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Raspidancer

Facedancer on RaspberryPi <http://wiki.yobi.be/wiki/Raspidancer>

Newer software <https://github.com/ktemkin/Facedancer>

Schema:

```
pi@picam ~ $ git clone https://github.com/ktemkin/Facedancer
```

```
pi@picam ~ $ git clone https://github.com/lthiery/SPI-Py
Cloning into 'SPI-Py'...
remote: Counting objects: 81, done.
remote: Total 81 (delta 0), reused 0 (delta 0), pack-reused 81
Unpacking objects: 100% (81/81), done.
Checking connectivity... done.
pi@picam ~ $ cd SPI-Py/
```

```
pi@picam ~/SPI-Py $ sudo apt-get install python3-dev
```

```
pi@picam ~/SPI-Py $ python3 setup.py build
```

```
pi@picam ~/SPI-Py $ sudo python3 setup.py install
```

```
pi@picam ~/Facedancer $ export BACKEND=raspidancer
```

```
pi@picam ~/Facedancer $ sudo -E ./facedancer-serial.py
```

```
pi@picam ~/Facedancer $ sudo -E ./facedancer-serial.py
```

```
Using MAXUSB backend.
```

```
MAXUSB initialized
```

```
MAXUSB enabled
```

```
MAXUSB revision 0
```

```
<facedancer.backends.RaspidancerMaxUSBApp.RaspidancerMaxUSBApp object at 0xb6a67710>
```

```
MAXUSB connected device USB Serial device
```

USB Host Shield for Arduino Pro Mini

http://shop.tkjelectronics.dk/product_info.php?cPath=22&products_id=45

Schema: http://www.tkjelectronics.dk/uploads/usbhost/UHS_mini_10.pdf

problems

- VBCOMP is not routed on this board
- VBUS (usb VCC) is 3.3V not 5V

MAX3421 kernel module

- device tree support
<https://github.com/AlexanderAmelkin/linux-wandboard/commits/for-linux-usb>

Raspberry pi kernel modules

- <https://github.com/notro/rpi-source/wiki/Examples-on-how-to-build-various-modules>

```
pi@picam ~ $ sudo apt-get install libncurses5-dev
```

```
pi@picam ~ $ rpi-source
```

```
pi@picam ~/linux $ ./scripts/diffconfig  
+USB_MAX3421_HCD m
```

```
pi@picam ~/linux $ grep MAX3421 .config  
CONFIG_USB_MAX3421_HCD=m
```

```
pi@picam ~/linux $ make SUBDIRS=drivers/usb/host/ modules
```

cross-compile

```
dpavlin@klin:/klin/rpi/linux$ cat run.sh
```

1. <https://www.raspberrypi.org/documentation/linux/kernel/building.md>

```
#make oldconfig
```

```
KERNEL=kernel7
```

```
#make ARCH=arm CROSS_COMPILE=arm-linux-gnueabihf- bcm2709_defconfig
```

```
#make ARCH=arm CROSS_COMPILE=arm-linux-gnueabihf- oldconfig
```

```
make -j4 ARCH=arm CROSS_COMPILE=arm-linux-gnueabihf- zImage modules dtbs
```

```
test -d mnt && rm -Rf mnt/
```

```
mkdir -p mnt/boot/overlays
```

```
make ARCH=arm CROSS_COMPILE=arm-linux-gnueabihf- INSTALL_MOD_PATH=mnt/ modules_install
```

```
cp arch/arm/boot/zImage mnt/boot/$KERNEL.img
```

```
cp arch/arm/boot/dts/*.dtb mnt/boot/
```

```
cp arch/arm/boot/dts/overlays/*.dtb* mnt/boot/overlays/
```

```
cp arch/arm/boot/dts/overlays/README mnt/boot/overlays/
```