```
                          • MobaXterm 10.9 •
               (SSH client, X-server and networking tools)

   → SSH session to pi@192.168.178.25
     • SSH compression : v
     • SSH-browser     : v
     • X11-forwarding  : v  (remote display is forwarded through SSH)
     • DISPLAY         : v  (automatically set on remote server)

   → For more info, ctrl+click on help or visit our website
```

Linux SFS-1 4.14.79-v7+ #1159 SMP Sun Nov 4 17:50:20 GMT 2018 armv7l

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jan 14 13:36:42 2019 from 192.168.178.17
-bash: /home/pi/ansible/hacking/env-setup: No such file or directory
pi@SFS-1:~ $ ls
cpuburn-a53   data   Documents grafana-5.3.4   MagPi ncsdk
opencv-3.3.0   opencv_contrib.zip Pictures   prometheus-2.4.3.linux-armv7
Public   Templates   Videos
cpuburn-a53.S Desktop Downloads grafana-5.3.4.linux-armv7.tar.gz Music
oldconffiles opencv_contrib-3.3.0 opencv.zip   prometheus
prometheus-2.4.3.linux-armv7.tar.gz python_games thinclient_drives
pi@SFS-1:~ $ cd ncsdk
pi@SFS-1:~/ncsdk $ ls
api ATTRIBUTIONS docs examples extras install-opencv.sh install.sh
install-utilities.sh LICENSE Makefile NCSDK-2.08.01.02.tar.gz ncsdk.conf
README.md requirements_apt_raspbian.txt requirements_apt.txt requirements.txt
uninstall-opencv.sh uninstall.sh version.txt
pi@SFS-1:~/ncsdk $ cd examples
pi@SFS-1:~/ncsdk/examples $ ls
apps caffe data Makefile README.md tensorflow
pi@SFS-1:~/ncsdk/examples $ cd tensorflow
pi@SFS-1:~/ncsdk/examples/tensorflow $ make run
make -C inception_v3/. run
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
./run.py
No devices found
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/. run
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
./run.py
No devices found
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'

```
pi@SFS-1:~/ncsdk/examples/tensorflow $ make run
make -C inception_v3/. run
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
./run.py
Number of categories: 1001
Start download to NCS...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:416: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
  tensor = numpy.fromstring(tensor.raw, dtype=numpy.float32)
*******************************************************************************
inception-v3 on NCS
*******************************************************************************
547 electric guitar 0.98828125
403 acoustic guitar 0.007789612
715 pick, plectrum, plectron 0.0015392303
421 banjo 0.00095939636
820 stage 0.00069093704
*******************************************************************************
Finished
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/. run
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
./run.py
Number of categories: 1001
Start download to NCS...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:416: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
  tensor = numpy.fromstring(tensor.raw, dtype=numpy.float32)
*******************************************************************************
inception-v1 on NCS
*******************************************************************************
547 electric guitar 0.87890625
784 screw 0.011459351
421 banjo 0.009765625
883 vacuum, vacuum cleaner 0.005329132
597 hatchet 0.0050849915
*******************************************************************************
Finished
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
pi@SFS-1:~/ncsdk/examples/tensorflow $ make
make -C inception_v3/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
mvNCProfile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
```

Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
2019-01-14 13:41:31.343926: W tensorflow/core/framework/allocator.cc:108] Allocation of
9830400 exceeds 10% of system memory.
2019-01-14 13:41:31.961139: W tensorflow/core/framework/allocator.cc:108] Allocation of
8200192 exceeds 10% of system memory.
2019-01-14 13:41:34.608837: W tensorflow/core/framework/allocator.cc:108] Allocation of
6193152 exceeds 10% of system memory.
2019-01-14 13:41:35.698125: W tensorflow/core/framework/allocator.cc:108] Allocation of
6193152 exceeds 10% of system memory.
2019-01-14 13:41:36.185571: W tensorflow/core/framework/allocator.cc:108] Allocation of
9830400 exceeds 10% of system memory.
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer

