

FINTEK

PCI to UART Driver Installation Guide for Linux

v1.03

April 2, 2015

Datasheet Revision History

Date	Version	Revision History
2014/12/25	1.0	Initial Version.
2014/12/26	1.01	Add compile kernel with Fedora Distribution.
2015/1/28	1.02	Add permanent installation with F81504 Module.
2015/4/2	1.03	Separate documents to match different kernel ver, this is for for Kernel 2.6.38 ~ 3.12. Fix port failed after S3(Suspend To RAM).

1. Driver installation (for Kernel 2.6.38 ~ 3.12)

1. Unzip the driver.zip
2. cd driver
3. Prepare the kernel tree & compiler tools for your distribution. (refer driver/readme.txt)
4. make clean ; make ; make install
5. If your distribution is not Debian/Ubuntu, Please Edit /boot/grub/grub.conf
 - Add 8250.nr_uarts=32 after to all "kernel" cmd (If kernel version < 3.7)
 - Add 8250_core.nr_uarts=32 after to all "kernel" cmd (If kernel version >= 3.7)

```
#boot=/dev/sda
default=0
timeout=0
splashimage=(hd0,0)/grub/splash.xpm.gz
hiddenmenu
title Fedora (2.6.38.6-26.rc1.fc15.i686.PAE)
    root (hd0,0)
    kernel /vmlinuz-2.6.38.6-26.rc1.fc15.i686.PAE ro root=/dev/mapper/VolGroup-lv_root rd LVM LV=VolGroup/lv_root rd LVM LV=VolGroup/lv_swap rd_NO_LUKS rd_NO_MD rd_NO_DM LANG=en_US.UTF-8 SYSFONT=latarcyrheb-sun16 KEYTABLE=us nomodeset rhgb quiet 8250.nr_uarts=32
    initrd /initramfs-2.6.38.6-26.rc1.fc15.i686.PAE.img
```

6. Reboot and check if any new port added by "dmesg | grep ttyS", if you cant see any new add ports, please following the Troubleshooting A1 then insmod driver again.

```
root@code-desktop:/home/code/ddd/hpeter/fintek/1110/3.13- driver# dmesg | grep ttyS
[ 0.493174] 00:0a: ttyS0 at I/O 0x3f8 (irq = 4) is a 16550A
[ 0.513943] 00:0b: ttyS1 at I/O 0x2f8 (irq = 3) is a 16550A
[ 0.534706] 00:0c: ttyS2 at I/O 0x3e8 (irq = 10) is a 16550A
[ 0.555469] 00:0d: ttyS3 at I/O 0x2e8 (irq = 10) is a 16550A
[ 0.576239] 00:0e: ttyS4 at I/O 0x2d0 (irq = 11) is a 16550A
[ 0.597005] 00:0f: ttyS5 at I/O 0x2d8 (irq = 11) is a 16550A
[ 102.988045] 0000:01:00.0: ttyS6 at I/O 0xe000 (irq = 16) is a 16550A
[ 103.008588] 0000:01:00.0: ttyS7 at I/O 0xe008 (irq = 16) is a 16550A
[ 103.029241] 0000:01:00.0: ttyS8 at I/O 0xe010 (irq = 16) is a 16550A
[ 103.049840] 0000:01:00.0: ttyS9 at I/O 0xe018 (irq = 16) is a 16550A
```