

How to Overclock ODROID-C4

- Ubuntu : The Kernel version must be 4.9.218-24 or higher.
- Android : The Android-PIE release date must be May 2020 or later.

The available list of cpu frequency set

frequency	notation on boot.ini	clock spec.
2.100 GHz	"2100"	overclock (unstable)
2.016 GHz	"2016"	overclock (stable)
1.908 GHz	"1908"	default
1.800 GHz	"1800"	spec in
1.704 GHz	"1704"	spec in
...

You can check the available frequency set with the following node.

```
# # cat
/sys/devices/system/cpu/cpufreq/policy0/scaling_available_frequencies
100000 250000 500000 667000 1000000 1200000 1404000 1500000 1608000 1704000
1800000 1908000 2016000 2100000
```

In case of **Android**, we don't recommend **2.100GHz** cpu frequency on Android system so far because system booting and heavy load test with 2.100GHz is unstable currently.

Adjust CPU Max Frequency using boot.ini

How to Set boot.ini

Please modify **max_freq** based on the aforementioned frequency table. The unit of max_freq in boot.ini in MHz.

```
### boot.ini

# max cpu frequency for little core, A55 in MHz unit
# setenv max_freq_a55 "2100" # 2.100 Ghz (NOTICE: 2.1GHz is the Overclock frequency)
setenv max_freq_a55 "2016" # 2.016 Ghz
```

```
# setenv max_freq_a55 "1908" # 1.908 GHz, default value
# setenv max_freq_a55 "1800" # 1.8 Ghz
# setenv max_freq_a55 "1704" # 1.704 GHz
```

How to Check new max cpu frequency

You can check if the current max cpu frequency via the below node.

```
# cat /sys/devices/system/cpu/cpufreq/policy0/scaling_max_freq
2016000
```

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