

Assembly instruction

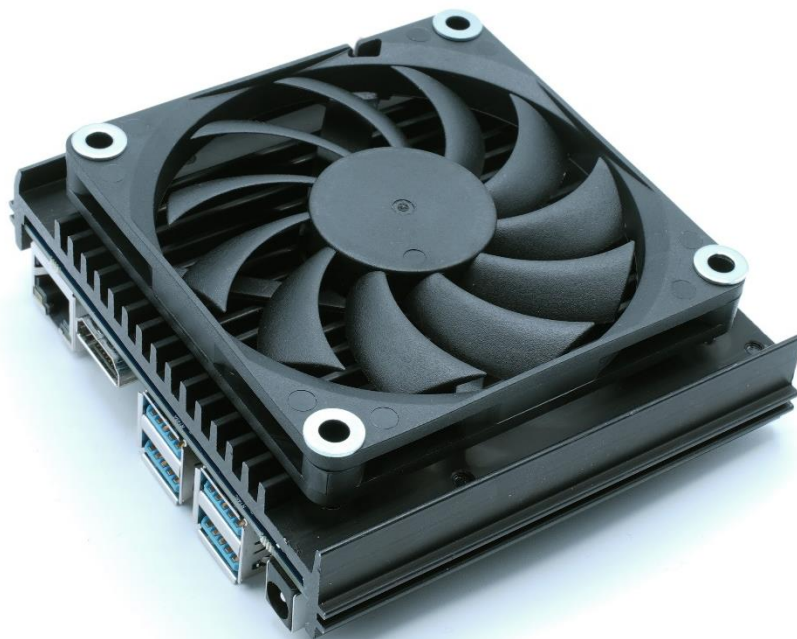
How to assemble KKSb N2+ Case & How to connect a push-button for the N2+ board



