

以下的四个条件都必须满足：

## 1.at+qcfg="band"

```
[2019-10-31_13:28:01:205]  
[2019-10-31_13:28:01:205]+QCFG: "band",0x493 0x1e200000095,0x21  
[2019-10-31_13:28:01:205]OK  
[2019-10-31_13:28:02:205]
```

每一位代表一个band，如果该为0表示不支持。

如果上述结果的0x1e200000095换算成二进制1 11100010 00000000 00000000  
00000000 10010101

bit0=1说明支持band1

bit1=0表示不支持的band2

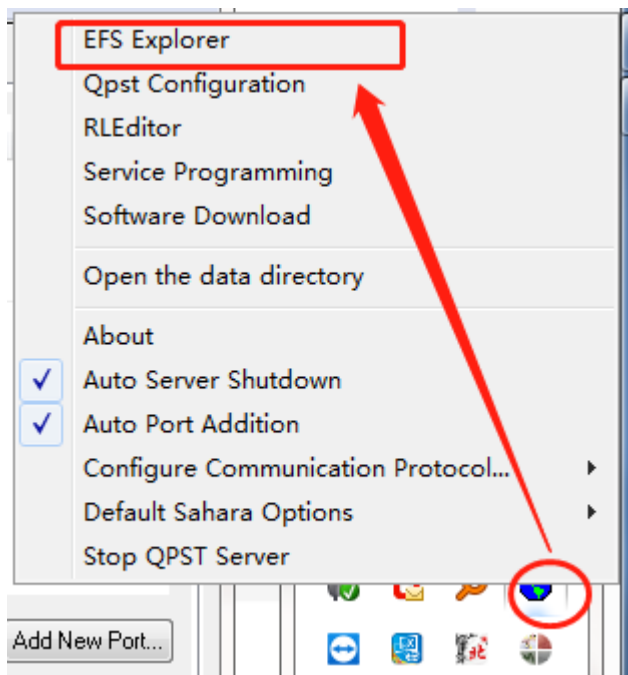
bit40=1表示支持band41

## 2.AT+QNVR=6828,0

```
[2019-10-31_13:34:19:968]AT+QNVR=6828,0  
[2019-10-31_13:34:19:971]+QNVR: "95000000E20100000000000000000000"  
[2019-10-31_13:34:19:971]OK
```

