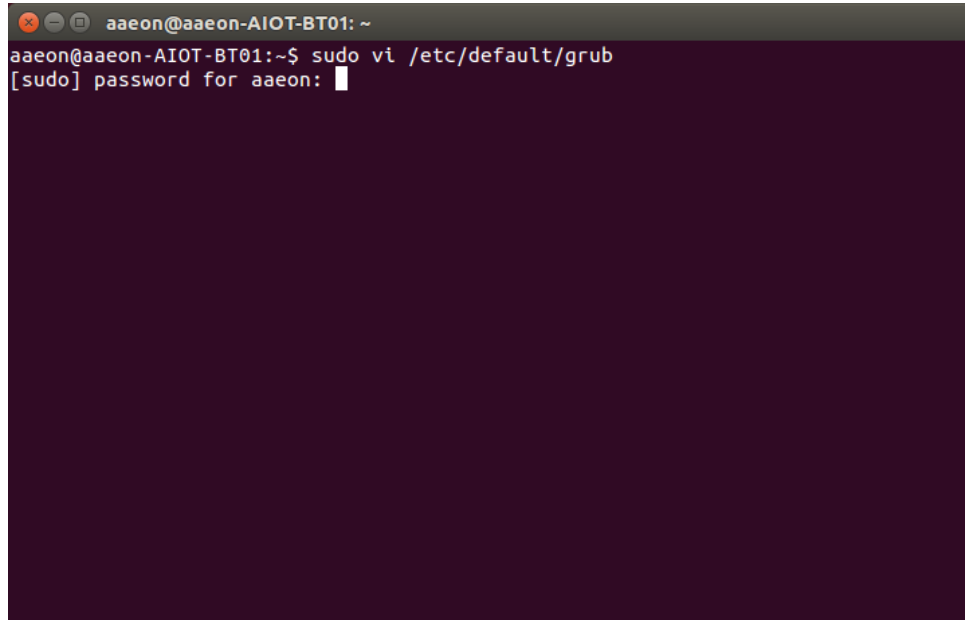


Fix the GENE-QM77 reboot Issue on Ubuntu

Step 1. Edit /etc/default/grub one command.

\$ sudo vi /etc/default/grub

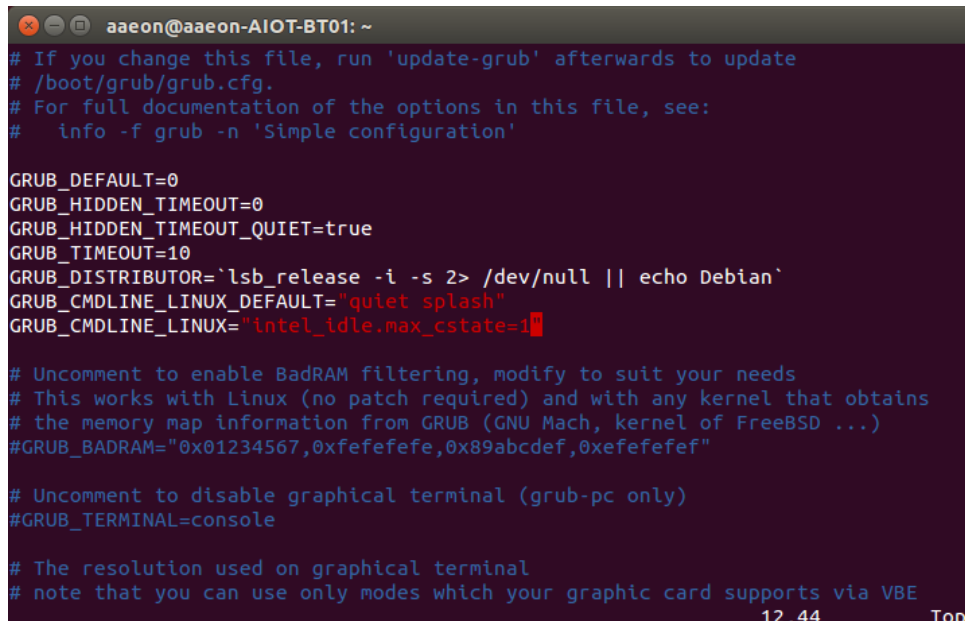


```
aaeon@aaeon-AIOT-BT01: ~  
aaeon@aaeon-AIOT-BT01:~$ sudo vi /etc/default/grub  
[sudo] password for aaeon: █
```