Network Input tensors ['input:0#327']
Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute : 612.75 ms
USB: Myriad Execution Finished
Time to Execute : 586.17 ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary

```
Detailed Per Layer Profile

Bandwidth   time
#     Name
MFLOPs  (MB/s)    (ms)
================================================================================
================================================================================
================================================================================
==========================
0     input
0.0     0.0   0.004
1     InceptionV3/InceptionV3/Conv2d_1a_3x3/Conv2D
38.4   113.1   4.540
2     InceptionV3/InceptionV3/Conv2d_1a_3x3/Relu
2.1  1893.3   0.716
3     InceptionV3/InceptionV3/Conv2d_2a_3x3/Conv2D
398.3    69.7  19.702
4     InceptionV3/InceptionV3/Conv2d_2a_3x3/Relu
2.1  1899.0   0.695
5     InceptionV3/InceptionV3/Conv2d_2b_3x3/Conv2D
796.6    37.9  35.686
6     InceptionV3/InceptionV3/Conv2d_2b_3x3/Relu
4.1  1928.2   1.368
7     InceptionV3/InceptionV3/MaxPool_3a_3x3/MaxPool
3.1  1441.3   1.830
8     InceptionV3/InceptionV3/Conv2d_3b_1x1/Conv2D
54.6   222.6   2.967
9     InceptionV3/InceptionV3/Conv2d_3b_1x1/Relu
1.3  1858.3   0.438
10    InceptionV3/InceptionV3/Conv2d_4a_3x3/Conv2D
1393.7    19.6  55.030
11    InceptionV3/InceptionV3/Conv2d_4a_3x3/Relu
2.9  1916.4   0.964
12    InceptionV3/InceptionV3/MaxPool_5a_3x3/MaxPool
2.1  1284.5   1.437
13    InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
30.1   355.1   1.330
14    InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1626.1   0.092
15    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
22.6   450.9   1.034
16    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.2  1507.4   0.074
17    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Conv2D
188.2    29.8   8.689
18    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Relu
0.2  1614.4   0.093
19    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
30.1   355.5   1.328
20    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.2  1607.1   0.093
21    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.709
22    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Relu
0.4  1707.4   0.131
23    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Conv2D
203.2    43.0   8.892
24    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Relu
0.4  1700.6   0.132
25    InceptionV3/InceptionV3/Mixed_5b/Branch_3/AvgPool_0a_3x3/AvgPool
4.2   595.0   0.755
26    InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
```

```
15.1   606.4   0.759
27    InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.1  1334.6   0.056
28    InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
40.1   356.9   1.764
29    InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.2  1617.9   0.093
30    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Conv2D
30.1   478.8   1.298
31    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Relu
0.2  1484.6   0.076
32    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Conv2D
188.2   29.8   8.682
33    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Relu
0.2  1618.2   0.092
34    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
40.1   357.5   1.761
35    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.2  1603.4   0.093
36    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.698
37    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.4  1709.0   0.131
38    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Conv2D
203.2   43.1   8.887
39    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Relu
0.4  1702.6   0.132
40    InceptionV3/InceptionV3/Mixed_5c/Branch_3/AvgPool_0a_3x3/AvgPool
5.6   617.3   0.970
41    InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
40.1   358.1   1.758
42    InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.2  1609.0   0.093
43    InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Conv2D
45.2   363.1   1.951
44    InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Relu
0.2  1624.3   0.092
45    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Conv2D
33.9   476.1   1.469
46    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Relu
0.2  1508.6   0.074
47    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Conv2D
188.2   29.8   8.691
48    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Relu
0.2  1627.5   0.092
49    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Conv2D
45.2   361.9   1.957
50    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Relu
0.2  1602.3   0.093
51    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.700
52    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Relu
0.4  1715.8   0.131
53    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Conv2D
203.2   43.1   8.888
54    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Relu
0.4  1699.5   0.132
55    InceptionV3/InceptionV3/Mixed_5d/Branch_3/AvgPool_0a_3x3/AvgPool
6.4   601.6   1.119
56    InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Conv2D
45.2   362.2   1.955
57    InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Relu
0.2  1620.4   0.092
```

```
58    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Conv2D
575.3   101.9  25.239
59    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Relu
0.3  1710.7   0.124
60    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Conv2D
45.2   361.8   1.957
61    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Relu
0.2  1608.3   0.093
62    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.697
63    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Relu
0.4  1708.2   0.131
64    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Conv2D
47.9   156.6   2.444
65    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Relu
0.1  1269.8   0.042
66    InceptionV3/InceptionV3/Mixed_6a/Branch_2/MaxPool_1a_3x3/MaxPool
0.7  1415.5   0.476
67    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.8   3.714
68    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1492.4   0.071
69    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Conv2D
56.8   235.8   2.592
70    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Relu
0.1  1349.0   0.052
71    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Conv2D
66.3    80.2   3.609
72    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Relu
0.1  1347.5   0.053
73    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Conv2D
99.4    88.8   4.496
74    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Relu
0.2  1505.0   0.071
75    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Conv2D
56.8   235.3   2.597
76    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Relu
0.1  1354.3   0.052
77    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Conv2D
66.3    81.6   3.550
78    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Relu
0.1  1319.5   0.054
79    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Conv2D
66.3    80.4   3.600
80    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Relu
0.1  1355.9   0.052
81    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Conv2D
66.3    81.4   3.559
82    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Relu
0.1  1348.4   0.053
83    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Conv2D
99.4    87.9   4.541
84    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Relu
0.2  1521.3   0.070
85    InceptionV3/InceptionV3/Mixed_6b/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   512.4   0.829
86    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   190.0   3.711
87    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Relu
0.2  1508.7   0.070
88    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.711
89    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Relu
```

```
0.2   1503.1   0.071
90    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Conv2D
71.0    169.5    3.882
91    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Relu
0.1   1402.3   0.063
92    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Conv2D
103.6    69.3    6.209
93    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Relu
0.1   1344.4   0.066
94    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Conv2D
124.3    84.2    5.926
95    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Relu
0.2   1432.5   0.074
96    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Conv2D
71.0    168.3    3.909
97    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Relu
0.1   1418.9   0.062
98    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Conv2D
103.6    70.0    6.147
99    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Relu
0.1   1337.2   0.066
100   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.226
101   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Relu
0.1   1341.2   0.066
102   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.9    6.157
103   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Relu
0.1   1330.2   0.067
104   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.3    5.986
105   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Relu
0.2   1432.1   0.074
106   InceptionV3/InceptionV3/Mixed_6c/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    510.3    0.832
107   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    188.4    3.742
108   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Relu
0.2   1504.0   0.071
109   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    189.8    3.714
110   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Relu
0.2   1499.2   0.071
111   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Conv2D
71.0    169.3    3.886
112   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Relu
0.1   1414.9   0.063
113   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Conv2D
103.6    69.4    6.204
114   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Relu
0.1   1330.2   0.067
115   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Conv2D
124.3    84.3    5.916
116   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Relu
0.2   1412.7   0.075
117   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Conv2D
71.0    168.4    3.909
118   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Relu
0.1   1417.1   0.062
119   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Conv2D
103.6    70.1    6.142
120   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Relu
0.1   1362.7   0.065
```

```
121   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.231
122   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Relu
0.1  1351.1    0.066
123   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.9    6.159
124   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Relu
0.1  1348.2    0.066
125   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.4    5.982
126   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Relu
0.2  1418.1    0.075
127   InceptionV3/InceptionV3/Mixed_6d/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    510.4    0.832
128   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    188.3    3.744
129   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Relu
0.2  1503.6    0.071
130   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.713
131   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Relu
0.2  1505.7    0.071
132   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.712
133   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Relu
0.2  1472.9    0.072
134   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Conv2D
149.2    87.8    6.812
135   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Relu
0.2  1502.1    0.071
136   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Conv2D
149.2    89.1    6.718
137   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Relu
0.2  1499.6    0.071
138   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Conv2D
85.2    190.1    3.709
139   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Relu
0.2  1493.9    0.071
140   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Conv2D
149.2    89.1    6.717
141   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Relu
0.2  1494.1    0.071
142   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Conv2D
149.2    87.9    6.805
143   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Relu
0.2  1485.0    0.072
144   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Conv2D
149.2    89.0    6.721
145   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Relu
0.2  1491.5    0.071
146   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Conv2D
149.2    88.0    6.801
147   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Relu
0.2  1504.2    0.071
148   InceptionV3/InceptionV3/Mixed_6e/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    528.8    0.803
149   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    190.1    3.709
150   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Relu
0.2  1506.8    0.070
151   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.712
152   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Relu
```

```
0.2   1480.4   0.072
153   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Conv2D
70.8   334.0   3.476
154   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Relu
0.1   1109.8   0.036
155   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.710
156   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1492.1   0.071
157   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Conv2D
149.2   87.9   6.804
158   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Relu
0.2   1498.9   0.071
159   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Conv2D
149.2   89.1   6.715
160   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Relu
0.2   1476.5   0.072
161   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Conv2D
42.5   341.8   2.162
162   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Relu
0.0   795.7   0.030
163   InceptionV3/InceptionV3/Mixed_7a/Branch_2/MaxPool_1a_3x3/MaxPool
0.4   1269.6   0.335
164   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Conv2D
52.4   350.0   2.680
165   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Relu
0.1   1002.7   0.040
166   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Conv2D
62.9   359.2   3.047
167   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1130.4   0.042
168   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   309.3   2.882
169   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Relu
0.1   1140.7   0.042
170   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Conv2D
56.6   314.2   2.837
171   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Relu
0.1   1199.4   0.040
172   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Conv2D
73.4   340.8   3.670
173   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1163.9   0.048
174   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   342.3   8.789
175   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Relu
0.1   1194.9   0.040
176   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.4   2.853
177   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Relu
0.1   1202.0   0.040
178   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.2   2.837
179   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Relu
0.1   1187.9   0.040
180   InceptionV3/InceptionV3/Mixed_7b/Branch_3/AvgPool_0a_3x3/AvgPool
1.5   371.2   0.428
181   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Conv2D
31.5   368.3   1.698
182   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Relu
0.0   741.8   0.032
183   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Conv2D
83.9   388.5   3.863
```

```
184   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Relu
0.1   1103.3   0.036
185   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Conv2D
100.7   403.3   4.341
186   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Relu
0.1   1180.2   0.040
187   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   312.0   2.857
188   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Relu
0.1   1188.7   0.040
189   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Conv2D
56.6   314.4   2.835
190   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Relu
0.1   1184.3   0.040
191   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Conv2D
117.4   370.5   5.400
192   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Relu
0.1   1311.9   0.042
193   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   342.6   8.781
194   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Relu
0.1   1186.1   0.040
195   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.8   2.849
196   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Relu
0.1   1203.9   0.040
197   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.2   2.837
198   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Relu
0.1   1200.0   0.040
199   InceptionV3/InceptionV3/Mixed_7c/Branch_3/AvgPool_0a_3x3/AvgPool
2.4   390.1   0.651
200   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Conv2D
50.3   430.6   2.323
201   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Relu
0.0   792.4   0.030
202   InceptionV3/Logits/AvgPool_1a_8x8/AvgPool
0.3   1069.9   0.237
203   InceptionV3/Logits/Dropout_1b/Identity
0.0     0.0   0.001
204   InceptionV3/Logits/Conv2d_1c_1x1/Conv2D
4.1   1327.5   2.950
205   InceptionV3/Predictions/Reshape
0.0   456.7   0.008
206   InceptionV3/Predictions/Softmax
0.0    19.7   0.194
207   InceptionV3/Predictions/Reshape_1
0.0   435.7   0.009
--------------------------------------------------------------------------------------
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--------------------------------------------------------------------------------------
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Total inference time                    567.68
--------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------
--------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1 -cs 0,1,2
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
```

```
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
```
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.555
Expected:  (1, 1001, 1, 1)
1) 282 0.5570575
-----------------------------------------------------------
```

```
  Obtained values
-----------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.3700992800295353% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0049697897338774055% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.04513529094871169% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.027712270617485046
-----------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
mvNCProfile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
```

binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use frombuffer instead
Time to Execute : 124.07 ms
USB: Myriad Execution Finished
Time to Execute : 104.44 ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary

Detailed Per Layer Profile

Bandwidth   time
Name
MFLOPs (MB/s)   (ms)
==
==
==
===========================
0   input
0.0   0.0   0.002
1   InceptionV1/InceptionV1/Conv2d_1a_7x7/Conv2D
236.0   41.8   7.304
2   InceptionV1/InceptionV1/Conv2d_1a_7x7/Relu
2.4 1895.9   0.808
3   InceptionV1/InceptionV1/MaxPool_2a_3x3/MaxPool
1.8 1350.7   1.134
4   InceptionV1/InceptionV1/Conv2d_2b_1x1/Conv2D
25.7   478.9   0.816
5   InceptionV1/InceptionV1/Conv2d_2b_1x1/Relu
0.6 1722.4   0.222
6   InceptionV1/InceptionV1/Conv2d_2c_3x3/Conv2D
693.6   49.9 11.918
7   InceptionV1/InceptionV1/Conv2d_2c_3x3/Relu
1.8 1878.9   0.611
8   InceptionV1/InceptionV1/MaxPool_3a_3x3/MaxPool
1.4 1400.9   0.820
9   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Conv2D
19.3   562.4   0.552
10   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Relu
0.2 1332.3   0.072
11   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   459.3   0.702
12   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Relu
0.2 1424.7   0.101
13   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Conv2D
173.4   75.5   4.699
14   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Relu
0.3 1530.9   0.125
15   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Conv2D
4.8 1034.0   0.283
16   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Relu
0.0   419.7   0.057
17   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   76.5   0.428
18   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Relu
0.1   837.3   0.057
19   InceptionV1/InceptionV1/Mixed_3b/Branch_3/MaxPool_0a_3x3/MaxPool
1.4   646.8   0.444
20   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Conv2D
9.6   657.8   0.454
21   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Relu

