

# freebsd hardware- informationen anzeigen

## freebsd Hardwareinformationen anzeigen



### FreeBSD Hardwareinformationen abfragen – Thomas-Krenn-Wiki

FreeBSD stellt mehrere Kommandos bereit, die es erlauben Informationen zur verwendeten Hardware anzuzeigen. In diesem Artikel zeigen wir einige dieser Kommandos. Sofern nicht anders angeführt, haben wir einen 1HE Intel Single-CPU RI1102D-F Server mit OPNsense Version 18.7 verwendet.

[expand title="mehr lesen..."]

## FreeBSD Hardwareinformationen abfragen

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## camcontrol

Das Dienstprogramm camcontrol ermöglicht die Steuerung des FreeBSD CAM-Subsystems. CAM steht für Common Access Method. Es ist eine generische Möglichkeit, I/O-Busse SCSI-ähnlich anzusprechen. Mit dem Parameter ‚devlist‘ zeigt es die vorhandenen Devices an.

```
# camcontrol devlist
```

Die Ausgabe (in diesem Beispiel auf einem LES network+) zeigt:

```
<SanDisk SD8SFAT064G1122 Z2333000> at scbus0 target 0 lun 0  
(pass0,ada0)
```

## clog /var/log/system.log

Die Logdatei system.log enthält zahlreiche Informationen, die während des Systemstarts und auch danach vom FreeBSD Kernel und anderen Software Komponenten dokumentiert werden.

```
# clog /var/log/system.log
```

Die Ausgabe zeigt:

```
Jul 10 12:56:37 OPNsense syslogd: kernel boot file is /boot/kernel/kernel
```

```
Jul 10 12:56:37 OPNsense kernel: Copyright (c) 1992-2017 The FreeBSD Project.
```

```
Jul 10 12:56:37 OPNsense kernel: Copyright (c) 1979, 1980, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994
```

```
Jul 10 12:56:37 OPNsense kernel: The Regents of the University of California. All rights reserved.
```

```
Jul 10 12:56:37 OPNsense kernel: FreeBSD is a registered trademark of The FreeBSD Foundation.
```

```
Jul 10 12:56:37 OPNsense kernel: FreeBSD 11.1-RELEASE-p9 e86703e30(stable/18.1) amd64
```

```
Jul 10 12:56:37 OPNsense kernel: FreeBSD clang version 4.0.0 (tags/RELEASE_400/final 297347) (based on LLVM 4.0.0)
```

```
Jul 10 12:56:37 OPNsense kernel: VT(efifb): resolution 800x600
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD LOG] logging to system: enabled
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD LOG] logging to user: disabled
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD HARDENING] procfs hardening: enabled
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD ASLR] status: opt-out
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD ASLR] mmap: 30 bit
```

```
[...]
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD SEGVGUARD] status: opt-out
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD SEGVGUARD] expiry: 120 sec
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD SEGVGUARD] suspension: 600 sec
```

```
Jul 10 12:56:37 OPNsense kernel: [HBSD SEGVGUARD] maxcrashes: 5
```

```
Jul 10 12:56:37 OPNsense kernel: CPU: Intel(R) Xeon(R) CPU D-1518 @ 2.20GHz (2200.05-MHz K8-class CPU)
```

```
Jul 10 12:56:37 OPNsense kernel: Origin="GenuineIntel" Id=0x50663 Family=0x6 Model=0x56 Stepping=3
```

```
Jul 10 12:56:37 OPNsense kernel: Features=0xbfebfbff<FPU,VME,DE,PSE,TSC,MSR,PAE,MCE,CX8,APIC,SE
```

```

P, MTRR, PGE, MCA, CMOV, PAT, PSE36, CLFLUSH, DTS, ACPI, MMX, FXSR, SSE, SSE2, SS, HTT, TM, PBE>
Jul 10 12:56:37 OPNsense kernel: Features2=0x7ffefbff<SSE3, PCLMULQDQ, DTES64, MON, DS_CPL, VMX, SMX, EST, TM2, SSSE3, SDBG, FMA, CX16, xTPR, PDCM, PCID, DCA, SSE4.1, SSE4.2, x2APIC, MOVBE, POPCNT, TSCDLT, AESNI, XSAVE, OSXSAVE, AVX, F16C, RDRAND>
Jul 10 12:56:37 OPNsense kernel: AMD Features=0x2c100800<SYSCALL, NX, Page1GB, RDTSCP, LM>
Jul 10 12:56:37 OPNsense kernel: AMD Features2=0x121<LAHF, ABM, Prefetch>
Jul 10 12:56:37 OPNsense kernel: Structured Extended Features=0x21cbfbb<FSGSBASE, TSCADJ, BMI1, HLE, AVX2, SMEP, BMI2, ERMS, INVPCID, RTM, PQM, NFPUSG, PQE, RDSEED, ADX, SMAP, PROCTRACE>
Jul 10 12:56:37 OPNsense kernel: Structured Extended Features3=0xc0000000<IBPB, STIBP>
Jul 10 12:56:37 OPNsense kernel: XSAVE Features=0x1<XSAVEOPT>
[...]

