

serial_UART..txt

The SA1100 serial port had its major/minor numbers officially assigned:

```
> Date: Sun, 24 Sep 2000 21:40:27 -0700
> From: H. Peter Anvin <hpa@transmeta.com>
> To: Nicolas Pitre <nico@CAM.ORG>
> Cc: Device List Maintainer <device@lanana.org>
> Subject: Re: device
>
> Okay. Note that device numbers 204 and 205 are used for "low density
> serial devices", so you will have a range of minors on those majors (the
> tty device layer handles this just fine, so you don't have to worry about
> doing anything special.)
>
> So your assignments are:
>
> 204 char          Low-density serial ports
>                   5 = /dev/ttySA0          SA1100 builtin serial port 0
>                   6 = /dev/ttySA1          SA1100 builtin serial port 1
>                   7 = /dev/ttySA2          SA1100 builtin serial port 2
>
> 205 char          Low-density serial ports (alternate device)
>                   5 = /dev/cusa0           Callout device for ttySA0
>                   6 = /dev/cusa1           Callout device for ttySA1
>                   7 = /dev/cusa2           Callout device for ttySA2
>
```

You must create those inodes in /dev on the root filesystem used by your SA1100-based device:

```
mknod ttySA0 c 204 5
mknod ttySA1 c 204 6
mknod ttySA2 c 204 7
mknod cusa0 c 205 5
mknod cusa1 c 205 6
mknod cusa2 c 205 7
```

In addition to the creation of the appropriate device nodes above, you must ensure your user space applications make use of the correct device name. The classic example is the content of the /etc/inittab file where you might have a getty process started on ttyS0. In this case:

- replace occurrences of ttyS0 with ttySA0, ttyS1 with ttySA1, etc.
- don't forget to add 'ttySA0', 'console', or the appropriate tty name in /etc/securetty for root to be allowed to login as well.