1. Put the fan on the heatsink and align it with the 4 threaded holes on the heatsink

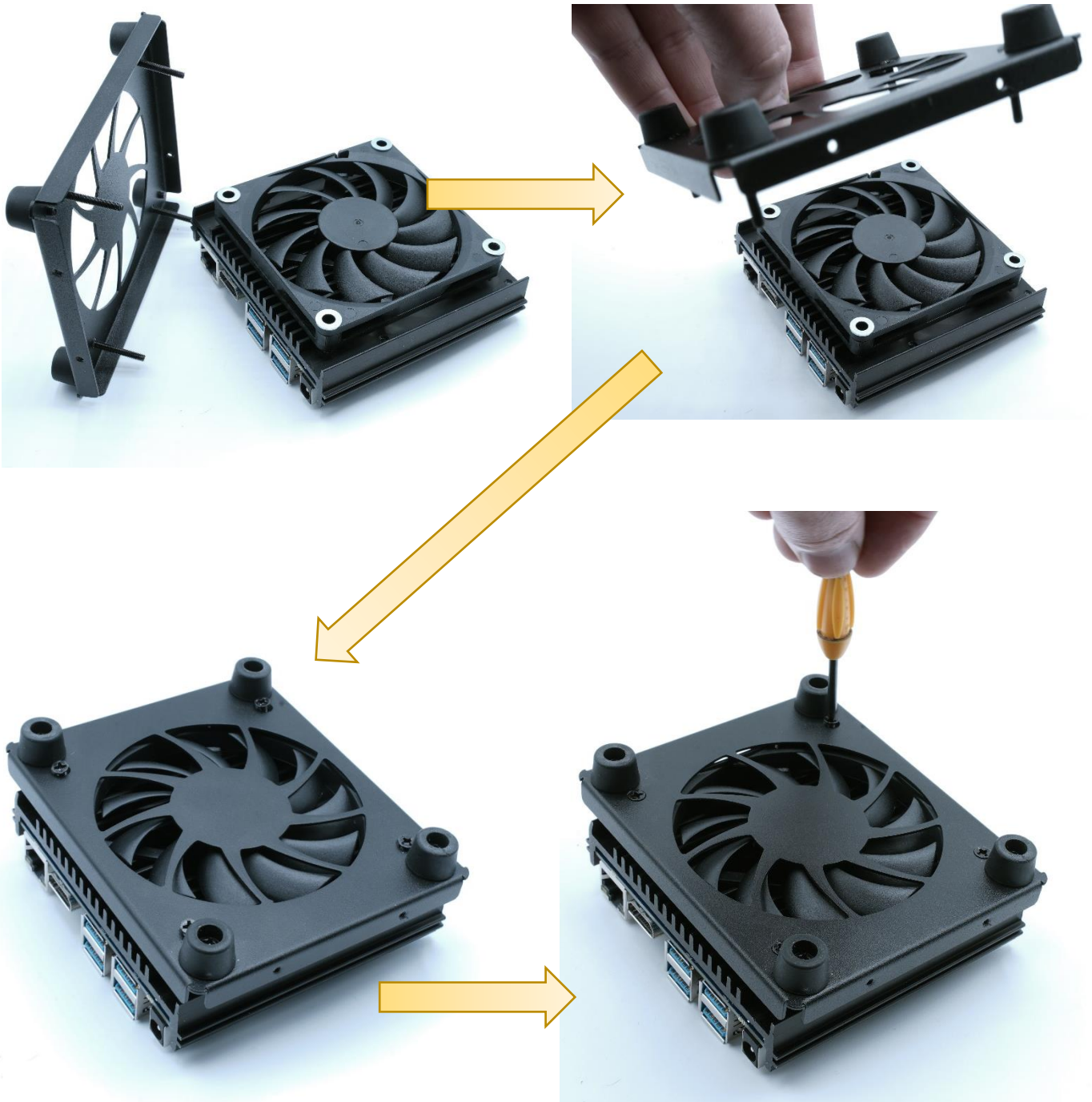


2. Put the washers on top of the fan