```
0.1    840.8    0.057
22    InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Conv2D
51.4    451.0    0.988
23    InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Relu
0.3  1553.0    0.123
24    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Conv2D
51.4    450.9    0.988
25    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Relu
0.3  1514.7    0.127
26    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Conv2D
346.8     74.2    8.267
27    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Relu
0.5  1672.3    0.172
28    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Conv2D
12.8    885.8    0.450
29    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Relu
0.1    837.5    0.057
30    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Conv2D
43.4     90.7    1.111
31    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Relu
0.2  1441.1    0.100
32    InceptionV1/InceptionV1/Mixed_3c/Branch_3/MaxPool_0a_3x3/MaxPool
1.8    673.3    0.569
33    InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Conv2D
25.7    650.2    0.637
34    InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Relu
0.2  1328.5    0.072
35    InceptionV1/InceptionV1/MaxPool_4a_3x3/MaxPool
0.8  1220.9    0.589
36    InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Conv2D
36.1    376.5    0.944
37    InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Relu
0.1  1172.8    0.062
38    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Conv2D
18.1    488.5    0.548
39    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Relu
0.1    633.6    0.057
40    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Conv2D
70.4    175.3    2.163
41    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Relu
0.1  1210.9    0.065
42    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Conv2D
3.0    760.4    0.255
43    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Relu
0.0    102.8    0.058
44    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Conv2D
2.7     66.8    0.288
45    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Relu
0.0    315.5    0.057
46    InceptionV1/InceptionV1/Mixed_4b/Branch_3/MaxPool_0a_3x3/MaxPool
0.8    605.4    0.298
47    InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Conv2D
12.0    615.2    0.387
48    InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Relu
0.0    419.8    0.057
49    InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Conv2D
32.1    343.5    1.013
50    InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Relu
0.1  1079.0    0.056
51    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Conv2D
22.5    376.7    0.799
52    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Relu
0.1    718.9    0.059
```

```
53    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Conv2D
88.5   166.3   2.844
54    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Relu
0.1  1262.4   0.067
55    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   569.6   0.377
56    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Relu
0.0   162.4   0.056
57    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4    97.6   0.363
58    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Relu
0.0   418.4   0.057
59    InceptionV1/InceptionV1/Mixed_4c/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   633.4   0.304
60    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   625.1   0.406
61    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Relu
0.0   418.4   0.057
62    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Conv2D
25.7   398.3   0.795
63    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Relu
0.1   850.2   0.057
64    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Conv2D
25.7   402.3   0.787
65    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Relu
0.1   842.1   0.057
66    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Conv2D
115.6   183.0   3.338
67    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Relu
0.2  1314.4   0.073
68    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   572.9   0.375
69    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Relu
0.0   162.0   0.056
70    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Conv2D
5.4    97.9   0.362
71    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Relu
0.0   420.8   0.057
72    InceptionV1/InceptionV1/Mixed_4d/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   632.7   0.304
73    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   625.2   0.406
74    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Relu
0.0   420.4   0.057
75    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Conv2D
22.5   389.8   0.772
76    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Relu
0.1   741.1   0.057
77    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   486.9   0.682
78    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Relu
0.1   941.8   0.057
79    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Conv2D
146.3   256.9   2.983
80    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Relu
0.2  1328.6   0.081
81    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Conv2D
6.4   730.6   0.305
82    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Relu
0.0   216.2   0.056
83    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   127.9   0.369
84    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Relu
```

```
0.0    423.5   0.057
85     InceptionV1/InceptionV1/Mixed_4e/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    633.1   0.304
86     InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   624.7   0.407
87     InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Relu
0.0    418.4   0.057
88     InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Conv2D
53.0   302.9   1.504
89     InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Relu
0.2    1325.3  0.073
90     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Conv2D
33.1   279.3   1.285
91     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Relu
0.1    1065.2  0.056
92     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Conv2D
180.6  194.6   4.828
93     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Relu
0.2    1417.2  0.085
94     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Conv2D
6.6    490.9   0.468
95     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Relu
0.0    207.8   0.058
96     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Conv2D
14.5   176.2   0.468
97     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Relu
0.1    846.0   0.057
98     InceptionV1/InceptionV1/Mixed_4f/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    622.2   0.319
99     InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Conv2D
26.5   460.1   0.710
100    InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Relu
0.1    840.4   0.057
101    InceptionV1/InceptionV1/MaxPool_5a_2x2/MaxPool
0.2    950.7   0.329
102    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
20.9   635.0   0.763
103    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.0    428.7   0.057
104    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
13.0   561.1   0.592
105    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.0    270.5   0.056
106    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Conv2D
45.2   546.3   1.637
107    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Relu
0.0    537.8   0.057
108    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
2.6    327.5   0.393
109    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.0    54.9    0.056
110    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Conv2D
3.6    231.4   0.318
111    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Relu
0.0    219.3   0.056
112    InceptionV1/InceptionV1/Mixed_5b/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    543.1   0.146
113    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   558.6   0.503
114    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.0    218.4   0.056
115    InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
31.3   588.6   1.169
```

```
116   InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.1    646.1   0.057
117   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Conv2D
15.7   649.5   0.589
118   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Relu
0.0    322.9   0.057
119   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Conv2D
65.0   517.7   2.481
120   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Relu
0.1    645.5   0.057
121   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
3.9    370.8   0.415
122   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.0     80.7   0.057
123   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4    337.8   0.326
124   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.0    219.4   0.056
125   InceptionV1/InceptionV1/Mixed_5c/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    541.5   0.147
126   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   557.2   0.505
127   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.0    218.5   0.056
128   InceptionV1/Logits/MaxPool_0a_7x7/AvgPool
0.1    416.2   0.235
129   InceptionV1/Logits/Dropout_0b/Identity
0.0      0.0   0.001
130   InceptionV1/Logits/Conv2d_0c_1x1/Conv2D
2.1   1498.7   1.307
131   InceptionV1/Logits/Predictions/Reshape
0.0    497.4   0.008
132   InceptionV1/Logits/Predictions/Softmax
0.0     20.0   0.191
133   InceptionV1/Logits/Predictions/Reshape_1
0.0    588.8   0.006
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
--------------------------

Total inference time                  93.23
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
--------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1
-cs 2,1,0
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
```

/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer

Network Input tensors ['input:0#201']
Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result: (1, 1001, 1, 1)
1) 282 0.2495
Expected: (1, 1001, 1, 1)
1) 282 0.25380206

 Obtained values

 Obtained Min Pixel Accuracy: 1.6904285177588463% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0071906676114987582% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.073060147478341% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.01826833374798298
----
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'

```
pi@SFS-1:~/ncsdk/examples/tensorflow $ make
make -C inception_v3/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
mvNCProfile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute :  612.35  ms
USB: Myriad Execution Finished
Time to Execute :  586.14  ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary
```

```
Detailed Per Layer Profile

Bandwidth   time
#      Name
MFLOPs  (MB/s)    (ms)
===============================================================================
===============================================================================
===============================================================================
===========================
0      input
0.0     0.0    0.004
1      InceptionV3/InceptionV3/Conv2d_1a_3x3/Conv2D
38.4   113.8   4.508
2      InceptionV3/InceptionV3/Conv2d_1a_3x3/Relu
2.1  1890.5   0.717
3      InceptionV3/InceptionV3/Conv2d_2a_3x3/Conv2D
398.3    69.7  19.702
4      InceptionV3/InceptionV3/Conv2d_2a_3x3/Relu
2.1  1901.6   0.694
5      InceptionV3/InceptionV3/Conv2d_2b_3x3/Conv2D
796.6    37.9  35.713
6      InceptionV3/InceptionV3/Conv2d_2b_3x3/Relu
4.1  1931.9   1.365
7      InceptionV3/InceptionV3/MaxPool_3a_3x3/MaxPool
3.1  1440.4   1.831
8      InceptionV3/InceptionV3/Conv2d_3b_1x1/Conv2D
54.6   222.6   2.967
9      InceptionV3/InceptionV3/Conv2d_3b_1x1/Relu
1.3  1857.7   0.438
10     InceptionV3/InceptionV3/Conv2d_4a_3x3/Conv2D
1393.7    19.6  55.036
11     InceptionV3/InceptionV3/Conv2d_4a_3x3/Relu
2.9  1914.3   0.965
12     InceptionV3/InceptionV3/MaxPool_5a_3x3/MaxPool
2.1  1281.2   1.441
13     InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
30.1   354.8   1.331
14     InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1625.5   0.092
15     InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
22.6   451.0   1.034
16     InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.2  1508.5   0.074
17     InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Conv2D
188.2    29.8   8.693
18     InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Relu
0.2  1621.5   0.092
19     InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
30.1   357.5   1.321
20     InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.2  1587.5   0.094
21     InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.708
22     InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Relu
0.4  1709.1   0.131
23     InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Conv2D
203.2    43.0   8.891
24     InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Relu
0.4  1696.7   0.132
25     InceptionV3/InceptionV3/Mixed_5b/Branch_3/AvgPool_0a_3x3/AvgPool
4.2   594.4   0.755
26     InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
```

