

测试目录包括运行库，nbg 文件，测试用例以及仿真产生的 input tensor 文件。

此电脑 > caozilong (\\172.16.7.65) (Z:) > WorkSpace > model > qunlunstudy > test-tiny

| 名称 | 修改日期 | 类型 | 大小 |
|-------------------|----------------|--------|----------|
| libVIPlite.so | 2022/1/8 16:00 | SO 文件 | 117 KB |
| libVIPuser.so | 2022/1/8 16:00 | SO 文件 | 34 KB |
| network_binary.nb | 2022/1/8 18:39 | NB 文件 | 5,406 KB |
| yolov3-tiny | 2022/1/8 19:41 | 文件 | 48 KB |
| input_0.dat | 2022/1/8 19:00 | DAT 文件 | 507 KB |

```
caozilong@AwXndroid65:~/WorkSpace/model/qunlunstudy/test-tiny$ sha512sum network_binary.nb
a872b8a51310e5e5c7f4466939190c5c90027393631a4416435bdf57b38a93d02aebc689e6380ca40a92dc8191586864e1a74f00f4bc1372b11 network_binary.nb
caozilong@AwXndroid65:~/WorkSpace/model/qunlunstudy/test-tiny$ ls -l
total 6120
-rwxr--r-- 1 caozilong caozilong 519168 Jan  8 19:00 input_0.dat
-rwxr--r-- 1 caozilong caozilong 119100 Jan  8 16:00 libVIPlite.so
-rwxr--r-- 1 caozilong caozilong 34032 Jan  8 16:00 libVIPuser.so
-rwxr--r-- 1 caozilong caozilong 5535232 Jan  8 18:39 network_binary.nb
-rwxr--r-- 1 caozilong caozilong 48472 Jan  8 19:41 yolov3-tiny
caozilong@AwXndroid65:~/WorkSpace/model/qunlunstudy/test-tiny$
```

对比 SHA 码，确实是上面我们导出的那一个 NBG 文件。

测试

执行导出环境变量的操作后，执行命令验证，事先执行 `export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/mnt/sdcard`，以及 `export VNN_LOOP_TIME=100000000`，表示循环执行 100000000 次。

```
root@TinaLinux:/mnt/sdcard/test-tiny# export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/mnt/sdcard/test-tiny
root@TinaLinux:/mnt/sdcard/test-tiny# ls
input_0.dat      libVIPuser.so    yolov3-tiny
libVIPlite.so    network_binary.nb
root@TinaLinux:/mnt/sdcard/test-tiny# ./yolov3-tiny network_binary.nb input_0.dat
Usage: [ 70.856071] npu[433][433] vipcore, device init..

nbg_name input_data1 input[ 70.861927] #enter_SetClock#
data2...
[ 70.869966] npu[433][433] gckvip drv init user alloc 0 size, use default ion size
[ 70.878486] enter aw vip mem alloc size 33554432
[ 70.902808] aw_vip_mem_alloc vir 0xe198f000, phy 0x800000
[ 70.909078] npu[433][433] gckvip drv init kernel logical phy address=0x800000 virtual=0xe198f000
[ 70.919375] npu[433][433] vipcore, fail get info, user logical=0x (null), physical=0x800000, size=0x2000000
Create Neural Network: 89.73ms or 89727.88us
Start run graph [1] times...
Run the 1 time: 14.09ms or 14091.92us
vip run network execution time:
Total 14.24ms or 14238.04us
Average 14.24ms or 14238.04us
[ 71.108930] npu[433][433] gckvip drv exit, aw_vip_mem_free
[ 71.115180] aw_vip_mem_free vir 0xe198f000, phy 0x800000
[ 71.121147] aw_vip_mem_free dma_unmap_sg_attr
[ 71.126176] aw_vip_mem_free ion_unmap_kernel
[ 71.136605] aw_vip_mem_free ion_free
[ 71.140624] aw_vip_mem_free ion_client_destroy
[ 71.146756] npu[433][433] vipcore, device un-init..
root@TinaLinux:/mnt/sdcard/test-tiny# ./yolov3-tiny network_binary.nb input_0.dat

Run the 9966 time: 14.06ms or 14059.54us
Run the 9967 time: 14.06ms or 14059.54us
Run the 9968 time: 14.05ms or 14054.12us
Run the 9969 time: 14.05ms or 14051.75us
Run the 9970 time: 14.06ms or 14058.21us
Run the 9971 time: 14.03ms or 14030.92us
Run the 9972 time: 14.06ms or 14059.58us
Run the 9973 time: 14.05ms or 14050.29us
Run the 9974 time: 14.05ms or 14054.88us
Run the 9975 time: 14.06ms or 14057.79us
Run the 9976 time: 14.05ms or 14050.62us
Run the 9977 time: 14.04ms or 14042.33us
Run the 9978 time: 14.05ms or 14053.92us
Run the 9979 time: 14.06ms or 14055.50us
Run the 9980 time: 14.05ms or 14052.50us
Run the 9981 time: 14.05ms or 14053.46us
Run the 9982 time: 14.06ms or 14060.00us
Run the 9983 time: 14.04ms or 14035.75us
Run the 9984 time: 14.05ms or 14053.04us
Run the 9985 time: 14.06ms or 14063.62us
Run the 9986 time: 14.05ms or 14052.67us
Run the 9987 time: 14.06ms or 14058.75us
Run the 9988 time: 14.06ms or 14057.42us
Run the 9989 time: 14.04ms or 14042.04us
Run the 9990 time: 14.06ms or 14057.46us
Run the 9991 time: 14.05ms or 14053.54us
Run the 9992 time: 14.06ms or 14057.21us
Run the 9993 time: 14.06ms or 14057.46us
Run the 9994 time: 14.05ms or 14052.12us
Run the 9995 time: 14.05ms or 14047.67us
Run the 9996 time: 14.06ms or 14060.04us
Run the 9997 time: 14.05ms or 14054.12us
Run the 9998 time: 14.06ms or 14057.88us
Run the 9999 time: 14.05ms or 14053.62us
Run the 10000 times: 14.05ms or 14053.71us
vip run network execution time:
Total 141090.48ms or 141090496.00us
Average 14.11ms or 14109.05us
[ 752.379911] npu[44f][44f] gckvip drv exit, aw_vip_mem_free
[ 752.385269] aw_vip_mem_free vir 0xe160a000, phy 0x800000
[ 752.391236] aw_vip_mem_free dma_unmap_sg_attr
[ 752.396262] aw_vip_mem_free ion_unmap_kernel
[ 752.401867] aw_vip_mem_free ion_free
[ 752.405976] aw_vip_mem_free ion_client_destroy
[ 752.415169] npu[44f][44f] vipcore, device un-init..
root@TinaLinux:/mnt/sdcard/test-tiny# export VNN_LOOP_TIME=100000
root@TinaLinux:/mnt/sdcard/test-tiny# ./yolov3-tiny network_binary.nb input_0.dat
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```