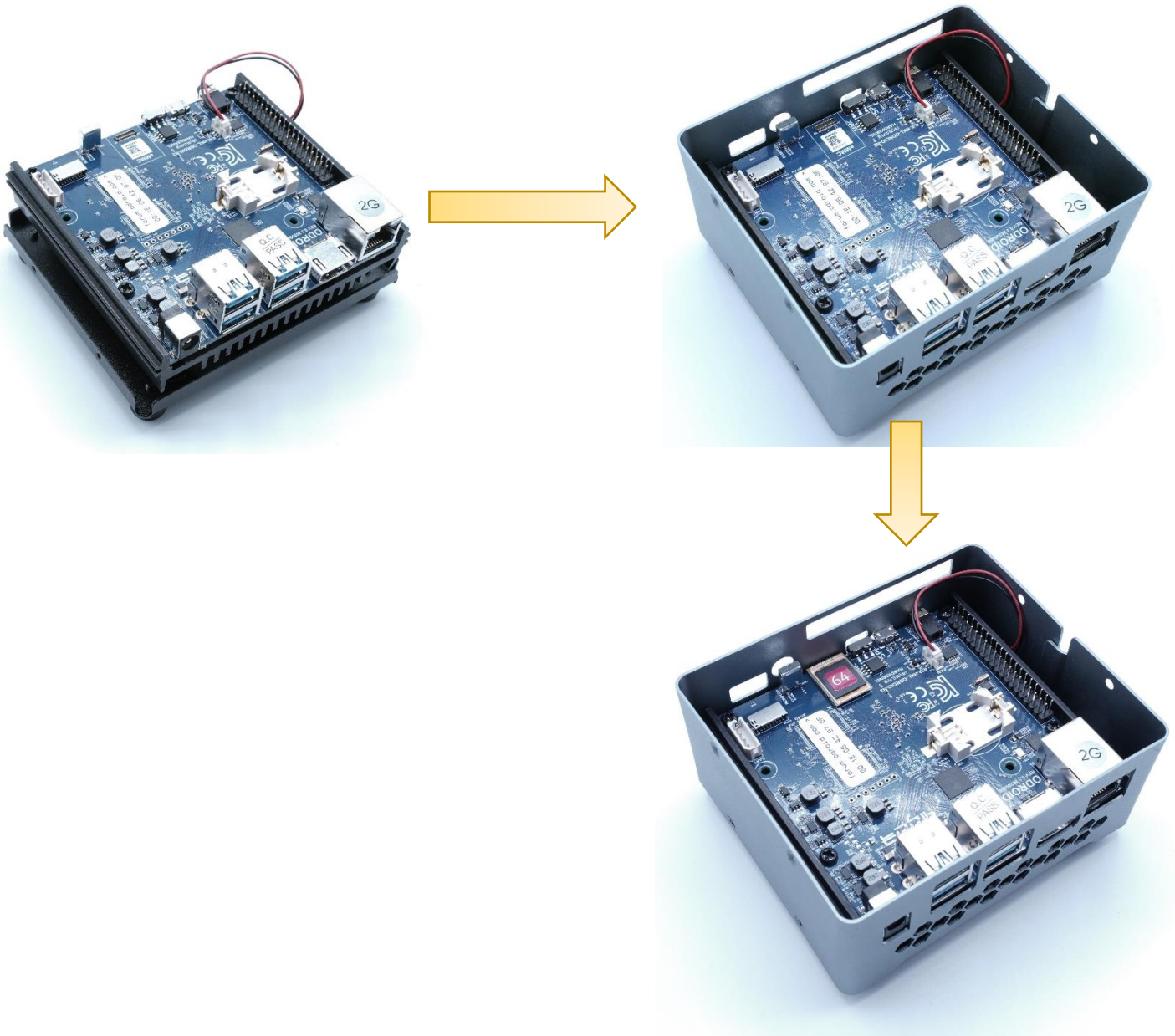




3. Insert the long screws in the bottom part & screw them all together.

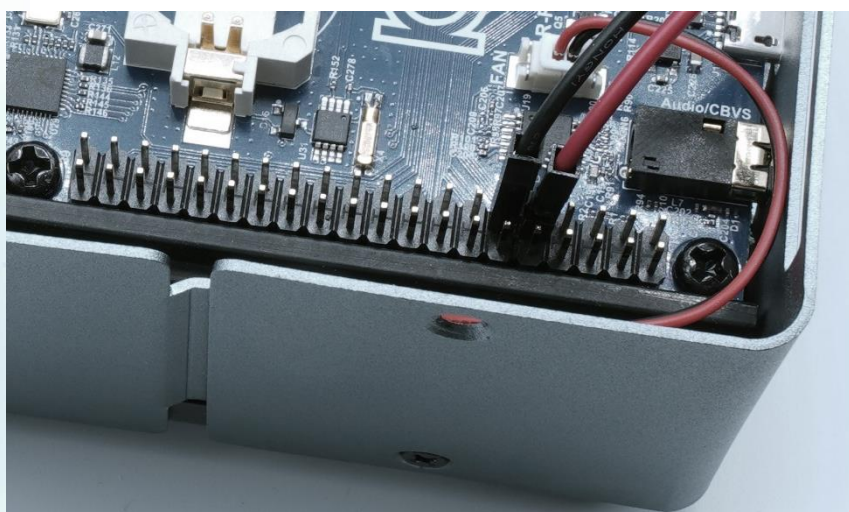
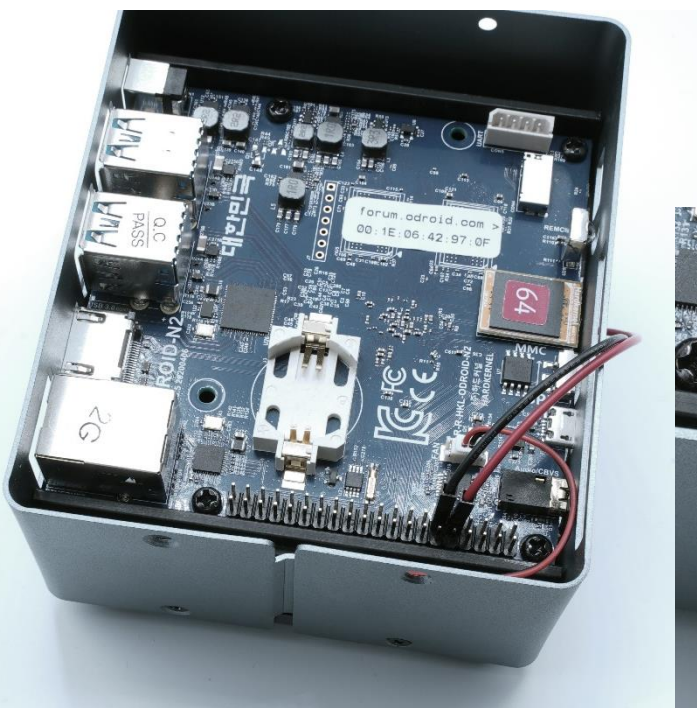
