

# 组会报告

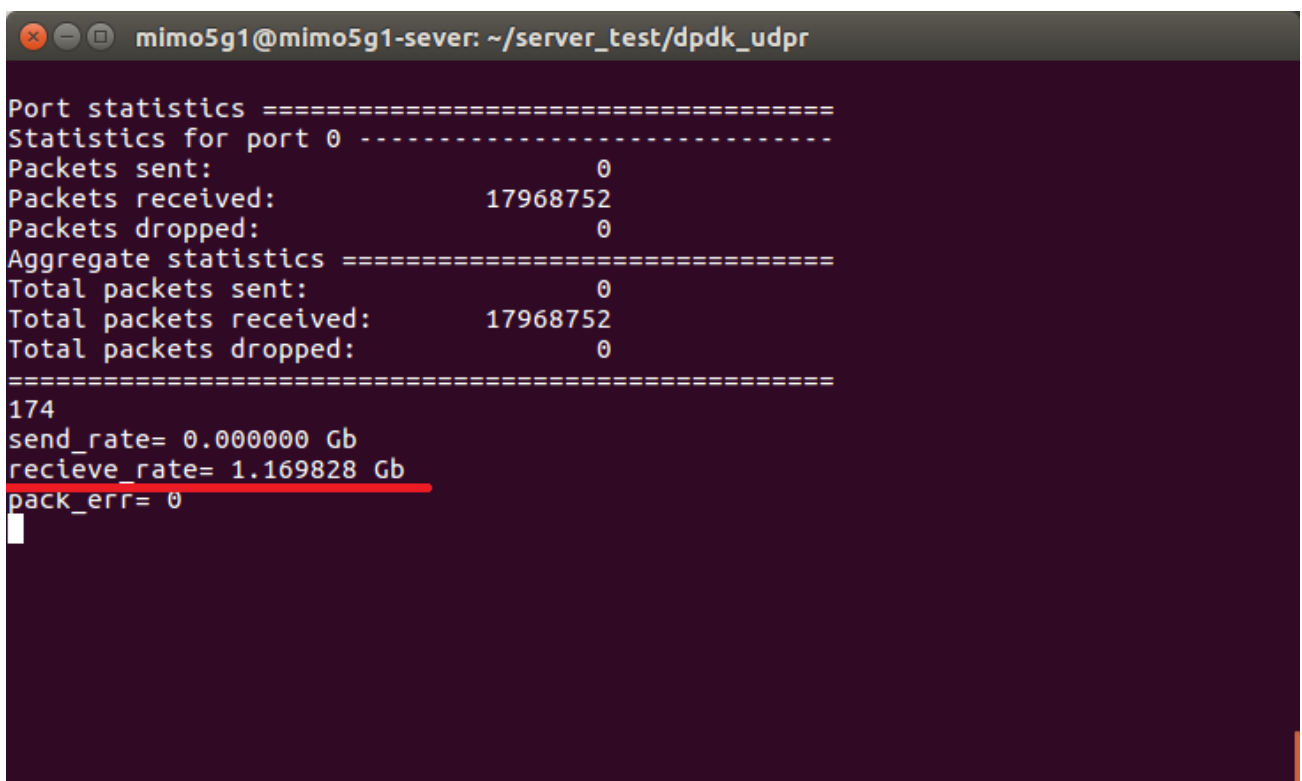
徐益

2018 年 7 月 19 日

## 1 工作内容

1. 测试服务器解包程序
2. 实现 LDPC 速率匹配部分
3. 实现 LDPC 编码 c 语言实现

## 2 测试服务器解包程序



A terminal window titled 'mimo5g1@mimo5g1-sever: ~/server\_test/dpdk\_udpr' displays the following output:

```
Port statistics =====
Statistics for port 0 -----
Packets sent: 0
Packets received: 17968752
Packets dropped: 0
Aggregate statistics =====
Total packets sent: 0
Total packets received: 17968752
Total packets dropped: 0
=====
174
send_rate= 0.000000 Gb
recieve_rate= 1.169828 Gb
pack_err= 0
```

图 1: 不加文件读写的速率

```
mimo5g1@mimo5g1-sever: ~/server_test/dpdk_udpr

Port statistics =====
Statistics for port 0 -----
Packets sent:                0
Packets received:            689440
Packets dropped:              0
Aggregate statistics =====
Total packets sent:          0
Total packets received:      689440
Total packets dropped:        0
=====
127
send_rate= 0.000000 Gb
recieve rate= 0.061496 Gb
pack_err= 0
```

