

USB Interface :

Configure and compile linux kernel

1. Modify \linux-x.x.x.x\linux-x.x.x.x\drivers\hid\hid-ids.h

```
#ifndef HID_IDS_H_FILE
```

```
#define HID_IDS_H_FILE
```

```
#define USB_VENDOR_ID_RISINTECH1 0x1BFD
```

```
#define USB_DEVICE_ID_RISINTECH1 0x1688
```

```
#define USB_VENDOR_ID_RISINTECH2 0x1BFD
```

```
#define USB_DEVICE_ID_RISINTECH2 0x1568
```

```
.....
```

2. Modify \linux-x.x.x.x\linux-x.x.x.x\drivers\hid\usbhid\hid-quirks.c

```
static const struct hid_blacklist {
```

```
    __u16 idVendor;
```

```
    __u16 idProduct;
```

```
    __u32 quirks;
```

```
} hid_blacklist[] = {
```

```
.....
```

```
{ USB_VENDOR_ID_RISINTECH1, USB_DEVICE_ID_RISINTECH1, HID_QUIRK_MULTI_INPUT },
```

```
{ USB_VENDOR_ID_RISINTECH2, USB_DEVICE_ID_RISINTECH2, HID_QUIRK_MULTI_INPUT },
```

```
{ 0, 0 }
```

```
};
```

kernel 2.6.18 : Modify \your_kernel_src\drivers\usb\input\hid-core.c

```
#define USB_VENDOR_ID_YEALINK 0x6993
```

```
#define USB_DEVICE_ID_YEALINK_P1K_P4K_B2K 0xb001
```

```
#define USB_VENDOR_ID_RISINTECH1 0x1BFD
```

```
#define USB_DEVICE_ID_RISINTECH1 0x1688
```

```
#define USB_VENDOR_ID_RISINTECH2 0x1BFD
```

```
#define USB_DEVICE_ID_RISINTECH2 0x1568
```

```
static const struct hid_blacklist {
```

```
    __u16 idVendor;
```

```
    __u16 idProduct;
```

```
    unsigned quirks;
```

```
} hid_blacklist[] = {
```

```
.....
```

```
{ USB_VENDOR_ID_RISINTECH1, USB_DEVICE_ID_RISINTECH1, HID_QUIRK_MULTI_INPUT },
```

```
{ USB_VENDOR_ID_RISINTECH2, USB_DEVICE_ID_RISINTECH2, HID_QUIRK_MULTI_INPUT },
```

```
{ 0, 0 }
```

```
};
```

3. Enable framebuffer
 - # make menuconfig
 - [*]VGA text console
 - [*]Video mode selection support
 - <*> Framebuffer Console support
4. Please enable USB HID support in kernel, first find .config in Android kernel source folder, and enable HID related flags :
 - CONFIG_HID_SUPPORT=y
 - CONFIG_HID=y
 - CONFIG_USB_HID=y
 - CONFIG_HID_PID=y
 - CONFIG_USB_HIDDEV=y
5. Run "make clean" then run "make" to build kernel image
6. Get root access .
7. Copy "LinearAp" to the target board and run
 - # cp -f ./LinearAp /usr/bin/
 - # LinearAp