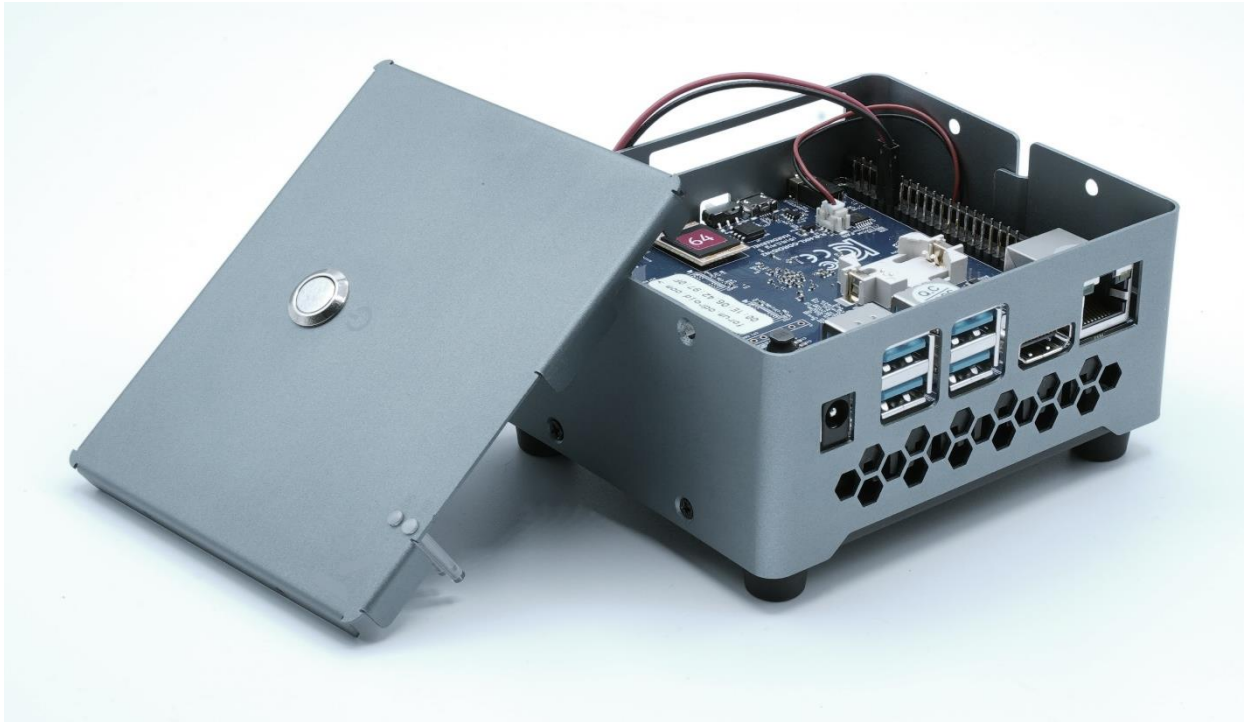


4. Put carefully the case body like below and mount the eMMC module & fan. The fan will start automatically only if the temperature gets high.