大端转成小端，就变成上面的0x1e200000095。支持情况的判别方法如上

## 3.查看EFS



然后路径为/policyman/carrier\_policy.xml,打开查看

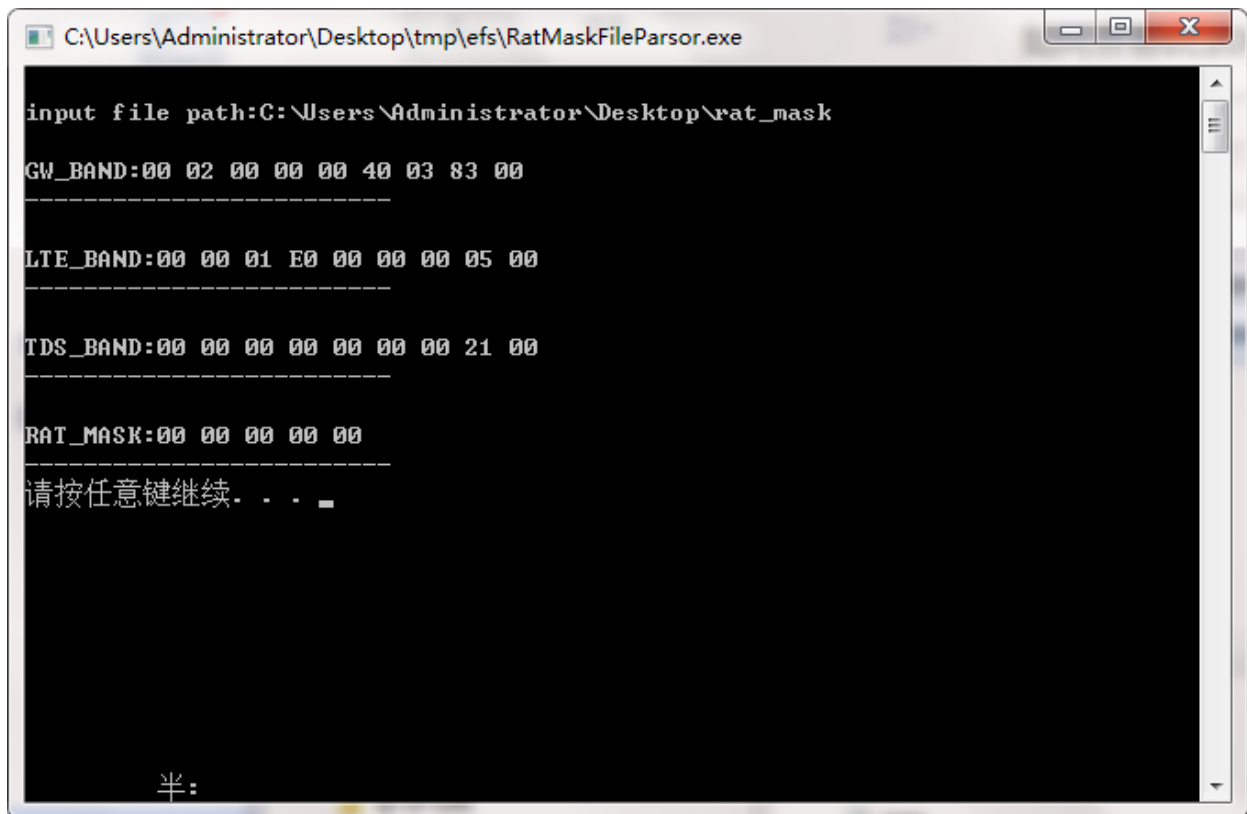
```
<lte_bands base = "none">
  <include> 0 2 37 38 39 40 </include>
</lte_bands>
```

这个时候可以看到支持band1 band3 band38 band39 band40 band41这个band

## 4.EFS中导出rat\_mask，使用工具 RatMaskFileParsor.exe来进行查看



RatMaskFileParsor.rar  
50.61KB



把LTE\_BAND的16进制转成二进制，同1的方法查看发现支持

bit0=1 支持band1

bit2=1 支持band3

### 附录：以下图片来自研发

LTE band capability determination(4 conditions):

Con-1: BC Config that's stored in NV\_6828:

AT+QNVR=6828,0

+QNVR: "95000000E00100000000000000000000"

OK

该NV保存的是**RF**的band能力集，内容两个32位的大端整数，转为小端后拼接为64位：0x1E0 00000095

band掩码规则为bandx=(0x1 << x),

即上述nv对应的band能力为: band1 band3 band5 band8 band38 band39 band40 band41

Con-2: Band Prefer(AT+QCFG="BAND")

AT+QCFG="BAND"

+QCFG: "band",0x493,0x1e000000085,0x21

OK

该NV保存的是**配置**的band能力集，其中0x1e0 00000085是LTE的band能力集，掩码规则与NV\_6828一样

Con-3: carrier\_policy.xml that's different for every MBN.

Efs path is "/sd/policyman/carrier\_policyman.xml".

该配置与

```
<!-- Define a HOME RF band list that include GW and LTE bands -->
<rf_band_list name="rf_bands_home">
  <gw_bands base = "hardware" />
  <lte_bands base = "none">
    <include> 0 2 37 38 39 40 </include>
  </lte_bands>
  <tds_bands base = "none" />
</rf_band_list>
```

Con-4: rat\_mask that's different for every MBN.

Efs path is "/sd/policyman/rat\_mask".



```
选择RatMaskFileParsor.exe - 快捷方式
input file path:E:\rat_mask
GW_BAND:00 02 00 00 00 40 03 83 00
-----
LTE_BAND:00 00 01 E0 00 00 00 05 00
-----
TDS_BAND:00 00 00 00 00 00 00 21 00
-----
RAT_MASK:00 00 00 00 00
-----
请按任意键继续. . .
```

band参数参考: 80-vd564-1\_d\_application\_note\_\_band\_preference\_settings\_for\_gsm\_umts\_lte\_td-scdma\_targets

Key tool: RatMaskFileParsor.exe

**The result of con-1&con-2&con-3&con-4 represents UE's final band capability.**