```

## devinfo

```
# devinfo -rv
```

Die Ausgabe zeigt:

```

nexus0
  cryptosoft0
  apic0
  ram0
    I/O memory addresses:
      0x0-0x9bfff
      0x100000-0x795d0fff
      0x797a2000-0x7989afff
      0x7bdb1000-0x7bdb1fff
      0x7be38000-0x7bfffffff
      0x100000000-0x17fffffff
  acpi0
  [...]
      cpu0  pnpinfo  _HID=ACPI0007  _UID=0  at
handle=\_SB_.SCK0.CP00  _PXM=0
  acpi_throttle0
  est0

```

```
p4tcc0
acpi_perf0
cpufreq0
[...]
    pci5
        pcib5 bus numbers:
            4
            ix0 pnpinfo vendor=0x8086 device=0x15ac
subvendor=0x15d9 subdevice=0x15ac class=0x020000 at slot=0
function=0 dbsf=pci0:4:0:0 handle=\_SB_.PCI0.BR2C.H000
        Interrupt request lines:
            0x111
            0x112
            0x113
            0x114
            0x115
            0x116
            0x117
            0x118
            0x119
        pcib5 prefetch window:
            0xfbc00000-0xfbdf0000
            0xfbe04000-0xfbe07fff
[...]
    aesni0
```

## dmesg

Das Dienstprogramm `dmesg` zeigt den Inhalt des Systemnachrichtenpuffers (system message buffer) an.

```
# dmesg
```

Die Ausgabe zeigt:

Copyright (c) 1992-2017 The FreeBSD Project.

Copyright (c) 1979, 1980, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994

The Regents of the University of California. All rights reserved.

FreeBSD is a registered trademark of The FreeBSD Foundation.

```
FreeBSD 11.1-RELEASE-p11 21b4c8ea1d5(stable/18.7) amd64
[...]
real memory = 4294967296 (4096 MB)
avail memory = 3955470336 (3772 MB)
Event timer "LAPIC" quality 600
ACPI APIC Table: <SUPERM SMCI--MB>
FreeBSD/SMP: Multiprocessor System Detected: 8 CPUs
FreeBSD/SMP: 1 package(s) x 4 core(s) x 2 hardware threads
[...]
ix0: <Intel(R) PRO/10GbE PCI-Express Network Driver, Version -
3.2.12-k> mem 0xfbc00000-0xfbdfffff,0xfbe04000-0xfbe07fff
[...]
igb0: <Intel(R) PRO/1000 Network Connection, Version - 2.5.3-
k> port 0xe000-0xe01f mem
[...]
nvd0: <INTEL SSDPEKKW128G8> NVMe namespace
nvd0: 122104MB (250069680 512 byte sectors)
[...]
aesni0: <AES-CBC,AES-XTS,AES-GCM,AES-ICM> on motherboard
[...]
```

## dmidecode

Das Tool [dmidecode](#) zeigt den Inhalt der DMI (Desktop Management Interface) Tabellen:

```
# dmidecode
```

Unter FreeBSD und OPNsense muss dmidecode zumeist manuell installiert werden:

```
# pkg install dmidecode
```

Die Ausgabe zeigt dann:

```
root@fw-neufelden:~ # dmidecode
# dmidecode 3.2
# SMBIOS entry point at 0x8d346000
Found SMBIOS entry point in EFI, reading table from /dev/mem.
SMBIOS 3.0 present.
68 structures occupying 3320 bytes.
Table at 0x8D343000.
```

Handle 0x0000, DMI type 0, 24 bytes

BIOS Information

Vendor: American Megatrends Inc.