```
15.1   606.7   0.759
27    InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.1  1338.5   0.056
28    InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
40.1   359.7   1.750
29    InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.2  1618.5   0.092
30    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Conv2D
30.1   478.7   1.299
31    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Relu
0.2  1482.9   0.076
32    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Conv2D
188.2    29.8   8.691
33    InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Relu
0.2  1617.6   0.093
34    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
40.1   358.2   1.758
35    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.2  1602.4   0.093
36    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.700
37    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.4  1709.2   0.131
38    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Conv2D
203.2    43.0   8.894
39    InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Relu
0.4  1706.0   0.132
40    InceptionV3/InceptionV3/Mixed_5c/Branch_3/AvgPool_0a_3x3/AvgPool
5.6   617.7   0.969
41    InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
40.1   358.1   1.758
42    InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.2  1624.3   0.092
43    InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Conv2D
45.2   363.8   1.947
44    InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Relu
0.2  1620.1   0.092
45    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Conv2D
33.9   475.9   1.470
46    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Relu
0.2  1507.1   0.074
47    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Conv2D
188.2    29.8   8.695
48    InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Relu
0.2  1619.5   0.092
49    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Conv2D
45.2   363.0   1.951
50    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Relu
0.2  1609.6   0.093
51    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.704
52    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Relu
0.4  1713.8   0.131
53    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Conv2D
203.2    43.1   8.886
54    InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Relu
0.4  1703.2   0.132
55    InceptionV3/InceptionV3/Mixed_5d/Branch_3/AvgPool_0a_3x3/AvgPool
6.4   611.7   1.101
56    InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Conv2D
45.2   362.7   1.953
57    InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Relu
0.2  1629.0   0.092
```

```
58    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Conv2D
575.3   101.9   25.243
59    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Relu
0.3   1707.6   0.124
60    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Conv2D
45.2   361.9   1.957
61    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1590.0   0.094
62    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.699
63    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Relu
0.4   1711.7   0.131
64    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Conv2D
47.9   156.5   2.445
65    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Relu
0.1   1269.9   0.042
66    InceptionV3/InceptionV3/Mixed_6a/Branch_2/MaxPool_1a_3x3/MaxPool
0.7   1417.0   0.475
67    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.712
68    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Relu
0.2   1514.7   0.070
69    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Conv2D
56.8   235.2   2.599
70    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1352.4   0.052
71    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Conv2D
66.3   80.1   3.614
72    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Relu
0.1   1347.4   0.053
73    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Conv2D
99.4   88.8   4.496
74    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Relu
0.2   1520.5   0.070
75    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Conv2D
56.8   235.5   2.595
76    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1366.6   0.052
77    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Conv2D
66.3   81.4   3.558
78    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Relu
0.1   1340.2   0.053
79    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Conv2D
66.3   80.4   3.601
80    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Relu
0.1   1351.2   0.052
81    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Conv2D
66.3   81.5   3.555
82    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Relu
0.1   1354.3   0.052
83    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Conv2D
99.4   87.7   4.548
84    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Relu
0.2   1516.0   0.070
85    InceptionV3/InceptionV3/Mixed_6b/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   512.7   0.829
86    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   190.0   3.711
87    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Relu
0.2   1506.6   0.070
88    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.710
89    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Relu
```

```
0.2  1504.1   0.071
90     InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.6   3.881
91     InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Relu
0.1  1424.7   0.062
92     InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Conv2D
103.6   69.4   6.203
93     InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Relu
0.1  1348.7   0.066
94     InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Conv2D
124.3   84.3   5.918
95     InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Relu
0.2  1426.0   0.074
96     InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.3   3.910
97     InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Relu
0.1  1412.4   0.063
98     InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Conv2D
103.6   70.1   6.134
99     InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Relu
0.1  1351.0   0.066
100    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Conv2D
103.6   69.1   6.225
101    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Relu
0.1  1350.6   0.066
102    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Conv2D
103.6   69.9   6.160
103    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Relu
0.1  1350.6   0.066
104    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Conv2D
124.3   83.3   5.985
105    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Relu
0.2  1421.9   0.075
106    InceptionV3/InceptionV3/Mixed_6c/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   531.1   0.800
107    InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   188.1   3.748
108    InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Relu
0.2  1495.4   0.071
109    InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.712
110    InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Relu
0.2  1502.6   0.071
111    InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.7   3.877
112    InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Relu
0.1  1424.1   0.062
113    InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Conv2D
103.6   69.4   6.204
114    InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Relu
0.1  1343.3   0.066
115    InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Conv2D
124.3   84.2   5.922
116    InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Relu
0.2  1416.1   0.075
117    InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.2   3.912
118    InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Relu
0.1  1411.0   0.063
119    InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Conv2D
103.6   70.0   6.144
120    InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Relu
0.1  1283.6   0.069
```

```
121   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.226
122   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Relu
0.1  1344.6    0.066
123   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.9    6.156
124   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Relu
0.1  1349.3    0.066
125   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.3    5.989
126   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Relu
0.2  1429.7    0.074
127   InceptionV3/InceptionV3/Mixed_6d/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    520.9    0.816
128   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    188.3    3.744
129   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Relu
0.2  1505.2    0.071
130   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    190.0    3.711
131   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Relu
0.2  1510.4    0.070
132   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Conv2D
85.2    190.0    3.711
133   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Relu
0.2  1485.7    0.071
134   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Conv2D
149.2    87.8    6.814
135   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Relu
0.2  1493.9    0.071
136   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Conv2D
149.2    89.1    6.715
137   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Relu
0.2  1507.4    0.070
138   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Conv2D
85.2    190.0    3.711
139   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Relu
0.2  1489.3    0.071
140   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Conv2D
149.2    89.1    6.718
141   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Relu
0.2  1488.8    0.071
142   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Conv2D
149.2    87.9    6.807
143   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Relu
0.2  1477.6    0.072
144   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Conv2D
149.2    89.1    6.715
145   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Relu
0.2  1486.7    0.071
146   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Conv2D
149.2    88.0    6.803
147   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Relu
0.2  1506.6    0.070
148   InceptionV3/InceptionV3/Mixed_6e/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    512.0    0.830
149   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    190.0    3.711
150   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Relu
0.2  1505.9    0.071
151   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.712
152   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Relu
```

0.2 1484.9   0.072
153   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Conv2D
70.8   334.3   3.473
154   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Relu
0.1 1088.4   0.036
155   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.710
156   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Relu
0.2 1499.0   0.071
157   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Conv2D
149.2   87.9   6.809
158   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Relu
0.2 1495.8   0.071
159   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Conv2D
149.2   89.1   6.720
160   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Relu
0.2 1474.8   0.072
161   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Conv2D
42.5   342.1   2.160
162   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Relu
0.0   782.4   0.030
163   InceptionV3/InceptionV3/Mixed_7a/Branch_2/MaxPool_1a_3x3/MaxPool
0.4 1272.7   0.334
164   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Conv2D
52.4   350.5   2.676
165   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Relu
0.1 1021.4   0.039
166   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Conv2D
62.9   361.8   3.026
167   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Relu
0.1 1064.4   0.045
168   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   309.2   2.882
169   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Relu
0.1 1189.8   0.040
170   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Conv2D
56.6   313.7   2.842
171   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Relu
0.1 1182.4   0.040
172   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Conv2D
73.4   340.8   3.670
173   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Relu
0.1 1161.8   0.048
174   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   342.1   8.795
175   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Relu
0.1 1196.7   0.040
176   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.1   2.856
177   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Relu
0.1 1215.8   0.039
178   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.0   2.839
179   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Relu
0.1 1192.3   0.040
180   InceptionV3/InceptionV3/Mixed_7b/Branch_3/AvgPool_0a_3x3/AvgPool
1.5   369.5   0.429
181   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Conv2D
31.5   368.2   1.699
182   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Relu
0.0   710.5   0.034
183   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Conv2D
83.9   388.4   3.863

```
184   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Relu
0.1   1114.5   0.036
185   InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Conv2D
100.7   402.9   4.345
186   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Relu
0.1   1189.8   0.040
187   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   312.5   2.852
188   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Relu
0.1   1198.3   0.040
189   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Conv2D
56.6   314.1   2.838
190   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Relu
0.1   1198.6   0.040
191   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Conv2D
117.4   370.5   5.401
192   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Relu
0.1   1239.4   0.045
193   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   343.1   8.770
194   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Relu
0.1   1197.8   0.040
195   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.6   2.851
196   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Relu
0.1   1198.8   0.040
197   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   313.8   2.841
198   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Relu
0.1   1234.0   0.039
199   InceptionV3/InceptionV3/Mixed_7c/Branch_3/AvgPool_0a_3x3/AvgPool
2.4   390.1   0.651
200   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Conv2D
50.3   430.3   2.325
201   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Relu
0.0   799.2   0.030
202   InceptionV3/Logits/AvgPool_1a_8x8/AvgPool
0.3   1066.8   0.238
203   InceptionV3/Logits/Dropout_1b/Identity
0.0     0.0   0.001
204   InceptionV3/Logits/Conv2d_1c_1x1/Conv2D
4.1   1327.1   2.951
205   InceptionV3/Predictions/Reshape
0.0   455.0   0.008
206   InceptionV3/Predictions/Softmax
0.0    19.7   0.194
207   InceptionV3/Predictions/Reshape_1
0.0   625.3   0.006
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Total inference time                   567.63
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Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1 -cs 0,1,2
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
```