5. Connect the push button to pin 11 and pin 9. It does not matter which of the pushbutton contacts goes to which of the pins



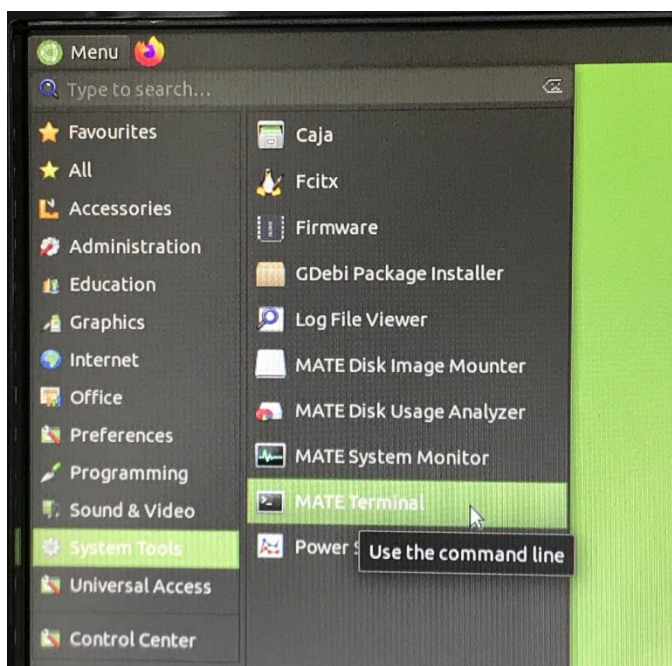
6. Assemble the lid



7. Software settings (The example is for Linux). All steps below are to simply edit the boot.ini file. There are many ways to do this.

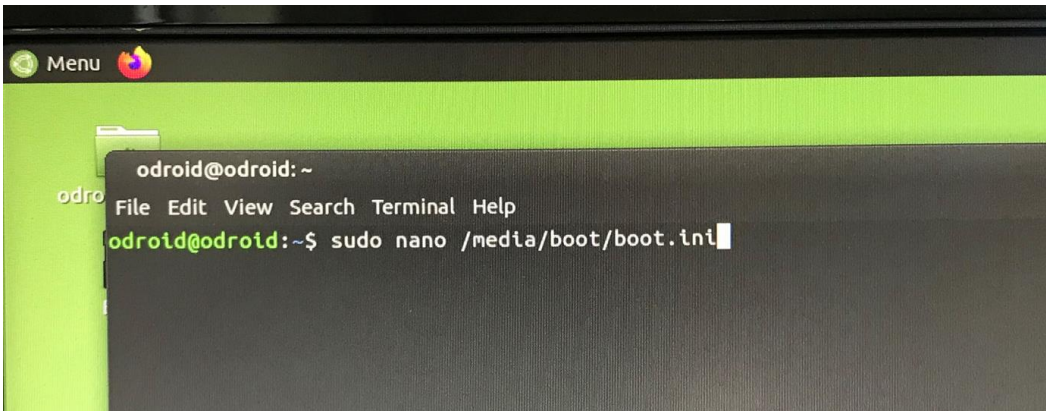
A) Connect the power, keyboard, mouse, ethernet and connect to a screen

