ASUS 1005HA - ACPI AND CPU FAN FAILURE

I use ASUS 1005HA for web browsing but recently I experienced CPU fan failure as it loudly works only from time to time. Its hard to get new fan when most people celebrates Christmas. Hopefully there is one solution that will give me some time.

At first I can hear that fan is failing and logs proves it:

Dec 24 15:54:51 milosz-1005HA kernel: [53200.537194] Critical temperature reached (89 C), shutting down.

System will noticeably slow down when CPU temperature reaches 85'C and shut itself down at 88'C.

```
# acpi -V
Battery 0: Discharging, 92%, 07:36:54 remaining
Battery 0: design capacity 5800 mAh, last full capacity 5408 mAh = 93%
Adapter 0: off-line
Thermal 0: ok, 54.0 degrees C
Thermal 0: trip point 0 switches to mode critical at temperature 88.0 degrees C
Thermal 0: trip point 1 switches to mode passive at temperature 85.0 degrees C
Cooling 0: LCD 0 of 15
Cooling 1: Processor 0 of 10
```

Cooling 2: Processor 0 of 10

To change these values we need to edit grub configuration:

```
$ sudo vim /etc/grub.d/10_linux
```

Search for **GRUB_CMDLINE_LINUX_DEFAULT** around line **70**:

```
GRUB_CMDLINE_LINUX_DEFAULT="$GRUB_CMDLINE_LINUX_DEFAULT

vt.handoff=7"
```

Modify it in similar way (**thermal.psv** is a passive temperature and **thermal.crt** is a critical temperature):

```
GRUB_CMDLINE_LINUX_DEFAULT="$GRUB_CMDLINE_LINUX_DEFAULT

thermal.psv=75 thermal.crt=100 vt.handoff=7"
```

Update grub and reboot system:

```
$ sudo update-grub2
$ sudo reboot
```

Now you can check modifications:

```
$ acpi -V
Battery 0: Discharging, 91%, 07:00:05 remaining
Battery 0: design capacity 5800 mAh, last full capacity 5408 mAh = 93%
Adapter 0: off-line
Thermal 0: ok, 63.0 degrees C
```

Thermal 0: trip point 0 switches to mode critical at temperature 100.0 degrees C

Thermal 0: trip point 1 switches to mode passive at temperature 75.0 degrees C

Cooling 0: LCD 0 of 15

Cooling 1: Processor 0 of 10

Cooling 2: Processor 0 of 10

It won't make problem go away but there is a chance that at least it will work for couple of days.