SETUP COM3 & COM4 OF ROBOARD RB-100/RB-110 IN UBUNTU

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STEP1.
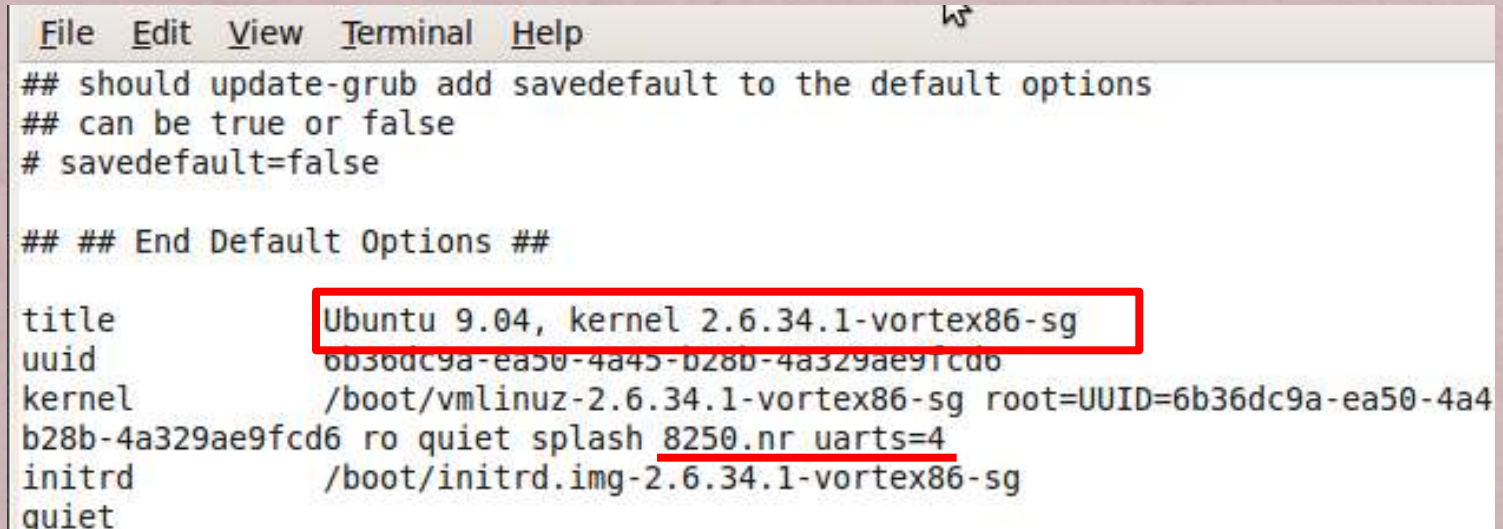
+ Open a Terminal window

+ Type `vi /boot/grub/menu.lst`

STEP2.

+ Find **`kernel 2.6.34.1-vortex86-sg`** in the menu.lst

+ Add **`8250.nr_uarts=4`**

```
File  Edit  View  Terminal  Help
## should update-grub add savedefault to the default options
## can be true or false
# savedefault=false

## ## End Default Options ##

title          Ubuntu 9.04, kernel 2.6.34.1-vortex86-sg
uuid           6b36dc9a-ea50-4a45-b28b-4a329ae9fcd6
kernel         /boot/vmlinuz-2.6.34.1-vortex86-sg root=UUID=6b36dc9a-ea50-4a4
b28b-4a329ae9fcd6 ro quiet splash 8250.nr uarts=4
initrd         /boot/initrd.img-2.6.34.1-vortex86-sg
quiet
```

+ Save & exit vi

STEP3.