```
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


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---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.555
Expected:  (1, 1001, 1, 1)
1) 282 0.5570575
------------------------------------------------------------
```

```
  Obtained values
-------------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.3700992800295353% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0049697897338774055% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.04513529094871169% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.027712270617485046
-------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
mvNCProfile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
--------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
```

binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute : 123.63 ms
USB: Myriad Execution Finished
Time to Execute : 104.45 ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary

Detailed Per Layer Profile

Bandwidth   time
Name
MFLOPs (MB/s)   (ms)
==
==
==
===========================
0   input
0.0   0.0   0.002
1   InceptionV1/InceptionV1/Conv2d_1a_7x7/Conv2D
236.0   41.7   7.322
2   InceptionV1/InceptionV1/Conv2d_1a_7x7/Relu
2.4 1898.5   0.807
3   InceptionV1/InceptionV1/MaxPool_2a_3x3/MaxPool
1.8 1352.4   1.132
4   InceptionV1/InceptionV1/Conv2d_2b_1x1/Conv2D
25.7   479.8   0.814
5   InceptionV1/InceptionV1/Conv2d_2b_1x1/Relu
0.6 1730.9   0.221
6   InceptionV1/InceptionV1/Conv2d_2c_3x3/Conv2D
693.6   49.9 11.917
7   InceptionV1/InceptionV1/Conv2d_2c_3x3/Relu
1.8 1876.2   0.612
8   InceptionV1/InceptionV1/MaxPool_3a_3x3/MaxPool
1.4 1403.1   0.819
9   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Conv2D
19.3   563.6   0.551
10   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Relu
0.2 1329.2   0.072
11   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   455.5   0.708
12   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Relu
0.2 1438.9   0.100
13   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Conv2D
173.4   76.2   4.653
14   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Relu
0.3 1541.4   0.124
15   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Conv2D
4.8 1041.6   0.281
16   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Relu
0.0   422.8   0.057
17   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   76.8   0.427
18   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Relu
0.1   841.8   0.057
19   InceptionV1/InceptionV1/Mixed_3b/Branch_3/MaxPool_0a_3x3/MaxPool
1.4   646.6   0.445
20   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Conv2D
9.6   658.3   0.454
21   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Relu

```
0.1    841.5    0.057
22     InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Conv2D
51.4    451.5    0.987
23     InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Relu
0.3   1575.8    0.122
24     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Conv2D
51.4    450.0    0.990
25     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Relu
0.3   1524.6    0.126
26     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Conv2D
346.8     75.0    8.179
27     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Relu
0.5   1663.3    0.173
28     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Conv2D
12.8    885.9    0.450
29     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Relu
0.1    841.1    0.057
30     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Conv2D
43.4     90.6    1.112
31     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Relu
0.2   1451.4    0.099
32     InceptionV1/InceptionV1/Mixed_3c/Branch_3/MaxPool_0a_3x3/MaxPool
1.8    673.6    0.569
33     InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Conv2D
25.7    651.5    0.636
34     InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Relu
0.2   1332.6    0.072
35     InceptionV1/InceptionV1/MaxPool_4a_3x3/MaxPool
0.8   1219.4    0.589
36     InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Conv2D
36.1    357.9    0.994
37     InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Relu
0.1   1199.7    0.060
38     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Conv2D
18.1    487.6    0.549
39     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Relu
0.1    632.4    0.057
40     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Conv2D
70.4    169.2    2.240
41     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Relu
0.1   1177.0    0.066
42     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Conv2D
3.0    760.2    0.255
43     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Relu
0.0    105.8    0.057
44     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Conv2D
2.7     66.2    0.291
45     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Relu
0.0    315.7    0.057
46     InceptionV1/InceptionV1/Mixed_4b/Branch_3/MaxPool_0a_3x3/MaxPool
0.8    605.7    0.298
47     InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Conv2D
12.0    617.3    0.386
48     InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Relu
0.0    419.3    0.057
49     InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Conv2D
32.1    340.5    1.022
50     InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Relu
0.1   1073.7    0.056
51     InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Conv2D
22.5    378.2    0.796
52     InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Relu
0.1    741.0    0.057
```

```
53   InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Conv2D
88.5   172.1   2.749
54   InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Relu
0.1   1265.5   0.067
55   InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   572.1   0.376
56   InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Relu
0.0   155.5   0.058
57   InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   97.2   0.365
58   InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Relu
0.0   418.9   0.057
59   InceptionV1/InceptionV1/Mixed_4c/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   633.4   0.304
60   InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   625.4   0.406
61   InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Relu
0.0   420.5   0.057
62   InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Conv2D
25.7   391.6   0.809
63   InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Relu
0.1   843.8   0.057
64   InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Conv2D
25.7   390.6   0.811
65   InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Relu
0.1   846.6   0.057
66   InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Conv2D
115.6   181.2   3.371
67   InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Relu
0.2   1338.7   0.072
68   InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   572.3   0.376
69   InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Relu
0.0   162.3   0.056
70   InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   97.5   0.364
71   InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Relu
0.0   421.0   0.057
72   InceptionV1/InceptionV1/Mixed_4d/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   633.5   0.304
73   InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   621.2   0.409
74   InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Relu
0.0   421.3   0.057
75   InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Conv2D
22.5   385.7   0.780
76   InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Relu
0.1   745.0   0.056
77   InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   486.6   0.683
78   InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Relu
0.1   945.7   0.057
79   InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Conv2D
146.3   257.1   2.981
80   InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Relu
0.2   1285.9   0.084
81   InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Conv2D
6.4   726.2   0.307
82   InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Relu
0.0   216.0   0.056
83   InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   127.9   0.369
84   InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Relu
```

```
0.0    421.6    0.057
85     InceptionV1/InceptionV1/Mixed_4e/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    632.9    0.304
86     InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   623.5    0.407
87     InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Relu
0.0    419.5    0.057
88     InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Conv2D
53.0   299.1    1.524
89     InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Relu
0.2    1346.3   0.071
90     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Conv2D
33.1   279.5    1.284
91     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Relu
0.1    1085.4   0.055
92     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Conv2D
180.6  188.6    4.980
93     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Relu
0.2    1405.1   0.086
94     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Conv2D
6.6    493.4    0.465
95     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Relu
0.0    215.6    0.056
96     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Conv2D
14.5   175.4    0.471
97     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Relu
0.1    845.7    0.057
98     InceptionV1/InceptionV1/Mixed_4f/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    623.3    0.318
99     InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Conv2D
26.5   459.7    0.710
100    InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Relu
0.1    844.2    0.057
101    InceptionV1/InceptionV1/MaxPool_5a_2x2/MaxPool
0.2    952.6    0.328
102    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
20.9   644.0    0.752
103    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.0    430.6    0.057
104    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
13.0   561.6    0.591
105    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.0    271.0    0.056
106    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Conv2D
45.2   542.5    1.649
107    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Relu
0.0    522.2    0.058
108    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
2.6    326.9    0.393
109    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.0    54.8     0.056
110    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Conv2D
3.6    231.2    0.318
111    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Relu
0.0    218.8    0.056
112    InceptionV1/InceptionV1/Mixed_5b/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    534.8    0.148
113    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   557.3    0.504
114    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.0    219.0    0.056
115    InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
31.3   591.6    1.163
```

```
116   InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.1   647.3   0.057
117   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Conv2D
15.7   651.2   0.588
118   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Relu
0.0   322.5   0.057
119   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Conv2D
65.0   526.1   2.441
120   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Relu
0.1   646.8   0.057
121   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
3.9   370.8   0.415
122   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.0    80.7   0.057
123   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   337.0   0.327
124   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.0   219.0   0.056
125   InceptionV1/InceptionV1/Mixed_5c/Branch_3/MaxPool_0a_3x3/MaxPool
0.4   542.0   0.146
126   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   551.9   0.509
127   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.0   219.0   0.056
128   InceptionV1/Logits/MaxPool_0a_7x7/AvgPool
0.1   415.8   0.235
129   InceptionV1/Logits/Dropout_0b/Identity
0.0     0.0   0.001
130   InceptionV1/Logits/Conv2d_0c_1x1/Conv2D
2.1  1499.1   1.307
131   InceptionV1/Logits/Predictions/Reshape
0.0   486.4   0.008
132   InceptionV1/Logits/Predictions/Softmax
0.0    20.0   0.191
133   InceptionV1/Logits/Predictions/Reshape_1
0.0   589.1   0.006
---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
---------------------------

