-F"
  Memory Array: #18
  Error Info: No Error
  Form Factor: 0x0d (SODIMM)
  Type: 0x18 (Other)
  Type Detail: 0x0080 (Synchronous)
  Data Width: 64 bits
  Size: 2 GB
  Speed: 1333 MHz
Memory Device: #20
  Location: "M2"
  Bank: "Bank 1"
  Manufacturer: "02FE"
  Serial: "0A5E2576"
  Asset Tag: "0951"
  Part Number: "EBJ21UE8BDS0-DJ-F"
  Memory Array: #18
  Error Info: No Error
  Form Factor: 0x0d (SODIMM)
  Type: 0x18 (Other)
```

```
Type Detail: 0x0080 (Synchronous)
Data Width: 64 bits
Size: 2 GB
Speed: 1333 MHz
32bit-Memory Error Info: #21
Type: 0x03 (OK)
Granularity: 0x02 (Unknown)
Operation: 0x02 (Unknown)
32bit-Memory Error Info: #22
Type: 0x03 (OK)
Granularity: 0x02 (Unknown)
Operation: 0x02 (Unknown)
Memory Array Mapping: #23
Memory Array: #18
Partition Width: 2
Start Address: 0x0000000000000000
End Address: 0x0000000100000000
Memory Device Mapping: #24
Memory Device: #19
Array Mapping: #23
Row: 1
Interleave Pos: 0
Interleaved Depth: 1
Start Address: 0x00000000
End Address: 0x80000000
Memory Device Mapping: #25
Memory Device: #20
Array Mapping: #23
Row: 1
Interleave Pos: 0
Interleaved Depth: 1
Start Address: 0x0000000080000000
End Address: 0x0000000100000000
Pointing Device: #26
Type: 0x07 (Touch Pad)
Interface: 0x07 (Bus Mouse)
Buttons: 2
Inactive Record: #27
Data 00: 7e 1a 1b 00 01 02 00 00 02 02 00 00 00 00 04 ff
Data 10: 00 00 01 00 05 0a 00 00 00 00
String 1: "System Battery Bay"
String 2: "DELL"
String 3: "Dell"
String 4: "1.1"
String 5: "Li-ion"
Type 23 Record: #28
Data 00: 17 0d 1c 00 3f ff ff ff ff ff ff ff ff
Hardware Security: #29
Power-on Password: 0x00 (Disabled)
Keyboard Password: 0x03 (Unknown)
Admin Password: 0x00 (Disabled)
```

```
Front Panel Reset: 0x03 (Unknown)
System Power Controls: #30
Next Power-on: 23:59:59 31/12
Type 26 Record: #31
Data 00: 1a 14 1f 00 01 63 00 80 00 80 00 80 00 80 00 80
Data 10: 00 00 00 00
String 1: "Voltage Probe"
Type 27 Record: #32
Data 00: 1b 0c 20 00 21 00 63 00 00 00 00 00
Type 28 Record: #33
Data 00: 1c 14 21 00 01 63 00 80 00 80 00 80 00 80 00 80
Data 10: 00 00 00 00
String 1: "Temperature Probe"
Type 29 Record: #34
Data 00: 1d 14 22 00 01 63 00 80 00 80 00 80 00 80 00 80
Data 10: 00 00 00 00
String 1: "Electrical Current Probe"
Type 30 Record: #35
Data 00: 1e 06 23 00 01 02
String 1: "Intel"
Type 32 Record: #36
Data 00: 20 14 24 00 00 00 00 00 00 00 00 00 00 00 00 00
Data 10: 00 00 00 00
Type 39 Record: #37
Data 00: 27 16 25 00 01 01 02 03 04 05 06 07 00 80 12 09
Data 10: 1f 00 20 00 22 00
String 1: "To Be Defined By O.E.M"
String 2: "To Be Defined By O.E.M"
String 3: "To Be Defined By O.E.M"
String 4: "To Be Defined By O.E.M"
String 5: "To Be Defined By O.E.M"
String 6: "To Be Defined By O.E.M"
String 7: "2.50"
Type 176 Record: #45056
Data 00: b0 05 00 b0 00
Type 177 Record: #45312
Data 00: b1 0c 00 b1 1a 0e 00 00 00 00 00 00
Type 208 Record: #53248
Data 00: d0 0c 00 d0 01 05 fe 00 1b 04 01 02
String 1: "20070319"
String 2: "20070319"
Type 212 Record: #54272
Data 00: d4 11 00 d4 70 00 71 00 00 10 2d 2e ff ff 00 00
Data 10: 00
Type 216 Record: #55296
Data 00: d8 09 00 d8 01 02 01 f0 03
String 1: "ATI"
String 2: "011.021.000.007"
Type 217 Record: #55552
Data 00: d9 0a 00 d9 01 02 01 02 01 03
String 1: "US-101"
```

```
String 2: "Proprietary"  
Type 220 Record: #56320  
Data 00: dc 14 00 dc 01 f0 00 00 02 f0 00 00 03 f0 04 f0  
Data 10: 00 00 00 00  
Type 221 Record: #56576  
Data 00: dd 13 00 dd 00 00 00 00 00 00 00 00 00 00 00  
Data 10: 00 00 00  
Type 222 Record: #56832  
Data 00: de 10 00 de 01 02 ff ff 00 00 00 00 00 00 00  
Config Status: cfg=new, avail=yes, need=no, active=unknown
```

## Cartes réseau



## Cartes de son



## Cartes vidéo



## Processeur