B) Menu->System Tools->MATE Terminal

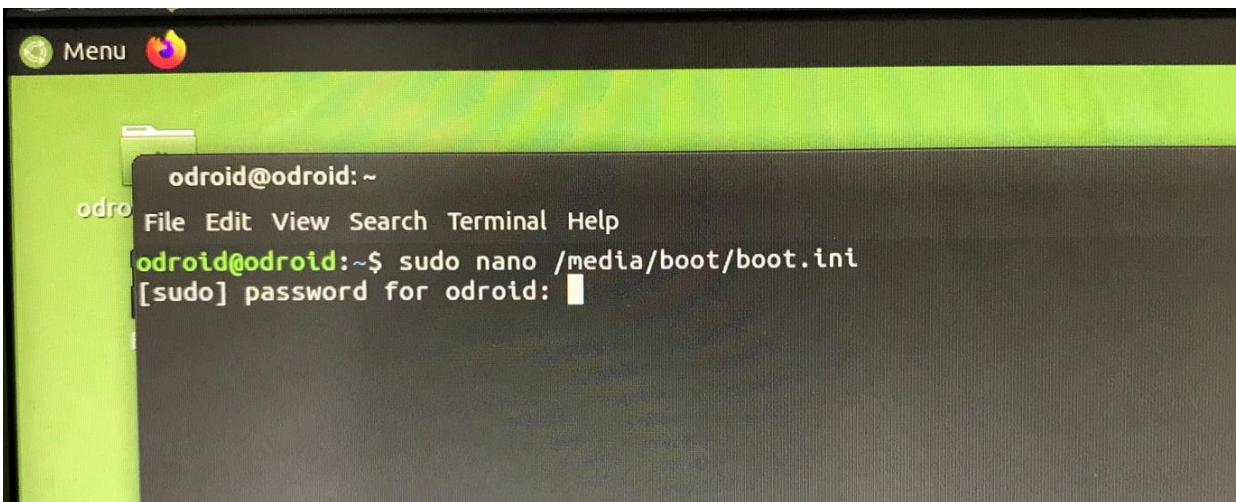




C) Type: `sudo nano /media/boot/boot.ini`



D) Type your password. Default password: `odroid`



E) Add the 3 lines as below:

```
# PLEASE USE CONFIG.INI INSTEAD. THIS HAS CHANGED!
#
#####
setenv board "odroidn2"
setenv display_autodetect "true"
setenv hdmimode "1080p60hz"
setenv monitor_onoff "false"
setenv overscan "100"
setenv sdrmode "auto"
setenv voutmode "hdmi"
setenv disablehpd "false"
setenv cec "true"
setenv disable_vu7 "true"
setenv enable_wol "0"

if test "${variant}" = "n2_plus";
    setenv max_freq_a73 "2200"
    setenv max_freq_a53 "1900"
else
    setenv max_freq_a73 "1800"
    setenv max_freq_a53 "1896"
fi

setenv maxcpus "6"

# Set load addresses
setenv dtb_loadaddr "0x10000000"
setenv dtbo_addr_r "0x11000000"
setenv k_addr "0x11000000"
setenv loadaddr "0x1B000000"
setenv initrd_loadaddr "0x37000000"

load mmc ${devno}:1 ${loadaddr} config.t
    && ini generic ${loadaddr}
if test "x${overlay_profile}" != "x";
    ini overlay_${overlay_profile} ${loadaddr}
fi

# Default Console Device Setting
setenv condev "console=ttyS0,115200n8" # on both

### Normal HDMI Monitors
if test "${display_autodetect}" = "true"; then hdmitx edid; fi
if test "${hdmimode}" = "n2_plus"; then setenv cmode "modeline=${modeline}"; fi
if test "${cec}" = "true"; then setenv cec_enable "hdmitx=cec3f"; fi
if test "${disable_vu7}" = "false"; then setenv hid_quirks "usbhid.quirks=0x0eef:0x0005:0x0004"; fi

# Boot Args
setenv bootargs "root=efi/efi/e139ce78-9841-40fe-8823-96a304a09859 rootwait rw ${condev} ${amllogic} no_console_suspend fsck.rep

# Load kernel, dtb and initrd
load mmc ${devno}:1 ${k_addr} Image.gz
load mmc ${devno}:1 ${initrd_loadaddr} uInitrd
load mmc ${devno}:1 ${dtb_loadaddr} amlogic/meson64_odroid${variant}.dtb

fdt addr ${dtb_loadaddr}

if test "x${overlays}" != "x"; then
    fdt resize ${overlay_resize}
    for overlay in ${overlays}; do
        load mmc ${devno}:1 ${dtbo_addr_r} amlogic/overlays/${board}/${overlay}.dtbo \
            && fdt apply ${dtbo_addr_r}
    done
fi

# unzip the kernel
unzip ${k_addr} ${loadaddr}

# boot
bootl ${loadaddr} ${initrd_loadaddr} ${dtb_loadaddr}
```