Total inference time                    93.36
---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
---------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1
-cs 2,1,0
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
```

```
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
```
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.2495
Expected:  (1, 1001, 1, 1)
1) 282 0.25380206
------------------------------------------------------------
 Obtained values
------------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.6904285177588463% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0071906676114987582% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.073060147478341% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.01826833374798298
------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
```

```
pi@SFS-1:~/ncsdk/examples/tensorflow $ make
make -C inception_v3/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
mvNCProfile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute :  612.16  ms
USB: Myriad Execution Finished
Time to Execute :  586.1  ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary
```

```
Detailed Per Layer Profile

Bandwidth   time
#      Name
MFLOPs  (MB/s)     (ms)
================================================================================
================================================================================
================================================================================
==========================
0    input
0.0    0.0   0.004
1    InceptionV3/InceptionV3/Conv2d_1a_3x3/Conv2D
38.4   113.3   4.531
2    InceptionV3/InceptionV3/Conv2d_1a_3x3/Relu
2.1  1870.9   0.724
3    InceptionV3/InceptionV3/Conv2d_2a_3x3/Conv2D
398.3    69.7  19.703
4    InceptionV3/InceptionV3/Conv2d_2a_3x3/Relu
2.1  1899.8   0.694
5    InceptionV3/InceptionV3/Conv2d_2b_3x3/Conv2D
796.6    38.0  35.632
6    InceptionV3/InceptionV3/Conv2d_2b_3x3/Relu
4.1  1927.0   1.369
7    InceptionV3/InceptionV3/MaxPool_3a_3x3/MaxPool
3.1  1441.5   1.830
8    InceptionV3/InceptionV3/Conv2d_3b_1x1/Conv2D
54.6   222.6   2.967
9    InceptionV3/InceptionV3/Conv2d_3b_1x1/Relu
1.3  1861.1   0.437
10    InceptionV3/InceptionV3/Conv2d_4a_3x3/Conv2D
1393.7    19.6  55.030
11    InceptionV3/InceptionV3/Conv2d_4a_3x3/Relu
2.9  1914.3   0.965
12    InceptionV3/InceptionV3/MaxPool_5a_3x3/MaxPool
2.1  1282.2   1.440
13    InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
30.1   353.3   1.337
14    InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1620.9   0.092
15    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
22.6   450.9   1.034
16    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.2  1507.6   0.074
17    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Conv2D
188.2    29.7   8.709
18    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Relu
0.2  1620.5   0.092
19    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
30.1   353.6   1.335
20    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.2  1598.4   0.094
21    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.708
22    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Relu
0.4  1708.5   0.131
23    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Conv2D
203.2    43.0   8.890
24    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Relu
0.4  1703.4   0.132
25    InceptionV3/InceptionV3/Mixed_5b/Branch_3/AvgPool_0a_3x3/AvgPool
4.2   594.6   0.755
26    InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
```

```
15.1    606.7    0.759
27      InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.1   1337.8    0.056
28      InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
40.1    358.1    1.758
29      InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.2   1621.0    0.092
30      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Conv2D
30.1    478.8    1.298
31      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Relu
0.2   1488.5    0.075
32      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Conv2D
188.2     29.7    8.699
33      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Relu
0.2   1613.0    0.093
34      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
40.1    357.6    1.760
35      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.2   1590.6    0.094
36      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
135.5     29.3    8.700
37      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.4   1707.5    0.131
38      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Conv2D
203.2     43.1    8.888
39      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Relu
0.4   1708.0    0.131
40      InceptionV3/InceptionV3/Mixed_5c/Branch_3/AvgPool_0a_3x3/AvgPool
5.6    617.7    0.969
41      InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
40.1    360.1    1.748
42      InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.2   1620.2    0.092
43      InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Conv2D
45.2    361.8    1.958
44      InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Relu
0.2   1618.6    0.092
45      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Conv2D
33.9    475.9    1.469
46      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Relu
0.2   1507.7    0.074
47      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Conv2D
188.2     29.8    8.684
48      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Relu
0.2   1617.1    0.093
49      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Conv2D
45.2    362.1    1.956
50      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Relu
0.2   1612.8    0.093
51      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Conv2D
135.5     29.3    8.701
52      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Relu
0.4   1711.4    0.131
53      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Conv2D
203.2     43.1    8.889
54      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Relu
0.4   1700.8    0.132
55      InceptionV3/InceptionV3/Mixed_5d/Branch_3/AvgPool_0a_3x3/AvgPool
6.4    601.1    1.120
56      InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Conv2D
45.2    361.9    1.957
57      InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Relu
0.2   1627.0    0.092
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58   InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Conv2D
575.3   101.9   25.242
59   InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Relu
0.3   1700.4   0.125
60   InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Conv2D
45.2   363.5   1.948
61   InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1615.5   0.093
62   InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.707
63   InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Relu
0.4   1711.1   0.131
64   InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Conv2D
47.9   156.6   2.443
65   InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Relu
0.1   1265.5   0.042
66   InceptionV3/InceptionV3/Mixed_6a/Branch_2/MaxPool_1a_3x3/MaxPool
0.7   1417.0   0.475
67   InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.712
68   InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Relu
0.2   1512.6   0.070
69   InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Conv2D
56.8   235.2   2.598
70   InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1357.6   0.052
71   InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Conv2D
66.3   80.3   3.606
72   InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Relu
0.1   1349.5   0.052
73   InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Conv2D
99.4   88.8   4.496
74   InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Relu
0.2   1513.3   0.070
75   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Conv2D
56.8   235.7   2.593
76   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1292.9   0.055
77   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Conv2D
66.3   81.5   3.553
78   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Relu
0.1   1325.0   0.053
79   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Conv2D
66.3   80.4   3.603
80   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Relu
0.1   1314.9   0.054
81   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Conv2D
66.3   81.5   3.553
82   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Relu
0.1   1346.9   0.053
83   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Conv2D
99.4   87.8   4.545
84   InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Relu
0.2   1509.9   0.070
85   InceptionV3/InceptionV3/Mixed_6b/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   511.9   0.830
86   InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   190.0   3.710
87   InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Relu
0.2   1508.7   0.070
88   InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.711
89   InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Relu
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0.2   1505.0    0.071
90    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.3    3.886
91    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Relu
0.1   1408.9    0.063
92    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Conv2D
103.6    69.3    6.207
93    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Relu
0.1   1366.6    0.065
94    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Conv2D
124.3    84.3    5.916
95    InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Relu
0.2   1445.0    0.073
96    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.3    3.909
97    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Relu
0.1   1404.0    0.063
98    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Conv2D
103.6    70.1    6.138
99    InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Relu
0.1   1347.8    0.066
100   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.227
101   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Relu
0.1   1357.4    0.065
102   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.8    6.163
103   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Relu
0.1   1328.0    0.067
104   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.2    5.993
105   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Relu
0.2   1376.6    0.077
106   InceptionV3/InceptionV3/Mixed_6c/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   511.0    0.831
107   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   188.2    3.746
108   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Relu
0.2   1509.1    0.070
109   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9    3.712
110   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Relu
0.2   1504.0    0.071
111   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.5    3.883
112   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Relu
0.1   1439.6    0.061
113   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Conv2D
103.6    69.4    6.203
114   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Relu
0.1   1333.0    0.066
115   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Conv2D
124.3    84.3    5.917
116   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Relu
0.2   1415.4    0.075
117   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.3    3.911
118   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Relu
0.1   1441.0    0.061
119   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Conv2D
103.6    70.1    6.139
120   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Relu
0.1   1377.1    0.064
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121   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.230
122   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Relu
0.1   1347.7    0.066
123   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.9    6.159
124   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Relu
0.1   1330.6    0.067
125   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.3    5.984
126   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Relu
0.2   1415.7    0.075
127   InceptionV3/InceptionV3/Mixed_6d/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   510.6    0.832
128   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   188.3    3.743
129   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Relu
0.2   1520.7    0.070
130   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   190.0    3.711
131   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Relu
0.2   1494.8    0.071
132   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   189.9    3.711
133   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Relu
0.2   1481.7    0.072
134   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Conv2D
149.2    87.9    6.811
135   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Relu
0.2   1500.5    0.071
136   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Conv2D
149.2    89.1    6.716
137   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Relu
0.2   1502.9    0.071
138   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Conv2D
85.2   190.0    3.710
139   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Relu
0.2   1489.9    0.071
140   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Conv2D
149.2    89.1    6.717
141   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Relu
0.2   1496.0    0.071
142   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Conv2D
149.2    87.9    6.805
143   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Relu
0.2   1485.5    0.071
144   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Conv2D
149.2    89.0    6.721
145   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Relu
0.2   1478.0    0.072
146   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Conv2D
149.2    88.0    6.803
147   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Relu
0.2   1494.8    0.071
148   InceptionV3/InceptionV3/Mixed_6e/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   512.4    0.829
149   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   190.0    3.711
150   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Relu
0.2   1507.2    0.070
151   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9    3.713
152   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Relu
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0.2   1477.5   0.072
153   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Conv2D
70.8   333.9   3.477
154   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Relu
0.1   1120.1   0.035
155   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.711
156   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1510.6   0.070
157   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Conv2D
149.2   87.9   6.808
158   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Relu
0.2   1497.5   0.071
159   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Conv2D
149.2   89.1   6.716
160   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Relu
0.2   1484.8   0.072
161   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Conv2D
42.5   342.0   2.161
162   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Relu
0.0   787.5   0.030
163   InceptionV3/InceptionV3/Mixed_7a/Branch_2/MaxPool_1a_3x3/MaxPool
0.4   1274.0   0.333
164   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Conv2D
52.4   350.5   2.676
165   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Relu
0.1   1021.8   0.039
166   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Conv2D
62.9   361.6   3.027
167   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1082.0   0.044
168   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   309.5   2.880
169   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Relu
0.1   1188.7   0.040
170   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Conv2D
56.6   314.0   2.838
171   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Relu
0.1   1189.6   0.040
172   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Conv2D
73.4   340.9   3.669
173   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1166.1   0.048
174   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   342.0   8.798
175   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Relu
0.1   1188.0   0.040
176   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.3   2.854
177   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Relu
0.1   1208.1   0.039
178   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.1   2.838
179   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Relu
0.1   1192.0   0.040
180   InceptionV3/InceptionV3/Mixed_7b/Branch_3/AvgPool_0a_3x3/AvgPool
1.5   370.4   0.428
181   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Conv2D
31.5   368.1   1.699
182   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Relu
0.0   700.8   0.034
183   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Conv2D
83.9   388.6   3.862
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184    InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Relu
0.1  1106.7   0.036
185    InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Conv2D
100.7   403.0   4.344
186    InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Relu
0.1  1198.6   0.040
187    InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   312.0   2.857
188    InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Relu
0.1  1188.1   0.040
189    InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Conv2D
56.6   313.8   2.840
190    InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Relu
0.1  1204.3   0.040
191    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Conv2D
117.4   370.7   5.397
192    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Relu
0.1  1297.8   0.043
193    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   343.2   8.765
194    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Relu
0.1  1185.4   0.040
195    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   313.2   2.846
196    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Relu
0.1  1180.3   0.040
197    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.0   2.839
198    InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Relu
0.1  1200.2   0.040
199    InceptionV3/InceptionV3/Mixed_7c/Branch_3/AvgPool_0a_3x3/AvgPool
2.4   390.3   0.651
200    InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Conv2D
50.3   430.4   2.324
201    InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Relu
0.0   789.8   0.030
202    InceptionV3/Logits/AvgPool_1a_8x8/AvgPool
0.3  1069.8   0.237
203    InceptionV3/Logits/Dropout_1b/Identity
0.0     0.0   0.001
204    InceptionV3/Logits/Conv2d_1c_1x1/Conv2D
4.1  1326.6   2.952
205    InceptionV3/Predictions/Reshape
0.0   454.4   0.008
206    InceptionV3/Predictions/Softmax
0.0    19.6   0.195
207    InceptionV3/Predictions/Reshape_1
0.0   625.3   0.006
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
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Total inference time                   567.67
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1 -cs 0,1,2
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
```

```
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer

Network Input tensors ['input:0#327']
Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result: (1, 1001, 1, 1)
1) 282 0.555
Expected: (1, 1001, 1, 1)
1) 282 0.5570575