Version: 5.12

Release Date: 05/24/2019

Address: 0xF0000

Runtime Size: 64 kB

ROM Size: 16 MB

Characteristics:

PCI is supported

BIOS is upgradeable

BIOS shadowing is allowed

Boot from CD is supported

[...]

## freebsd-version

Das Kommando `freebsd-version` zeigt die Version sowie den Patchlevel des installierten Systems an. Die Option `,-k` zeigt dabei die Kernel Version.

```
# freebsd-version -k
```

Die Ausgabe zeigt:

```
11.1-RELEASE-p11
```

Die Option `,-u` zeigt dabei die Userland Version.

```
# freebsd-version -u
```

Die Ausgabe zeigt:

```
11.1-RELEASE-p11
```

## gpart

Mit den `geom` Kommandos (Kurzbezeichnung in FreeBSD für **disk geometry**) können die unterschiedlichen FreeBSD GEOM Klassen gesteuert werden.

Die aktuellen Partitionsinformationen können mit dem folgenden Kommando abgefragt werden:

```
# gpart show
```

Die Ausgabe (in diesem Beispiel auf einem LES network+) zeigt:

```
=>      40  125045344  ada0  GPT  (60G)
      40      409600      1  efi  (200M)
      409640      1024      2  freebsd-boot  (512K)
      410664  106171048      3  freebsd-ufs  (51G)
     106581712  16777216      4  freebsd-swap (8.0G)
     123358928   1686456      - free - (823M)
```

Details zu den Partitionen zeigt folgendes Kommando:

```
# gpart list
```

Die Ausgabe (in diesem Beispiel auf einem LES network+) zeigt:

```
Geom name: ada0
modified: false
state: OK
fwheads: 16
fwsectors: 63
last: 125045383
first: 40
entries: 152
scheme: GPT
Providers:
1. Name: ada0p1
   Mediasize: 209715200 (200M)
   Sectorsize: 512
   Stripessize: 0
   Stripeoffset: 20480
   Mode: r0w0e0
   rawuuid: ae6015a9-6f0d-11e8-a8f7-0030180173f6
   rawtype: c12a7328-f81f-11d2-ba4b-00a0c93ec93b
   label: (null)
   length: 209715200
   offset: 20480
   type: efi
   index: 1
```

```
end: 409639
start: 40
[...]
Consumers:
1. Name: ada0
   Mediasize: 64023257088 (60G)
   Sectorsize: 512
   Mode: r2w2e5
```

## ifconfig

```
# ifconfig
```

Die Ausgabe zeigt:

```
ix0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> metric
0 mtu 1500
options=e407bb<RXCSUM,TXCSUM,VLAN_MTU,VLAN_HWTAGGING,JUMBO_MTU
,VLAN_HWCSUM,TS04,TS06,LRO,VLAN_HWTS0,RXCSUM_IPV6,TXCSUM_IPV6>
   ether ac:1f:6b:64:aa:2e
   hwaddr ac:1f:6b:64:aa:2e
   inet 172.16.10.2 netmask 0xffffffff00 broadcast
172.16.10.255
   inet6 fe80::ae1f:6bff:fe64:aa2e%ix0 prefixlen 64
scopeid 0x1
   nd6 options=21<PERFORMNUD,AUTO_LINKLOCAL>
   media: Ethernet autoselect
   status: no carrier
[...]
igb0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST>
metric 0 mtu 1500
options=6407bb<RXCSUM,TXCSUM,VLAN_MTU,VLAN_HWTAGGING,JUMBO_MTU
,VLAN_HWCSUM,TS04,TS06,LRO,VLAN_HWTS0,RXCSUM_IPV6,TXCSUM_IPV6>
   ether ac:1f:6b:64:a5:e6
   hwaddr ac:1f:6b:64:a5:e6
   inet 172.16.1.2 netmask 0xffffffff00 broadcast
172.16.1.255
   inet6 fe80::ae1f:6bff:fe64:a5e6%igb0 prefixlen 64
scopeid 0x3
   nd6 options=21<PERFORMNUD,AUTO_LINKLOCAL>
   media: Ethernet autoselect
```

```
status: no carrier
```

```
[...]
```

## kldstat

```
# kldstat
```

```
Die Ausgabe zeigt:
```

Id	Refs	Address	Size	Name
1	92	0xffffffff80200000	21484c0	kernel
2	1	0xffffffff8234a000	6e18	if_gre.ko
3	1	0xffffffff82351000	7570	if_tap.ko
[...]				
45	1	0xffffffff827e9000	7130	aesni.ko

