

# U-Boot

- ✓ u-boot(Universal Bootloader) is an open source, multi platform bootloader..
- ✓ u-boot supports interactive commands, environment variables, and booting from external media.
- ✓ u-boot supports a large variety of popular CPUs and CPU families

# Building U-Boot

```
$ make <boardname>_config
```

```
$ make CROSS_COMPILE=$(CROSTOOL-PATH)
```

1. u-boot.bin is the binary image. (with ELF headers striped out) used for download and Debugging
2. u-boot.map has the global addresses for symbols, etc.



## U-Boot Commands

### Set server ip address

```
u-boot> setenv serverip <server ip>
```

### Set ip address

```
u-boot> setenv ipaddr <I addr>
```

### Transfer kernel image and root file system image using tftp

```
U-boot> tftpboot <Load address> <ulmage>
```

### For KB9202 Board

```
U-boot> tftpboot 21000000 ulmage
```

```
U-boot> tftpboot 22000000 myfs
```

## U-Boot Commands

### Mounting root file system like initial ram disk

```
u-boot> setenv bootargs console=ttyS0,115200n8 root=/dev/ram0 rw  
initrd=0x22000000,4M
```

```
u-boot> setenv bootargs console=ttyS0,115200 root=/dev/ram0 rw  
initrd=0x22000000,4M rootfstype=jffs2 mem=64M
```

### Mounting root filesystem with NFS

```
u-boot> setenv bootargs console=ttyS0,115200 root=/dev/nfs  
nfsroot=192.168.1.50:/media ip=192.168.1.1
```

### Booting kernel image from RAM

```
u-boot> bootm <kernel image load address>
```