

# How to build Realtek USB HUB Test\_Command

## Key Word:

Linux ; Realtek USB HUB ; RTS5441 ; testmode ; rts\_hub\_u3testmode

## Description

To test the USB waveform, you must use the test program provided by Realtek for testing in the system. Realtek will provide source code to compile.

## Directions

### 1. To modefy Makefile CROSS\_COMPILE to system toolchain

```
CROSS_COMPILE ?= <toolchain path>
```

Then

```
make
```

Two files will be generated after completion  
testmode and rts\_hub\_u3testmode

### 2. Cpoy two files to system and testing

### 3. Check USB HUB is mount

```
lsusb
```

will be show

Bus 004 Device 002: ID 0bda:5411 <-- USB 2.0

Bus 005 Device 002: ID 0bda:0411 <-- USB 3.0

### 4. Test USB 2.0

[command]

```
./testmode -D <VID:PID> -p <port> -t <testmode>
```

<VID:PID> 0bda:5411

<port> 1~4

<testmode>

test\_packet

test\_se0\_nak

test\_k

test\_j

test\_force\_hs

test\_force\_fs

example:

```
./testmode -D 0bda:5411 -p 1 -t test_packet  
./testmode -D 0bda:5411 -p 2 -t test_packet  
./testmode -D 0bda:5411 -p 3 -t test_packet  
./testmode -D 0bda:5411 -p 4 -t test_packet
```

## 5. Test USB 3.0

[command]

```
./rts_hub_u3testmode -P <PID> -p <port>
```

<PID> 0411

<port> 1~4

example:

```
./rts_hub_u3testmode -P 0411 -p 1  
./rts_hub_u3testmode -P 0411 -p 2  
./rts_hub_u3testmode -P 0411 -p 3  
./rts_hub_u3testmode -P 0411 -p 4
```