## pciconf

```
# pciconf -lv
```

```
Die Ausgabe zeigt:
```

```
[...]
```

```
ix0@pci0:4:0:0: class=0x020000 card=0x15ac15d9 chip=0x15ac8086  
rev=0x00 hdr=0x00
```

```
vendor      = 'Intel Corporation'  
device      = 'Ethernet Connection X552 10 GbE SFP+'  
class       = network  
subclass    = ethernet
```

```
[...]
```

```
igb0@pci0:7:0:0: class=0x020000 card=0x153315d9  
chip=0x15338086 rev=0x03 hdr=0x00
```

```
vendor      = 'Intel Corporation'  
device      = 'I210 Gigabit Network Connection'  
class       = network  
subclass    = ethernet
```

```
[...]
```

```
igb2@pci0:11:0:0: class=0x020000 card=0x152115d9  
chip=0x15218086 rev=0x01 hdr=0x00
```

```
vendor      = 'Intel Corporation'
```

```
device      = 'I350 Gigabit Network Connection'
class       = network
subclass    = ethernet
[...]
```

## pkg info

```
# pkg info
```

Die Ausgabe zeigt:

```
GeoIP-1.6.12          Find the country that any IP
address or hostname originates from
apinger-0.7           IP device monitoring tool
[...]
cpustats-0.1          Gather system statistics
[...]
ntp-4.2.8p11_2        The Network Time Protocol
Distribution
openldap-sasl-client-2.4.46  Open source LDAP client
implementation with SASL2 support
openssh-portable-7.7.p1_6,1  The portable version of
OpenBSD's OpenSSH
openssl-1.0.2o_4,1     SSL and crypto library
openvpn-2.4.6_1        Secure IP/Ethernet tunnel
daemon
opnsense-18.7          OPNsense release package
opnsense-lang-18.1.7    OPNsense translations
opnsense-update-18.7    OPNsense update utilities
[...]
suricata-4.0.5          High Performance Network IDS,
IPS and Security Monitoring engine
syslogd-11.1           FreeBSD syslogd with additions
unbound-1.7.3           Validating, recursive, and
caching DNS resolver
wpa_supplicant-2.6_2    Supplicant (client) for
WPA/802.1x protocols
zip-3.0_1              Create/update ZIP files
compatible with PKZIP
```

```
# pkg info opnsense
```

Die Ausgabe zeigt:

opnsense-18.7

```
Name           : opnsense
Version        : 18.7
Installed on   : Tue Aug  7 13:51:34 2018 CEST
Origin         : opnsense/opnsense
Architecture   : FreeBSD:11:amd64
Prefix         : /usr/local
Categories     : sysutils www
Licenses       : BSD2CLAUSE
Maintainer     : franco@opnsense.org
WWW            : https://opnsense.org/
Comment        : OPNsense release package
Annotations    :
                FreeBSD_version: 1101001
                repo_type       : binary
                repository      : OPNsense
Flat size      : 25.1MiB
Description    :
950d04f47
```

## sysctl

```
# sysctl -a
```

Die Ausgabe zeigt:

```
kern.ostype: FreeBSD
kern.osrelease: 11.1-RELEASE-p11
kern.osrevision: 199506
kern.version:          FreeBSD           11.1-RELEASE-p11
21b4c8ea1d5(stable/18.7)
[...]
hw.igb.tx_process_limit: -1
hw.igb.rx_process_limit: 100
hw.igb.num_queues: 0
hw.igb.header_split: 0
hw.igb.buf_ring_size: 4096
hw.igb.max_interrupt_rate: 8000
hw.igb.enable_msix: 1
hw.igb.enable_aim: 1
```

```
hw.igb.txd: 1024
hw.igb.rxd: 1024
[...]
dev.igb.0.host.header_redir_missed: 0
dev.igb.0.host.serdes_violation_pkt: 0
dev.igb.0.dropped: 0
dev.igb.0.eee_disabled: 0
dev.igb.0.dmac: 0
dev.igb.0.tx_processing_limit: -1
dev.igb.0.rx_processing_limit: 100
dev.igb.0.fc: 3
dev.igb.0.enable_aim: 1
dev.igb.0.nvm: -1
dev.igb.0.%parent: pci8
dev.igb.0.%pnpinfo:      vendor=0x8086      device=0x1533
subvendor=0x15d9 subdevice=0x1533 class=0x020000
dev.igb.0.%location: slot=0 function=0 dbsf=pci0:7:0:0
handle=\_SB_.PCI0.RP01.D02D
dev.igb.0.%driver: igb
dev.igb.0.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
dev.igb.%parent:
[...]
```

