

Problem:

How do I prepare a CompactFlash module or hard disk to boot VxWorks?

Background:

The procedure below outlines the basic steps for preparing a CompactFlash (CF) module or hard disk (HD) to boot VxWorks. It assumes that a VxWorks development environment is installed and running and that a VxWorks image has already been built. See the [Wind River installation and programming guides](#) for your version of VxWorks.

This procedure requires that DOS and DOS utilities be run from the A: drive, typically a floppy disk drive.

Procedure:

The "target system" referred to in this procedure is the VersaLogic CPU board. The procedure assumes the use of a floppy drive, but any DOS bootable drive that can be designated as drive A: can be substituted.

1. Make a [DOS bootable floppy disk](#). Make sure this floppy contains the DOS external commands `chkdsk.exe`, `fdisk.exe`, and `format.com`.
2. Copy the `vxsys.com` program (found in the tools directory of Tornado) from your VxWorks development platform to the floppy.
3. Copy the `vxWorks_romCompress.bin` or `bootrom.bin` file (depending on your version of VxWorks) to the floppy.
4. Install the CF or HD on the target system. The CF or HD should be designated as drive C: in DOS.
5. Boot the target system from the floppy drive (drive A:).
6. From the floppy drive, create an active partition on C: using [fdisk](#).
7. From the floppy drive, format the active partition on C: using the [format](#) command. This creates the DOS file system on the CF or HD.

```
format c:
```

8. Enter the following command to make the CF or HD VxWorks bootable. The command copies the `VxLd` into the boot sector (master boot record, or MBR) of drive C:.

```
vxsys c:
```

9. Copy `vxWorks_romCompress.bin` or `bootrom.bin` from A: to the root directory of C:.
10. Rename the file `vxWorks_romCompress.bin` or `bootrom.bin` to `bootrom.sys` using the [ren](#) DOS command.
11. From the floppy disk, run [chkdsk](#) on the `bootrom.sys` file to make sure the file is contiguous and not fragmented.

```
chkdsk C:\bootrom.sys
```

12. Remove the floppy from the target and then boot from CF or HD.

Related Articles:

- [VT1388 - VxWorks 5.5.1 Support on VersaLogic CPU Boards](#)
- [VT1393 - How to Load a Bootable Windows XP Embedded Image onto CompactFlash via IDE](#)
- [VT1403 - Can't Boot from CompactFlash](#)
- [VT1607 - How to Load a Bootable Windows XP Embedded Image onto CompactFlash via USB](#)
- [VT1609 - How to Create a DOS Boot Floppy](#)

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