in case of GPIOX.3 (Pin 11) of 2x20 pins connect or

setenv gpiopower "479"

setenv bootargs \${bootargs} gpiopower=\${gpiopower}



It should now look like this:

```
#####
#
# PLEASE USE CONFIG.INI INSTEAD. THIS HAS CHANGED!!
#
#####

setenv board "odroidn2"
setenv display_autodetect "true"
setenv hdmimode "1080p60hz"
setenv monitor_onoff "false"
setenv overscan "100"
setenv sdrmode "auto"
setenv voutmode "hdmi"
setenv disablehpd "false"
setenv cec "true"
setenv disable_vu7 "true"
setenv enable_wol "0"

if test "${variant}" = "n2_plus"; then
    setenv max_freq_a73 "2208"
    setenv max_freq_a53 "1908"
else
    setenv max_freq_a73 "1800"
    setenv max_freq_a53 "1896"
fi

setenv maxcpus "6"

# Set load addresses
setenv dtb_loadaddr "0x10000000"
setenv dtbo_addr_r "0x11000000"
setenv k_addr "0x11000000"
setenv loadaddr "0x1B000000"
setenv initrd_loadaddr "0x37000000"

load mmc ${devno}:1 ${loadaddr} config.ini \
    && ln generic ${loadaddr}
if test "x${overlay_profile}" != "x"; then
    ln overlay_${overlay_profile} ${loadaddr}
fi

# Default Console Device Setting
setenv condev "console=ttyS0,115200n8" # on both

### Normal HDMI Monitors
if test "${display_autodetect}" = "true"; then hdmitx edid; fi
if test "${hdmimode}" = "custombuilt"; then setenv cnode "modeline=${modeline}"; fi
if test "${cec}" = "true"; then setenv cec_enable "hdmitx=cec3f"; fi
if test "${disable_vu7}" = "false"; then setenv hid_quirks "usbhid.quirks=0x0eef:0x0005:0x0004"; fi

# Boot Args
setenv bootargs "root=UUID=e139ce78-9841-40fe-8823-96a304a09859 rootwait rw ${condev} ${amlogic} no_console_suspend f

### in case of GPIOX.3 (Pin 11) of 2x20 pins connector
setenv gpiopower "479"
setenv bootargs ${bootargs} gpiopower=${gpiopower}

# Load kernel, dtb and initrd
load mmc ${devno}:1 ${k_addr} Image.gz
load mmc ${devno}:1 ${initrd_loadaddr} uInitrd
load mmc ${devno}:1 ${dtb_loadaddr} amlogic/meson64_odroid${variant}.dtb

fdt addr ${dtb_loadaddr}

if test "x${overlays}" != "x"; then
    fdt resize ${overlay_resize}
    for overlay in ${overlays}; do
        load mmc ${devno}:1 ${dtbo_addr_r} amlogic/overlays/${board}/${overlay}.dtbo \
            && fdt apply ${dtbo_addr_r}
    done
fi

# unzip the kernel
unzip ${k_addr} ${loadaddr}

# boot
```

- F) Press **Ctrl+x** when the system asks you if you want to save choose **Y** (yes).

- G) Now you can shut down the device and you can next time use the start button to start. Hold the start button for around 2 seconds until the device starts up.