## Mile Stone #1 Communication between Altera and Bluetooth device

Hardware Blocks LCD POD head Altera FPGA  $800 \times 480$  Resolution LCD touch-screen Color-touch panel Cyclone (Running Linux BSP) **USB HCI Module** Bluetooth chipset Any CSR/bluesoeil DDR RAM **USB** dongle **UART** Serial **Ethernet** debug Line-in, line-out, and 24 bit audio codec microphone-in jacks SD/Flash

Note: LCD Display and Audio codec are with daughter board

## Software Blocks







POD User Operator Interface

**Bluetooth Application** 

Bluetooth Stack

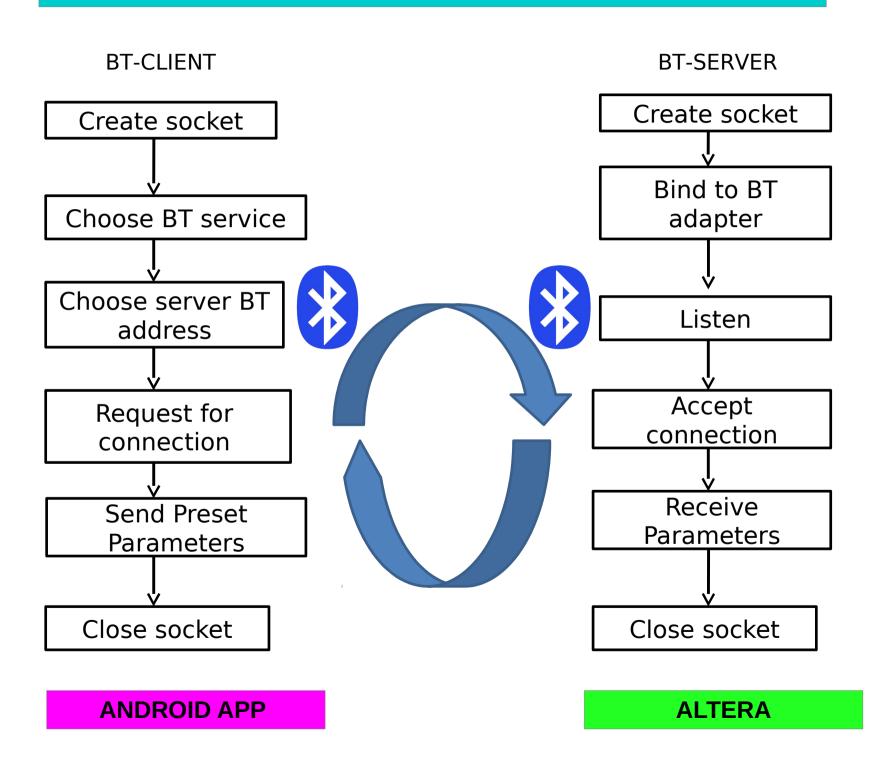
Bluetooth drivers, HCI USB dongle

Altera BSP ( Probably Linux ) ?

## **Tablet**

- Android application
- Using Bluetooth SPP Protocol
- Control POD presets

## COMMUNICATION BETWEEN ALTERA AND ANDROID



Hardware Peripheral costs:

Altera (Depends on the cyclone edition – \$499, \$1795)

Bluetooth dongle (<\$8)

Software Costs:

Linux – free and Open source

BlueZ – free and Open source stack

Very minimal Software cost Involved for programming Custom SPP protocol for Preset Parameters, Noise Gate etc