```
  Obtained values
--------------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.3700992800295353% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0049697897338774055% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.04513529094871169% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.027712270617485046
--------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
mvNCProfile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
--------------------------------------


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---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
```

binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute : 123.67 ms
USB: Myriad Execution Finished
Time to Execute : 104.78 ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary

Detailed Per Layer Profile

Bandwidth   time
Name
MFLOPs (MB/s)   (ms)
==
==
==
===========================
0   input
0.0   0.0   0.002
1   InceptionV1/InceptionV1/Conv2d_1a_7x7/Conv2D
236.0   41.7   7.313
2   InceptionV1/InceptionV1/Conv2d_1a_7x7/Relu
2.4 1895.1   0.808
3   InceptionV1/InceptionV1/MaxPool_2a_3x3/MaxPool
1.8 1352.4   1.132
4   InceptionV1/InceptionV1/Conv2d_2b_1x1/Conv2D
25.7   481.1   0.812
5   InceptionV1/InceptionV1/Conv2d_2b_1x1/Relu
0.6 1714.3   0.223
6   InceptionV1/InceptionV1/Conv2d_2c_3x3/Conv2D
693.6   49.7 11.945
7   InceptionV1/InceptionV1/Conv2d_2c_3x3/Relu
1.8 1878.3   0.612
8   InceptionV1/InceptionV1/MaxPool_3a_3x3/MaxPool
1.4 1404.6   0.818
9   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Conv2D
19.3   563.2   0.552
10   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Relu
0.2 1323.5   0.072
11   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   456.9   0.706
12   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Relu
0.2 1433.6   0.100
13   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Conv2D
173.4   74.6   4.757
14   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Relu
0.3 1512.3   0.127
15   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Conv2D
4.8 1043.2   0.281
16   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Relu
0.0   420.2   0.057
17   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   76.0   0.431
18   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Relu
0.1   835.6   0.057
19   InceptionV1/InceptionV1/Mixed_3b/Branch_3/MaxPool_0a_3x3/MaxPool
1.4   647.3   0.444
20   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Conv2D
9.6   655.9   0.456
21   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Relu

0.1   843.0   0.057
22   InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Conv2D
51.4   453.1   0.983
23   InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Relu
0.3   1549.9   0.124
24   InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Conv2D
51.4   450.4   0.989
25   InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Relu
0.3   1549.7   0.124
26   InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Conv2D
346.8   74.4   8.250
27   InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Relu
0.5   1691.2   0.170
28   InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Conv2D
12.8   870.0   0.458
29   InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Relu
0.1   837.9   0.057
30   InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Conv2D
43.4   90.7   1.111
31   InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Relu
0.2   1458.8   0.099
32   InceptionV1/InceptionV1/Mixed_3c/Branch_3/MaxPool_0a_3x3/MaxPool
1.8   675.1   0.568
33   InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Conv2D
25.7   651.1   0.636
34   InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Relu
0.2   1295.9   0.074
35   InceptionV1/InceptionV1/MaxPool_4a_3x3/MaxPool
0.8   1212.4   0.593
36   InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Conv2D
36.1   358.7   0.991
37   InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Relu
0.1   1198.9   0.060
38   InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Conv2D
18.1   490.1   0.546
39   InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Relu
0.1   637.3   0.057
40   InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Conv2D
70.4   171.6   2.209
41   InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Relu
0.1   1210.1   0.065
42   InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Conv2D
3.0   762.2   0.255
43   InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Relu
0.0   105.9   0.057
44   InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Conv2D
2.7   66.9   0.288
45   InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Relu
0.0   316.0   0.057
46   InceptionV1/InceptionV1/Mixed_4b/Branch_3/MaxPool_0a_3x3/MaxPool
0.8   605.4   0.298
47   InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Conv2D
12.0   613.3   0.388
48   InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Relu
0.0   419.8   0.057
49   InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Conv2D
32.1   337.6   1.031
50   InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Relu
0.1   1033.0   0.058
51   InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Conv2D
22.5   392.5   0.767
52   InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Relu
0.1   743.0   0.057

```
53    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Conv2D
88.5   170.2   2.779
54    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Relu
0.1  1236.0   0.068
55    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   571.9  0.376
56    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Relu
0.0   162.2  0.056
57    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4    97.1  0.365
58    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Relu
0.0   420.1  0.057
59    InceptionV1/InceptionV1/Mixed_4c/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   633.1  0.304
60    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   624.5  0.407
61    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Relu
0.0   420.1  0.057
62    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Conv2D
25.7   391.0  0.810
63    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Relu
0.1   848.1  0.057
64    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Conv2D
25.7   416.4  0.760
65    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Relu
0.1   840.4  0.057
66    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Conv2D
115.6   175.0   3.490
67    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Relu
0.2  1331.9   0.072
68    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   568.8  0.378
69    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Relu
0.0   162.2  0.056
70    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Conv2D
5.4    97.9  0.362
71    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Relu
0.0   420.8  0.057
72    InceptionV1/InceptionV1/Mixed_4d/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   633.0  0.304
73    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   624.5  0.407
74    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Relu
0.0   421.6  0.057
75    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Conv2D
22.5   408.1  0.738
76    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Relu
0.1   742.8  0.057
77    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   487.4  0.682
78    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Relu
0.1   945.8  0.057
79    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Conv2D
146.3   256.4   2.988
80    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Relu
0.2  1345.4   0.080
81    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Conv2D
6.4   725.4  0.307
82    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Relu
0.0   216.3  0.056
83    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   127.8  0.370
84    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Relu
```