Change lines command like below:

GRUB_CMDLINE_LINUX="intel_idle.max_cstate=1" or

GRUB_CMDLINE_LINUX="intel_idle.max_cstate=0"



```
aaeon@aaeon-AIOT-BT01: ~  
# If you change this file, run 'update-grub' afterwards to update  
# /boot/grub/grub.cfg.  
# For full documentation of the options in this file, see:  
# info -f grub -n 'Simple configuration'  
  
GRUB_DEFAULT=0  
GRUB_HIDDEN_TIMEOUT=0  
GRUB_HIDDEN_TIMEOUT_QUIET=true  
GRUB_TIMEOUT=10  
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`  
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"  
GRUB_CMDLINE_LINUX="intel_idle.max_cstate=1"  
  
# Uncomment to enable BadRAM filtering, modify to suit your needs  
# This works with Linux (no patch required) and with any kernel that obtains  
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)  
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"  
  
# Uncomment to disable graphical terminal (grub-pc only)  
#GRUB_TERMINAL=console  
  
# The resolution used on graphical terminal  
# note that you can use only modes which your graphic card supports via VBE  
12,44 Top
```

Step 2. Update grub

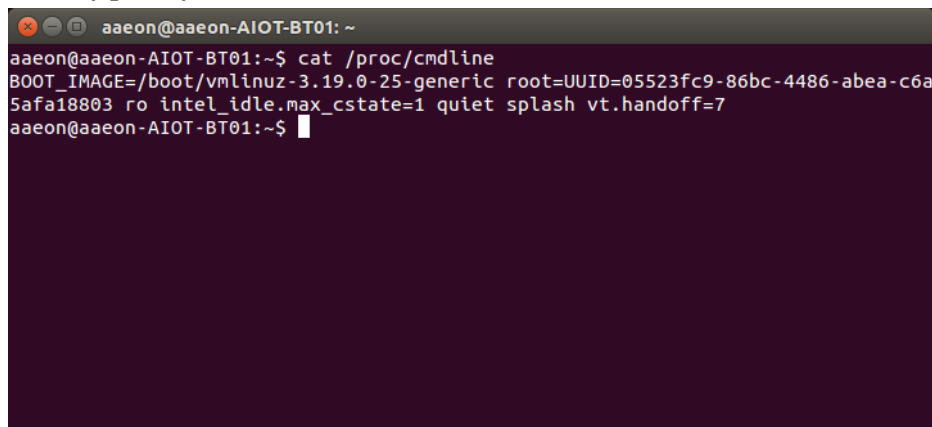
```
$ sudo update-grub
```

Step 3. Reboot system

```
$ sudo reboot
```

Step 4. Check command line again

```
$ cat /proc/cmdline
```



```
aaeon@aaeon-AIOT-BT01: ~  
aaeon@aaeon-AIOT-BT01:~$ cat /proc/cmdline  
BOOT_IMAGE=/boot/vmlinuz-3.19.0-25-generic root=UUID=05523fc9-86bc-4486-abea-c6a  
5afa18803 ro intel_idle.max_cstate=1 quiet splash vt.handoff=7  
aaeon@aaeon-AIOT-BT01:~$
```

Note

For “intel_idle.max_cstate=1”

Means the Linux kernel driver will **not allow CPU** get into c_state other than C1. This is for identify if the problem is relative to CPU idle status control.

For “intel_idle.max_cstate=0”

Which will **disable the Linux kernel driver** about controlling the CPU idle status. In another word, **the CPU will control the idle state by itself**. This solution should be able to avoid the situation that customer concerned cstate=1 will consume more energy from power supply.