

- ()
- USB
- , PCI
- lsw -
- 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

()

() lsblk:

```
lsblk
```

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

, .

## USB

() lsusb:

```
lsusb
```

```
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 lspci:

```
lspci -kv
```

:

-k- ;

-v- ;

## lsw -

:

```
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
```

## CPU

**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: 1
          :6
          : 1
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
BogoMIPS:             5616.00
  :VT-x
L1d cache:         32K
L1i 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  
pdpelgb 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 bmi1 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](mailto: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

```