In Kombination mit ‚grep‘ können Informationen wie Treiberversionen gesammelt ausgegeben werden: [\[11\]](#)

```
root@OPNsense-18-7:~/hw-analyse-frontio-mit-x710 # sysctl -a |
grep -E 'dev.(igb|ix|em).*.%desc:'
dev.igb.5.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
dev.igb.4.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
dev.igb.3.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
dev.igb.2.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
dev.igb.1.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
dev.igb.0.%desc: Intel(R) PR0/1000 Network Connection, Version
- 2.5.3-k
```

```
dev.ixl.1.%desc: Intel(R) Ethernet Connection 700 Series PF
Driver, Version - 1.9.9-k
dev.ixl.0.%desc: Intel(R) Ethernet Connection 700 Series PF
Driver, Version - 1.9.9-k
dev.ix.1.%desc: Intel(R) PRO/10GbE PCI-Express Network Driver,
Version - 3.2.12-k
dev.ix.0.%desc: Intel(R) PRO/10GbE PCI-Express Network Driver,
Version - 3.2.12-k
root@OPNsense-18-7:~/hw-analyse-frontio-mit-x710 # sysctl
dev.ixl.0.fw_version
dev.ixl.0.fw_version: fw 6.0.48442 api 1.7 nvm 6.01 etid
800035cf oem 1.262.0
```

## usbconfig

Das Tool `usbconfig` zeigt Details zu angeschlossenen USB-Geräten:

```
# usbconfig
```

Die Ausgabe zeigt:

```
root@OPNsense:~ # usbconfig
ugen0.1: <0x8086 XHCI root HUB> at usb0, cfg=0 md=HOST
spd=SUPER (5.0Gbps) pwr=SAVE (0mA)
ugen0.2: <Logitech USB Receiver> at usb0, cfg=0 md=HOST
spd=FULL (12Mbps) pwr=ON (98mA)
```

Mit der Option `-h` erscheinen Informationen zu weiteren Kommandos:

```
root@OPNsense:~ # usbconfig -h
usbconfig - configure the USB subsystem
usage: usbconfig -u <busnum> -a <devaddr> -i <ifaceindex>
[cmds...]
usage: usbconfig -d [ugen]<busnum>.<devaddr> -i <ifaceindex>
[cmds...]
commands:
  set_config <cfg_index>
  set_alt <alt_index>
  set_template <template>
  get_template
```

```
add_dev_quirk_vplh <vid> <pid> <lo_rev> <hi_rev> <quirk>
remove_dev_quirk_vplh <vid> <pid> <lo_rev> <hi_rev> <quirk>
add_quirk <quirk>
remove_quirk <quirk>
dump_quirk_names
dump_device_quirks
dump_all_desc
dump_device_desc
dump_curr_config_desc
dump_all_config_desc
dump_string <index>
dump_info
show_ifdrv
suspend
resume
power_off
power_save
power_on
reset
list
do_request <bmReqTyp> <bReq> <wVal> <wIdx> <wLen> <data...>
root@OPNsense:~ #
```

Details zu einem bestimmten Gerät können mit der Option -d zur Auswahl des Gerätes und mit dem Kommando `dump_all_desc` abgefragt werden:

```
# usbconfig -d ugen0.2 dump_all_desc
```

Die Ausgabe zeigt:

```
root@OPNsense:~ # usbconfig -d ugen0.2 dump_all_desc
ugen0.2: <Logitech USB Receiver> at usb0, cfg=0 md=HOST
spd=FULL (12Mbps) pwr=0N (98mA)
```

```
bLength = 0x0012
bDescriptorType = 0x0001
bcdUSB = 0x0200
bDeviceClass = 0x0000 <Probed by interface class>
bDeviceSubClass = 0x0000
bDeviceProtocol = 0x0000
bMaxPacketSize0 = 0x0008
```

```
idVendor = 0x046d
idProduct = 0xc52e
bcdDevice = 0x2301
iManufacturer = 0x0001 <Logitech>
iProduct = 0x0002 <USB Receiver>
iSerialNumber = 0x0000 <no string>
bNumConfigurations = 0x0001
```

```
Configuration index 0
[...]
```

## x86info

Das Tool x86info erlaubt es, zahlreiche Informationen über den verwendeten Prozessor auszulesen, z.B. auch die [Intel Microcode](#) Version.

