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Category	■ FAQ □ SOP	Related OS	Linux
Abstract	How to Build and test the driver in Linux		
Keyword	COM, Serial port, Serial COM card, Linux		
Related Product	PCI-1612A-AE / PCI-1601A-AE / PCI-1601B-AE / PCI-1602A-AE / PCI-1602B-AE / PCI-1602UP-A2E / PCI-1603-AE / PCI-1604UP-AE / PCI-1610A-AE / PCI-1610A/9-AE / PCI-1610AJU-AE / PCI-1610AUP-AE / PCI-1610B-AE / PCI-1610B/9-AE / PCI-1610CU-AE / PCI-1610CU/9-AE / PCI-1610UP-AE / PCI-1611U-AE / PCI-1611U/9-AE / PCI-1612AU-AE / PCI-1612B-AE / PCI-1612CU-AE / PCI-1612U-AE / PCI-1620A-AE / PCI-1620AU-AE / PCI-1620B-AE / PCI-1620U-AE / PCI-1622CU-AE / PCI-1610AUAGR-AE / PCI-1612BU-AE / PCI-1620BU-AE / PCM-3612-AE / PCM-3640-AE / PCM-3610-BE / PCM-3614I-AE / PCM-3618I-AE / PCM-3642I-AE / PCM-3641I-AE / PCI-1612A-BE / PCI-1620A / PCI-1620B / PCI-1620APU-AE / PCI-1603-BE / PCI-1604UP-BE / PCI-1602UP-BE / PCIE-1620 / PCIE-1622B-BE / PCIE-1622A-BE / PCIE-1620B-BE / PCIE-1620A-BE / PCI-1622A-BE / PCI-1601B-BE / PCIE-1622B-AE / PCIE-1622A-AE / PCIE-1620B-AE / PCIE-1620A-AE / PCI-1622C-CE / PCI-1622A-CE / PCI-1620B-CE / PCIE-1620A / PCIE-1620B / PCIE-1622B / PCIE-1622A / PCI-1622A / PCI-1622B / PCI-1622C / PCM-3614I / PCM-3641I		

■ Brief Solution - Step by Step:

1. Login as 'root' before executing the following instructions or add *sudo* as every beginning of the command.

2. Uncompress the driver

```
# tar zxvf adv950_vM_NN.tar.gz
```

3. Build the driver

a. Build driver for 2.4 kernel

```
# cd adv950_vM_NN/2.4
```

```
# make
```

b. Build driver for 2.6 kernel

```
# cd adv950_vM_NN/2.6
```

```
# make
```

c. Build driver for 3.X kernel

```
# cd adv950_vM_NN/3.X
```

```
# make
```

Note:

To compile the source code, you must install kernel development header file package, "gcc" and "make" command.

In 2.4 kernel version, you should use "ln" command to make a link named "linux-2.4" in /usr/src/, it link to your kernel development header installed folder.

4. Install the driver module

```
# make install
```

to see whether ttyAPn (n = 1,2,3...) exist in /dev/ folder. If not, please execute the following command
make node

5. Test driver and get serial port type configuration

make test

This will execute the test file *getconfig.c* and shows the test information. If the driver is built and enter this command, the LED on board will light up respectively. This means driver is successfully built.

6. If you want the Linux insert the driver module automaticly when boot, please follow the steps showing below

a. Build driver

b. For 2.4 kernel, add "insmod /path/adv950.o" to boot up shell script.

For 2.6 kernel, add "insmod /path/adv950.ko" to boot up shell script.

Here the "path" is adv950.o file location path.

c. For 2.6 and 3.X kernel, execute "make insall", the driver will be inserted into kernel automatically when boot. If not, please do the same as step b.

7. If you want to uninstall the driver module and clean

make uninstall

make clean

■ **Reference:**