

# Advantech AE Technical Sharing Documentation

Date	2017 / 07 / 13	SR#	1-2952950297
Category	□ FAQ ■ SOP	Related OS	3.14.28-ltsi-UNO-1252G-V2.02.001
Abstract	How to set static IP under Yocto linux for UNO-1252G		
Keyword	Static IP / Yocto linux		
Related Product	UNO-1252G		

## ■ Problem Description:

Users get to set a static IP under UNO-1252G.

## ■ Brief Solution - Step by Step:

### Step1

Verify the image version to be **V2.02** or above.

```
root@quark:~# uname -a
Linux quark 3.14.28-ltsi-UNO-1252G-V2.02.001 #6 Tue Mar 28 13:28:15 CST 2017 i586
GNU/Linux
root@quark:~#
```

### Step2

Verify the LAN ports number and create a file for setting **eth0/1**.

```
root@quark:~# ifconfig
eth0 Link encap:Ethernet HWaddr 74:FE:48:2C:6C:4F
      inet addr:192.168.1.80 Bcast:192.168.1.255 Mask:255.255.255.0
      inet6 addr: fe80::76fe:48ff:fe2c:6c4f/64 Scope:Link
      UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
      RX packets:113702 errors:3 dropped:6612 overruns:0 frame:0
      TX packets:328 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:20711165 (19.7 MiB) TX bytes:65474 (63.9 KiB)
      Interrupt:41 Base address:0x8000

eth1 Link encap:Ethernet HWaddr 74:FE:48:2C:6C:50
      inet addr:192.168.1.81 Bcast:192.168.1.255 Mask:255.255.255.0
      UP BROADCAST MULTICAST MTU:1500 Metric:1
      RX packets:0 errors:0 dropped:0 overruns:0 frame:0
      TX packets:7 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:0 (0.0 B) TX bytes:1050 (1.0 KiB)
      Interrupt:42 Base address:0x4000

lo Link encap:Local Loopback
      inet addr:127.0.0.1 Mask:255.0.0.0
      inet6 addr: ::1/128 Scope:Host
      UP LOOPBACK RUNNING MTU:65536 Metric:1
      RX packets:375 errors:0 dropped:0 overruns:0 frame:0
      TX packets:375 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:0
      RX bytes:27952 (27.2 KiB) TX bytes:27952 (27.2 KiB)
```

And create a script for setting **eth0/1**.

```
root@quark:~# vi /etc/network/interfaces
```

**Step3**

An editor will pop up for you to set static IPs to your desire ports.

```
#The primary network interface
auto eth0
iface eth0 inet static
address 192.168.1.80
netmask 255.255.255.0
gateway 192.168.1.1

auto eth1
iface eth1 inet static
address 192.168.1.81
netmask 255.255.255.0
gateway 192.168.1.1

~
~
~
~
~
~
~
- /etc/network/interfaces 1/14 7%
```

**Step4**

Create a script for setting eth0/1 automatically when the system starts up.

```
root@quark:~# vi /etc/init.d/StaticIP.sh
```

An editor will pop up.

```
#!/bin/sh
ifup eth0
ifdown eth0
ifup eth0

ifup eth1
ifdown eth
ifup eth1

~
~
~
~
~
~
~
~
~
~
~
- /etc/init.d/StaticIP.sh 1/9 11%
```

**Step5**

Change the script mode.

```
root@quark:~# chmod 755 /etc/init.d/StaticIP.sh
```

**Step6**

Create a symbolic links.

```
root@quark:~# ln -s /etc/init.d/StaticIP.sh /etc/rc3.d/S99StaticIP.sh
```

## Step7

Reboot and verify.

```
root@quark:~# ifconfig
eth0      Link encap:Ethernet  HWaddr 74:FE:48:2C:6C:4F
          inet addr:192.168.1.80  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::76fe:48ff:fe2c:6c4f/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:113702 errors:3 dropped:6612 overruns:0 frame:0
          TX packets:328 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:20711165 (19.7 MiB)  TX bytes:65474 (63.9 KiB)
          Interrupt:41 Base address:0x8000

eth1      Link encap:Ethernet  HWaddr 74:FE:48:2C:6C:50
          inet addr:192.168.1.81  Bcast:192.168.1.255  Mask:255.255.255.0
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:7 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B)  TX bytes:1050 (1.0 KiB)
          Interrupt:42 Base address:0x4000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:375 errors:0 dropped:0 overruns:0 frame:0
          TX packets:375 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:27952 (27.2 KiB)  TX bytes:27952 (27.2 KiB)
```

## Step8

If you want to change it back to DHCP, remove the created script.

```
root@quark:~# rm /etc/rc3.d/S99StaticIP.sh
```

## Reference:

<https://communities.intel.com/thread/49348>

<https://stackoverflow.com/questions/12973777/how-to-run-a-shell-script-at-startup>