Raspberry Pi3b

uboot

replace kernel.img (and rename kernel7.img so that there is no kernel*.img) on boot-partition with upstream-uboot built with this:

```
export ARCH=arm
export CROSS_COMPILE=arm-linux-gnueabihf-
make rpi_3_32b_defconfig
make -j8
```

if hdmi-output is scary, you can try changing hdmi_mode (https://www.raspberrypi.org/documentation/configuration/config-txt/video.md)

in my case i used

```
hdmi_group=1
hdmi_mode=4
```

for a 1024×600 display

Kernel

original kernel can be loaded like this:

```
U-Boot> setenv fdtfile backup/bcm2710-rpi-3-b.dtb
U-Boot> fatload mmc 0:1 ${fdt_addr} ${fdtfile}
26480 bytes read in 5 ms (5.1 MiB/s)
U-Boot> fatload mmc 0:1 ${kernel_addr_r} backup/kernel7l.img
5757200 bytes read in 250 ms (22 MiB/s)
U-Boot> setenv bootargs earlyprintk console=tty1 root=/dev/mmcblk0p2
rootfstype=ext4 rootwait noinitrd video=1024x600-32
U-Boot> bootz ${kernel_addr_r} - ${fdt_addr}
```

have not got serial console working after uboot...

have compiled new kernel like this:

```
export ARCH=arm
export CROSS_COMPILE=arm-linux-gnueabi-
export LOCALVERSION=-rpi3
CPUCORES=$(grep -c processor /proc/cpuinfo)
make bcm2835_defconfig
make -j$CPUCORES zImage modules dtbs 2> >(tee -a build.log >&2)
```

```
BOOTFS=/media/$USER/boot
ROOTFS=/media/$USER/rootfs
KERNELNAME="mykernel-"$(make kernelversion)
export INSTALL_MOD_PATH=$ROOTFS
sudo make  modules_install
sudo cp $BOOTFS/$KERNELNAME.img $BOOTFS/$KERNELNAME-backup.img
sudo cp arch/arm/boot/zImage $BOOTFS/$KERNELNAME.img
sudo cp arch/arm/boot/dts/bcm2837-rpi-3-b.dtb $BOOTFS/
```

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