+ Type **sudo -i**

+ Type **reboot**

```
a@a-laptop:~$ vi /boot/grub/menu.lst
a@a-laptop:~$ sudo -i
[sudo] password for a:
root@a-laptop:~# reboot
```
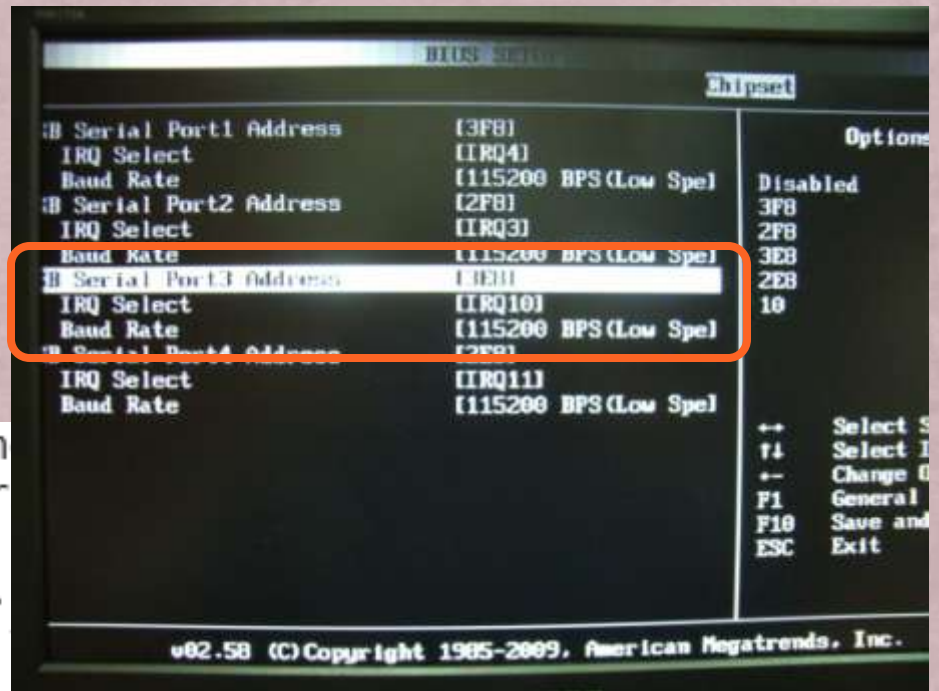
STEP4.

+ After the RoBoard reboots, open a Terminal window again
+ Type **sudo -i**
+ Type **apt-get install setserial**
  – Note: ensure that the network is connected

```
File  Edit  View  Terminal  Help
a@a-laptop:~$ sudo -i
[sudo] password for a:
root@a-laptop:~# apt-get install setserial
```

STEP5.

+ Type `setserial /dev/ttyS2 irq 10 port 0x03e8 uart 16550A`
  - Note the irq number and base address should match the RoBoard BIOS COM3 setting


```
(Reading database ... 89311 files an
Unpacking setserial (from .../setser
Processing triggers for man-db ...
Setting up setserial (2.17-44.2) ...
removing the old setserial entry in
Update complete.
root@a-laptop:~# setserial /dev/ttyS2 irq 10 port 0x03e8 uart 16550A
```

STEP6.

+ Type `setserial /dev/ttyS3 irq 11 port 0x02e8 uart 16550A`
  – Note the irq number and base address should match the RoBoard BIOS COM4 setting

STEP7.

+ You can then type `setserial -g /dev/ttyS*` to see all serial ports
  – Now you should see the COM3 & COM4 are showed in Ubuntu

```
root@a-laptop:~# setserial /dev/ttyS2 irq 10 port 0x03e8 uart 16550A
root@a-laptop:~# setserial /dev/ttyS3 irq 11 port 0x02e8 uart 16550A
root@a-laptop:~# setserial -g /dev/ttyS*
/dev/ttyS0, UART: 16550A, Port: 0x03f8, IRQ: 4
/dev/ttyS1, UART: 16550A, Port: 0x02f8, IRQ: 3
/dev/ttyS2, UART: 16550A, Port: 0x03e8, IRQ: 10
/dev/ttyS3, UART: 16550A, Port: 0x02e8, IRQ: 11
root@a-laptop:~#
```

THANK YOU

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