图 2: 加入文件读写的速率

```
mimo5g1@mimo5g1-sever: ~/server_test2.0/dpdk_udpr

Port statistics =====
Statistics for port 0 -----
Packets sent:                0
Packets received:            100000
Packets dropped:              0
Aggregate statistics =====
Total packets sent:          0
Total packets received:      100000
Total packets dropped:        0
=====
num err pkq=1034,num data nvld=0,correct BE=28,correct ED=26,incomplete pkq=2
mimo5g1@mimo5g1-sever:~/server_test2.0/dpdk_udpr$
```

图 3: 基于内存缓存的解包结果



### 3 实现 LDPC 速率匹配部分

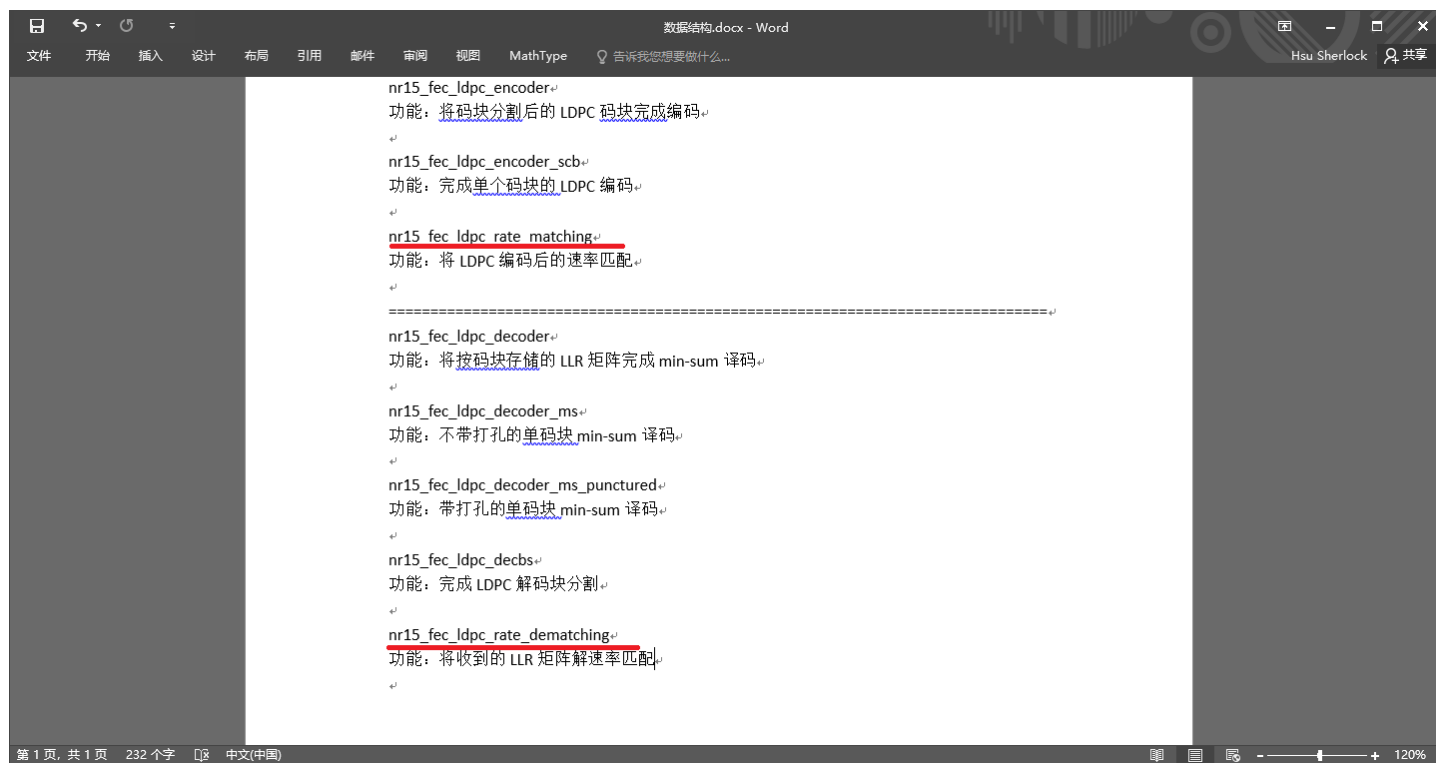


图 6: 实现 LDPC 速率匹配部分

### 4 实现 LDPC 编码 c 语言实现

```
1  /*
2  * Name:          nr15_fec_ldpc_encoder_scb
3  *
4  * Input:         info_bits:      information array
5  *               h:              LDPC type structure
6  *
7  * Output:        coded_bits:     coded array
8  */
9  void nr15_fec_ldpc_encoder_scb(int8_t* info_bits, nr15_ldpc_t *h, int8_t*
    coded_bits);
```

### 5 下阶段计划

实现 LDPC 剩余的 mex 函数