**Hinweis:** x86info ist bei [OPNsense](#) (das auf FreeBSD basiert), nicht enthalten. Damit es dennoch via `pkg install x86info` installiert werden kann, müssen zuvor FreeBSD Pakete temporär für die Installation zugelassen werden (Eintrag in `/usr/local/etc/pkg/repos/FreeBSD.conf` auf `yes` setzen). Nach der Installation sollte dieser Eintrag wieder auf `no` gestellt werden.

Installation von x86info unter OPNsense:

```
root@OPNsense:~ # vi /usr/local/etc/pkg/repos/FreeBSD.conf
root@OPNsense:~ # cat /usr/local/etc/pkg/repos/FreeBSD.conf
FreeBSD: { enabled: yes }
root@OPNsense:~ # pkg install x86info
[...]
```

The following 3 package(s) will be affected (of 0 checked):

New packages to be INSTALLED:

```
  x86info: 1.31.s02 [FreeBSD]
  libpci: 3.6.2 [OPNsense]
  pciids: 20180428 [FreeBSD]
```

```
[...]
```

```
root@OPNsense:~ # vi /usr/local/etc/pkg/repos/FreeBSD.conf
```

```
root@OPNsense:~ # cat /usr/local/etc/pkg/repos/FreeBSD.conf
FreeBSD: { enabled: no }
root@OPNsense:~ #
```

Damit das Tool ausgeführt werden kann, muss zuvor das Modul cpuctl mittels kldload geladen werden. Das folgende Beispiel zeigt die Ausgabe von x86info auf einem LES network+.

```
root@OPNsense:~ # kldload cpuctl
root@OPNsense:~ # x86info -a
x86info v1.31pre
```

MP Table:

#	APIC ID	Version	State	
Family	Model	Step	Flags	
#	0	0x15	BSP, usable	6
14	3	0x0381		
#	2	0x15	AP, usable	6
14	3	0x0381		

Found 4 identical CPUs

Extended Family: 0 Extended Model: 4 Family: 6 Model: 78  
Stepping: 3

Type: 0 (Original OEM)

CPU Model (x86info's best guess): Core i7 [Skylake Mobile]

Processor name string (BIOS programmed): Intel(R) Core(TM)  
i5-6300U CPU @ 2.40GHz

Performance msrs:

MSR\_IA32\_PERF\_STATUS: 0x1c2a00001700

MSR\_IA32\_MISC\_ENABLE: 0x850089 [Enabled: TCC PerfMon  
EnhancedSpeedStep ]

Thermal msrs:

MSR\_PM\_THERM2\_CTL: 0x0 [Thermal monitor: 1]

MSR\_IA32\_THERM\_CONTROL: 0x0 [Software-controlled clock  
disabled (full speed)]

MSR\_IA32\_THERM\_STATUS: 0x88390000

Machine check MSRs:

Number of reporting banks : 8

Bank: 0 (0x400)

MC0CTL: 00000000 00000000 00000000 00000000

```
00000000 00000000 00001111 11111111
MC0STATUS: 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000
MC0ADDR: 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000
```

[...]

Bank: 7 (0x41c)

```
MC7CTL: 00000000 00000000 00000000 00000000
00000000 00000000 00000000 11111111
MC7STATUS: 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000
MC7ADDR: 00000000 00000000 00000000 00000000
11111110 11110001 11011001 01000000
```

Microcode version: 0x0000000000000000c2

eax in: 0x00000000, eax = 00000016 ebx = 756e6547 ecx =  
6c65746e edx = 49656e69

eax in: 0x00000001, eax = 000406e3 ebx = 00100800 ecx =  
7ffafbff edx = bfebfbff

[...]

eax in: 0x80000008, eax = 00003027 ebx = 00000000 ecx =  
00000000 edx = 00000000

Cache info

L1 Data Cache: 32KB, 8-way associative, 64 byte line size

L1 Instruction Cache: 32KB, 8-way associative, 64 byte line  
size

L2 Unified Cache: 256KB, 4-way associative, 64 byte line size

L3 Unified Cache: 3072KB, 12-way associative, 64 byte line  
size

TLB info

Instruction TLB: 2M/4M pages, fully associative, 8 entries

Instruction TLB: 4K pages, 8-way associative, 64 entries

Data TLB: 1GB pages, 4-way set associative, 4 entries

Data TLB: 4KB pages, 4-way associative, 64 entries

Shared L2 TLB: 4KB/2MB pages, 6-way associative, 1536 entries

64 byte prefetching.