```
hwinfo --cpu
```

```
01: None 00.0: 10103 CPU  
[Created at cpu.455]  
Unique ID: rdCR.j8NaKXDZtZ6  
Hardware Class: cpu  
Arch: X86-64  
Vendor: "GenuineIntel"  
Model: 6.37.2 "Intel(R) Core(TM) i5 CPU          M 520 @ 2.40GHz"  
Features:  
fpu,vme,de,pse,tsc,msr,paе,mce,cx8,apic,sep,mtrr,pge,mca,cmov,pat,pse36,clfl  
ush,dts,acpi,mmx,fxsr,sse,sse2  
,ss,ht,tm,pbe,syscall,nx,rdtscp,lm,constant_tsc,arch_perfmon,pebs,bts,rep_go  
od,nopl,xtopology,nonstop_tsc,  
aperfmpperf,pni,pclmulqdq,dtes64,monitor,ds_cpl,vmx,smx,est,tm2,ssse3,cx16,xt  
pr,pdcm,sse4_1,sse4_2,popcnt,  
aes,lahf_lm,ida,arat,dtherm,tpr_shadow,vnmi,flexpriority,ept,vpid  
Clock: 1200 MHz  
BogoMips: 4788.04  
Cache: 3072 kb  
Units/Processor: 16
```



```
Config Status: cfg=new, avail=yes, need=no, active=unknown
```

```
02: None 01.0: 10103 CPU
```

```
[Created at cpu.455]
```

```
Unique ID: wkFv.j8NaKXDZtZ6
```

```
Hardware Class: cpu
```

```
Arch: X86-64
```

```
Vendor: "GenuineIntel"
```

```
Model: 6.37.2 "Intel(R) Core(TM) i5 CPU          M 520 @ 2.40GHz"
```

```
Features:
```

```
fpu,vme,de,pse,tsc,msr,paemce,cx8,apic,sep,mtrr,pge,mca,cmov,pat,pse36,clflush,dts,acpi,mmx,fxsr,sse,sse2
```

```
,ss,ht,tm,pbe,syscall,nx,rdtscp,lm,constant_tsc,arch_perfmon,pebs,bts,rep_good,nopl,xtopology,nonstop_tsc,
```

```
aperfmpperf,pni,pclmulqdq,dtes64,monitor,ds_cpl,vmx,smx,est,tm2,ssse3,cx16,xtp,rdcm,sse4_1,sse4_2,popcnt,
```

```
aes,lahf_lm,ida,arat,dtherm,tpr_shadow,vnmi,flexpriority,ept,vpid
```

```
Clock: 1200 MHz
```

```
BogoMips: 4788.04
```

```
Cache: 3072 kb
```

```
Units/Processor: 16
```

```
Config Status: cfg=new, avail=yes, need=no, active=unknown
```

```
03: None 02.0: 10103 CPU
```

```
[Created at cpu.455]
```

```
Unique ID: +rIN.j8NaKXDZtZ6
```

```
Hardware Class: cpu
```

```
Arch: X86-64
```

```
Vendor: "GenuineIntel"
```

```
Model: 6.37.2 "Intel(R) Core(TM) i5 CPU          M 520 @ 2.40GHz"
```

```
Features:
```

```
fpu,vme,de,pse,tsc,msr,paemce,cx8,apic,sep,mtrr,pge,mca,cmov,pat,pse36,clflush,dts,acpi,mmx,fxsr,sse,sse2
```

```
,ss,ht,tm,pbe,syscall,nx,rdtscp,lm,constant_tsc,arch_perfmon,pebs,bts,rep_good,nopl,xtopology,nonstop_tsc,
```

```
aperfmpperf,pni,pclmulqdq,dtes64,monitor,ds_cpl,vmx,smx,est,tm2,ssse3,cx16,xtp,rdcm,sse4_1,sse4_2,popcnt,
```

```
aes,lahf_lm,ida,arat,dtherm,tpr_shadow,vnmi,flexpriority,ept,vpid
```

```
Clock: 1200 MHz
```

```
BogoMips: 4788.04
```

```
Cache: 3072 kb
```

```
Units/Processor: 16
```

```
Config Status: cfg=new, avail=yes, need=no, active=unknown
```

```
04: None 03.0: 10103 CPU
```

```
[Created at cpu.455]
```

```
Unique ID: 4zLr.j8NaKXDZtZ6
```

```
Hardware Class: cpu
```

```
Arch: X86-64
```

```
Vendor: "GenuineIntel"
```

```
Model: 6.37.2 "Intel(R) Core(TM) i5 CPU          M 520 @ 2.40GHz"
```

Features:

```
fpu,vme,de,pse,tsc,msr,paе,mce,cx8,apic,sep,mtrr,pge,mca,cmov,pat,pse36,clflush,dts,acpi,mmx,fxsr,sse,sse2,ss,ht,tm,pbe,syscall,nx,rdtscp,lm,constant_tsc,arch_perfmon,pebs,bts,rep_good,nopl,xtopology,nonstop_tsc,aperfmpеrf,pni,pclmulqdq,dtes64,monitor,ds_cpl,vmx,smx,est,tm2,ssse3,cx16,xtpr,pdcm,sse4_1,sse4_2,popcnt,aes,lahf_lm,ida,arat,dtherm,tpr_shadow,vnmi,flexpriority,ept,vpid  
Clock: 2400 MHz  
BogoMips: 4788.04  
Cache: 3072 kb  
Units/Processor: 16  
Config Status: cfg=new, avail=yes, need=no, active=unknown
```

Ici on remarque qu'il y a 4 CPU Core I5 Intel. La vitesse maximale de chacun d'eux est 2400 MHz. La valeur **ht** dans **Features** indique que le hyperthreading est supporté par le processeur. **Arch** montre que l'architecture du processeur est 64-bit.

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