

# Cpuinfo

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There are a lot of useful information in `/proc/cpuinfo`. However in modern server boards you have a lot of CPU's and sometimes even more cores. To keep the oversight about this lengthy information sometimes this information needs to be a little preprocessed. This article is about some small scripts that get specific information.

## 1 Model Name

```
grep -i 'model name' /proc/cpuinfo|uniq
```

```
Machine      Model Name
```

```
=====
X200 Tablet Intel(R) Core(TM)2 Duo CPU    L9400  @ 1.86GHz
```

```
Super Micro Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz
MIC          0b/01
```

## 2 Number Of Calculation Cores

```
grep -i 'processor' /proc/cpuinfo|wc -l
```

| Machine     | Model Name                                 | Value |
|-------------|--------------------------------------------|-------|
| X200 Tablet | Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz | 2     |
| Super Micro | Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz   | 16    |
| MIC         | 0b/01                                      | 244   |

## 3 Number Of Real Cpu Cores:

### 3.1 Physical ID

```
grep -i "physical id" /proc/cpuinfo|sort -u|uniq|wc -l
```

| Machine     | Model Name                                 | Value |
|-------------|--------------------------------------------|-------|
| X200 Tablet | Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz | 1     |
| Super Micro | Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz   | 2     |
| MIC         | 0b/01                                      | 1     |

### 3.2 Core ID

```
grep -i 'core id' /proc/cpuinfo|uniq|wc -l
```

| Machine     | Model Name                                 | Value |
|-------------|--------------------------------------------|-------|
| X200 Tablet | Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz | 2     |
| Super Micro | Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz   | 16    |
| MIC         | 0b/01                                      | 62    |

However the 'cpu cores' value for MIC is set to 61. And 244 cores divided by 4 is 61 not 62.

### 3.3 CPU Cores

```
grep -i 'cpu cores' /proc/cpuinfo|uniq|sed -e 's%cpu cores.*: %%'
```

| Machine     | Model Name                                 | Value |
|-------------|--------------------------------------------|-------|
| =====       | =====                                      | ===== |
| X200 Tablet | Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz | 2     |
| Super Micro | Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz   | 8     |
| MIC         | 0b/01                                      | 61    |

### 3.4 The Number Of Cores

To make the situation not ambiguous the number of real cores should be calculated as:

```
echo $((`grep -i "physical id" /proc/cpuinfo|sort -u|uniq|wc -l` * \
`grep -i 'cpu cores' /proc/cpuinfo|uniq|sed -e 's%cpu cores.*: %%'`))
```

| Machine     | Model Name                                 | Value |
|-------------|--------------------------------------------|-------|
| =====       | =====                                      | ===== |
| X200 Tablet | Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz | 2     |
| Super Micro | Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz   | 16    |
| MIC         | 0b/01                                      | 61    |

## 4 History

| Version | Date       | Notes                           |
|---------|------------|---------------------------------|
| 0.1.1   | 2022-07-02 | Commands meta data, shell->bash |
| 0.1.0   | 2016-06-22 | Initial release                 |

## 5 Disclaimer of Warranty

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