```
()USB, PCIIswh -CPU
```



- Astra Linux Special Edition .10015-01 (1.7)
- Astra Linux Special Edition .10015-01 (1.6)
- Astra Linux Special Edition .10015-16 . 1
- Astra Linux Special Edition .10015-16 . 2 (cpufrequtils)
- Astra Linux Special Edition .10015-01 (1.5)
- Astra Linux Special Edition .10265-01 (8.1) (cpufrequtils)
- Astra Linux Common Edition 2.12

()

() Isblk:

```
lsblk
NAME
      MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
      11:0 1 3,6G 0 rom
sr0
      252:0
            0 30G 0 disk
vda
vda1 252:1
            0
                26G 0 part /
vda2 252:2
            0
                 1K 0 part
vda5 252:5
                 4G 0 part [SWAP]
```

. .

USB

() Isusb:

```
Bus 002 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 001 Device 002: ID 0627:0001 Adomax Technology Co., Ltd
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
```

PCI

, PCI Ispci:

```
lspci -kv
:
-k- ;
-v- ;
lswh -
    :
    sudo apt install lshw
```

sudo.

```
1. :

sudo lshw -short

, ;

2. -class:

sudo lshw -class volume

3. HTML:

sudo lshw -html > lshw.html

web-,:

firefox lshw.html
```

```
lscpu - , , -.
cpufreq-info - . cpufrequtils, Astra Linux Special Edition .

sudo apt install cpufrequtils
```

, -, , lscpu:

```
lscpu
:x86_64
CPU op-mode(s):
                      32-bit, 64-bit
:Little Endian
CPU(s):
                      6
On-line CPU(s) list:
                      0-5
Thread(s) per core:
 :6
NUMA node(s):
                      1
ID :GenuineIntel
:6
:
          158
: Intel(R) Core(TM) i5-8400 CPU @ 2.80GHz
: 10
CPU MHz:
                      3900.072
CPU max MHz:
                      4000,0000
CPU min MHz:
                      800,0000
                      5616.00
BogoMIPS:
:VT-x
L1d cache:
                      32K
Lli cache:
                      32K
L2 cache:
                      256K
```

```
L3 cache:
                       9216K
NUMA node0 CPU(s):
                       0 - 5
             fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
pdpe1gb rdtscp lm constant_tsc art arch_
perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf
tsc_known_freq pni pclmulqdq dtes64 monitor ds_cpl vmx est tm2 ssse3 sdbg
fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic
movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm
3dnowprefetch cpuid_fault invpcid_single pti ssbd ibrs ibpb stibp
tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_ad
just bmil avx2 smep bmi2 erms invpcid mpx rdseed adx smap clflushopt
intel_pt xsaveopt xsavec xgetbv1 xsaves dtherm ida arat pln pts hwp
hwp_notify hwp_act_window hwp_epp md_clear flush_lld
```

CPU(s): 6 - ()
Thread(s) per core: 1:6 CPU MHz: 3900.072 CPU max MHz: 4000,0000 CPU min MHz: 800,0000 L* cache -

```
cpufreq-info
cpufrequtils 008: cpufreq-info (C) Dominik Brodowski 2004-2009
Report errors and bugs to cpufreq@vger.kernel.org, please.
analyzing CPU 0:
driver: intel pstate
CPUs which run at the same hardware frequency: 0
CPUs which need to have their frequency coordinated by software: 0
maximum transition latency: 4294.55 ms.
hardware limits: 800 MHz - 4.00 GHz
available cpufreq governors: performance, powersave
current policy: frequency should be within 800 MHz and 4.00 GHz.
                 The governor "performance" may decide which speed to use
                 within this range.
current CPU frequency is 3.90 GHz.
analyzing CPU 1:
driver: intel_pstate
CPUs which run at the same hardware frequency: 1
CPUs which need to have their frequency coordinated by software: 1
maximum transition latency: 4294.55 ms.
hardware limits: 800 MHz - 4.00 GHz
available cpufreq governors: performance, powersave
current policy: frequency should be within 800 MHz and 4.00 GHz.
                 The governor "performance" may decide which speed to use
                 within this range.
current CPU frequency is 3.84 GHz.
analyzing CPU 2:
driver: intel pstate
CPUs which run at the same hardware frequency: 2
CPUs which need to have their frequency coordinated by software: 2
maximum transition latency: 4294.55 ms.
hardware limits: 800 MHz - 4.00 GHz
available cpufreq governors: performance, powersave
current policy: frequency should be within 800 MHz and 4.00 GHz.
                 The governor "performance" may decide which speed to use
```

```
within this range.
current CPU frequency is 3.90 GHz.
analyzing CPU 3:
driver: intel_pstate
CPUs which run at the same hardware frequency: 3
CPUs which need to have their frequency coordinated by software: 3
maximum transition latency: 4294.55 ms.
hardware limits: 800 MHz - 4.00 GHz
available cpufreq governors: performance, powersave
current policy: frequency should be within 800 MHz and 4.00 GHz.
                 The governor "performance" may decide which speed to use
                 within this range.
current CPU frequency is 3.87 GHz.
analyzing CPU 4:
driver: intel_pstate
CPUs which run at the same hardware frequency: 4
CPUs which need to have their frequency coordinated by software: 4
maximum transition latency: 4294.55 ms.
hardware limits: 800 MHz - 4.00 GHz
available cpufreq governors: performance, powersave
current policy: frequency should be within 800 MHz and 4.00 GHz.
                 The governor "performance" may decide which speed to use
                 within this range.
current CPU frequency is 3.89 GHz.
analyzing CPU 5:
driver: intel_pstate
CPUs which run at the same hardware frequency: 5
CPUs which need to have their frequency coordinated by software: 5
maximum transition latency: 4294.55 ms.
hardware limits: 800 MHz - 4.00 GHz
available cpufreq governors: performance, powersave
current policy: frequency should be within 800 MHz and 4.00 GHz.
                 The governor "performance" may decide which speed to use
                 within this range.
current CPU frequency is 3.90 GHz.
```

, :

```
cat /proc/cpuinfo | grep MHz

cpu MHz : 3899.859
cpu MHz : 3946.018
cpu MHz : 3982.597
cpu MHz : 3920.590
cpu MHz : 3918.047
cpu MHz : 3982.490
```