

## Include Bluetooth driver to IOT2000 Image:

- Clone layer [meta-iot2000](#)
- Using the build routine with *kas* to build the “standard” image
- Download Intel Quark X1000 Bluetooth driver from the internet:
  - <https://downloadcenter.intel.com/download/23197/Intel-Quark-SoC-X1000-Board-Support-Package-BSP->
- Unzip the downloaded file on building machine and search for *bluetooth.cfg*
- Copy the file *bluetooth.cfg* to <yourdirectory>/meta-iot2000-bsp/recipes-kernel/linux/configs
- Add the file to the kernel config under <yourdirectory>/meta-iot2000-bsp/recipes-kernel/linux/**linux-cip\_4.4.bb**:

change

```
SRC_URI += „ \
    ${KERNEL_PATCHES} \
    file://deconfig”
```

to

```
SRC_URI += „ \
    ${KERNEL_PATCHES} \
    file://deconfig \
    file://bluetooth.cfg”
```

## Include BlueZ5 to IOT2000 Image:

- Include “bluez5” to <yourdirectory>/meta-iot2000-example/recipes-core/images/**iot2000-example-image.inc**
  - Add line *IMAGE\_INSTALL\_APPEND* = “*bluez5*” at the end of the file

## Include ObexFTP to IOT2000 Image:

- Include “obexftp” to <yourdirectory>/meta-iot2000-example/recipes-core/images/**iot2000-example-image.inc**
  - Add line *IMAGE\_INSTALL\_APPEND* = “*obexftp*” at the end of the file

## Build the Image with the added components:

- Open a terminal
- Type in: *source github-build/oe-init-build-env build*
- Type in: *bitbake iot2000-example-image*

The built image can be found under *github-build/meta-iot2000-example/build/tmp/deploy/images/iot2000/iot2000-example-image-iot2000-datetime.rootfs.wic*

## Pairing Bluetooth devices with BlueZ5

- Show available adapters with `hciconfig`
- Turn on adapter with `hciconfig <name (e.g. hci0)> up`
- Start Bluez with `bluetoothctl`
- `pairable on`
- `agent on`
- `scan on`
- Once desired Bluetooth device is found use `scan off`
- `trust xx:xx:xx:xx:xx:xx` to trust the device
- Use `pair xx:xx:xx:xx:xx:xx` to pair the device
- Follow instructions in the console / device to be paired

(If permanent connection to e.g. a Bluetooth keyboard is desired:  
use `connect xx:xx:xx:xx:xx:xx` to establish a connection)

- `exit` or `quit` closes the application

## Send file from IOT2000 to Windows PC

- `obexftp -b <MAC Target> -p <filepath/filename>`