Feature flags:

fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov  
pat pse36 clflush ds acpi mmx fxsr sse sse2 ss ht tm pbe sse3

pclmuldq dtes64 monitor ds-cpl vmx smx est tm2 sse3 sdbg fma  
cx16 xTPR pdcm pcid sse4\_1 sse4\_2 x2apic movbe popcnt tsc-  
deadline aes xsave osxsave avx f16c rdrnd

Extended feature flags:

SYSCALL xd pdpe1gb rdtscp em64t lahf\_lm lzcnt prefetchw dts  
ida arat pln ecmd ptm hwp hwp\_notify hwp\_act\_window hwp\_epp  
hdc fsgsbase tsc\_adj sgx bmi1hle avx2 smep bmi2 erms invpcid  
rtm nofpucs mpx rdseed adx smap clflushopt ipt nonstop\_tsc

Long NOPs supported: yes

MTRR registers:

MTRRcap (0xfe): 0x000000000000001d0a wc:1 fix:1 vcnt:10

[...]

MTRRdefType (0x2ff): 0x00000000000000c06 (fixed-range flag:1  
enable flag:1 default type:0x06 (write-back))

APIC registers:

APIC MSR Base(0x1b): : 0x00000000fee00900

[...]

APIC Divide Configuration (for Timer) : 0x00000000

Address sizes : 39 bits physical, 48 bits virtual  
2.50GHz processor (estimate).

Total processor threads: 4

This system has 1 dual-core processor with hyper-threading (2  
threads per core) running at an estimated 2.50GHz

## Einzelnachweise

[/expand]

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# shopware6-console befehle

## Shopware 6 – Console – Befehle

[expand title="mehr lesen..."]

### Console

```
/Applications/MAMP/bin/php/php7.3.1/bin/php bin/console
```

### shopware plugin service

```
/Applications/MAMP/bin/php/php7.3.1/bin/php bin/console  
plugin:list
```

### shopware plugin deinstallieren

```
/Applications/MAMP/bin/php/php7.3.1/bin/php bin/console  
plugin:uninstall ...
```

### shopware cache leeren

```
/Applications/MAMP/bin/php/php7.3.1/bin/php bin/console  
cache:clear
```

### theme skelett erstellen

```
/Applications/MAMP/bin/php/php7.3.1/bin/php bin/console  
theme:create name (zB. EightTheme)
```

```
/Applications/MAMP/bin/php/php7.3.1/bin/php bin/console  
theme:create --help
```

### Core commands

```
sw:thumbnail:cleanup      Deletes thumbnails that lack their  
original (full size) image file.
```

```
sw:thumbnail:generate    Generates a new thumbnail.
```

```
sw:generate:attributes   Generates attribute models.
```

```
sw:warm:http:cache       Warms up http cache
```

```
sw:media:cleanup         Collects unused media and moves it to
```

the trashbin.

sw:snippets:find:missing Finds missing snippets in the database and dumps them into .ini files

sw:snippets:remove Removes snippets from the database. Applicable for a specified folder

sw:snippets:to:db Loads snippets from the "/snippets" folder in your installation's main directory to the database. To find the folder, [click here](#)

sw:snippets:to:ini Dump snippets from the database into .ini files

sw:snippets:to:sql Load snippets from .ini files into sql files

#### Plugin commands

sw:plugin:activate Activates a plugin.

sw:plugin:config:list Lists plugin configurations.

sw:plugin:config:set Sets plugin configurations.

sw:plugin:deactivate Deactivates a plugin.

sw:plugin:delete Deletes a plugin.

sw:plugin:install Installs a plugin.

sw:plugin:list Lists plugins.

sw:plugin:refresh Refreshes plugin list.

sw:plugin:uninstall Uninstalls a plugin.

sw:plugin:update Updates a plugin.

[/expand]