```
0.0    419.7   0.057
85    InceptionV1/InceptionV1/Mixed_4e/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    632.4   0.304
86    InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   625.4   0.406
87    InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Relu
0.0    420.2   0.057
88    InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Conv2D
53.0   301.3   1.512
89    InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Relu
0.2   1306.5   0.074
90    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Conv2D
33.1   279.3   1.285
91    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Relu
0.1   1078.8   0.056
92    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Conv2D
180.6   192.7   4.875
93    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Relu
0.2   1405.9   0.086
94    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Conv2D
6.6    492.8   0.466
95    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Relu
0.0    215.5   0.056
96    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Conv2D
14.5   175.7   0.470
97    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Relu
0.1    848.9   0.057
98    InceptionV1/InceptionV1/Mixed_4f/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    620.0   0.320
99    InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Conv2D
26.5   458.0   0.713
100   InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Relu
0.1    846.2   0.057
101   InceptionV1/InceptionV1/MaxPool_5a_2x2/MaxPool
0.2    952.3   0.328
102   InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
20.9   629.2   0.770
103   InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.0    425.5   0.057
104   InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
13.0   560.0   0.593
105   InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.0    268.8   0.057
106   InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Conv2D
45.2   547.1   1.635
107   InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Relu
0.0    532.5   0.057
108   InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
2.6    324.7   0.396
109   InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.0     54.8   0.056
110   InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Conv2D
3.6    229.5   0.321
111   InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Relu
0.0    219.2   0.056
112   InceptionV1/InceptionV1/Mixed_5b/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    543.4   0.146
113   InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   558.5   0.503
114   InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.0    218.5   0.056
115   InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
31.3   583.0   1.180
```

```
116   InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.1   644.9   0.057
117   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Conv2D
15.7   650.5   0.588
118   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Relu
0.0   323.5   0.057
119   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Conv2D
65.0   513.3   2.502
120   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Relu
0.1   642.5   0.057
121   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
3.9   371.4   0.415
122   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.0    80.6   0.057
123   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   336.2   0.328
124   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.0   218.7   0.056
125   InceptionV1/InceptionV1/Mixed_5c/Branch_3/MaxPool_0a_3x3/MaxPool
0.4   540.3   0.147
126   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   559.2   0.503
127   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.0   219.2   0.056
128   InceptionV1/Logits/MaxPool_0a_7x7/AvgPool
0.1   415.9   0.235
129   InceptionV1/Logits/Dropout_0b/Identity
0.0     0.0   0.001
130   InceptionV1/Logits/Conv2d_0c_1x1/Conv2D
2.1   1499.8   1.306
131   InceptionV1/Logits/Predictions/Reshape
0.0   488.7   0.008
132   InceptionV1/Logits/Predictions/Softmax
0.0    20.0   0.191
133   InceptionV1/Logits/Predictions/Reshape_1
0.0   589.3   0.006
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
---------------------------

Total inference time                    93.54
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
---------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1
-cs 2,1,0
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
```

```
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.2495
Expected:  (1, 1001, 1, 1)
1) 282 0.25380206
------------------------------------------------------------
 Obtained values
------------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.6904285177588463% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0071906761149875582% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.073060147478341% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.01826833374798298
------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
```

```
pi@SFS-1:~/ncsdk/examples/tensorflow $ make
make -C inception_v3/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
mvNCProfile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute :  612.71  ms
USB: Myriad Execution Finished
Time to Execute :  586.19  ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary
```

```
Detailed Per Layer Profile

Bandwidth   time
#      Name
MFLOPs  (MB/s)    (ms)
================================================================================
================================================================================
================================================================================
===========================
0    input
0.0     0.0    0.004
1    InceptionV3/InceptionV3/Conv2d_1a_3x3/Conv2D
38.4   112.5   4.563
2    InceptionV3/InceptionV3/Conv2d_1a_3x3/Relu
2.1  1896.4   0.715
3    InceptionV3/InceptionV3/Conv2d_2a_3x3/Conv2D
398.3    69.7  19.704
4    InceptionV3/InceptionV3/Conv2d_2a_3x3/Relu
2.1  1900.7   0.694
5    InceptionV3/InceptionV3/Conv2d_2b_3x3/Conv2D
796.6    38.0  35.638
6    InceptionV3/InceptionV3/Conv2d_2b_3x3/Relu
4.1  1928.5   1.368
7    InceptionV3/InceptionV3/MaxPool_3a_3x3/MaxPool
3.1  1441.0   1.831
8    InceptionV3/InceptionV3/Conv2d_3b_1x1/Conv2D
54.6   222.5   2.968
9    InceptionV3/InceptionV3/Conv2d_3b_1x1/Relu
1.3  1858.2   0.438
10    InceptionV3/InceptionV3/Conv2d_4a_3x3/Conv2D
1393.7    19.6  55.036
11    InceptionV3/InceptionV3/Conv2d_4a_3x3/Relu
2.9  1913.6   0.965
12    InceptionV3/InceptionV3/MaxPool_5a_3x3/MaxPool
2.1  1283.6   1.438
13    InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
30.1   353.3   1.336
14    InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1619.5   0.092
15    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
22.6   451.1   1.034
16    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.2  1501.3   0.075
17    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Conv2D
188.2    29.7   8.703
18    InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Relu
0.2  1626.9   0.092
19    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
30.1   355.0   1.330
20    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.2  1601.5   0.093
21    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.703
22    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Relu
0.4  1711.2   0.131
23    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Conv2D
203.2    43.0   8.890
24    InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Relu
0.4  1709.7   0.131
25    InceptionV3/InceptionV3/Mixed_5b/Branch_3/AvgPool_0a_3x3/AvgPool
4.2   595.0   0.755
26    InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
```

```
15.1    606.0    0.760
27      InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.1   1338.4    0.056
28      InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
40.1    358.4    1.756
29      InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.2   1620.4    0.092
30      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Conv2D
30.1    478.6    1.299
31      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Relu
0.2   1450.5    0.077
32      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Conv2D
188.2     29.7    8.700
33      InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Relu
0.2   1617.3    0.093
34      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
40.1    357.9    1.759
35      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.2   1602.7    0.093
36      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
135.5     29.3    8.696
37      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.4   1702.6    0.132
38      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Conv2D
203.2     43.1    8.889
39      InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Relu
0.4   1702.3    0.132
40      InceptionV3/InceptionV3/Mixed_5c/Branch_3/AvgPool_0a_3x3/AvgPool
5.6    617.8    0.969
41      InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
40.1    358.4    1.757
42      InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.2   1616.1    0.093
43      InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Conv2D
45.2    362.4    1.954
44      InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Relu
0.2   1615.2    0.093
45      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Conv2D
33.9    476.1    1.469
46      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Relu
0.2   1502.7    0.075
47      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Conv2D
188.2     29.8    8.689
48      InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Relu
0.2   1620.9    0.092
49      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Conv2D
45.2    362.6    1.953
50      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Relu
0.2   1617.6    0.093
51      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Conv2D
135.5     29.3    8.698
52      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Relu
0.4   1707.7    0.131
53      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Conv2D
203.2     43.1    8.887
54      InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Relu
0.4   1703.0    0.132
55      InceptionV3/InceptionV3/Mixed_5d/Branch_3/AvgPool_0a_3x3/AvgPool
6.4    627.5    1.073
56      InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Conv2D
45.2    363.0    1.951
57      InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Relu
0.2   1634.2    0.092
```

```
58    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Conv2D
575.3   101.9  25.243
59    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Relu
0.3  1700.4   0.125
60    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Conv2D
45.2   360.5   1.964
61    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Relu
0.2  1609.0   0.093
62    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.703
63    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Relu
0.4  1710.6   0.131
64    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Conv2D
47.9   156.7   2.442
65    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Relu
0.1  1267.5   0.042
66    InceptionV3/InceptionV3/Mixed_6a/Branch_2/MaxPool_1a_3x3/MaxPool
0.7  1416.1   0.476
67    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.713
68    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1507.9   0.070
69    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Conv2D
56.8   235.1   2.599
70    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Relu
0.1  1314.2   0.054
71    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Conv2D
66.3    80.3   3.604
72    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Relu
0.1  1349.5   0.052
73    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Conv2D
99.4    88.8   4.493
74    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Relu
0.2  1513.1   0.070
75    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Conv2D
56.8   235.4   2.595
76    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Relu
0.1  1358.5   0.052
77    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Conv2D
66.3    81.6   3.546
78    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Relu
0.1  1352.5   0.052
79    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Conv2D
66.3    80.5   3.598
80    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Relu
0.1  1359.5   0.052
81    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Conv2D
66.3    81.4   3.557
82    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Relu
0.1  1350.6   0.052
83    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Conv2D
99.4    87.8   4.543
84    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Relu
0.2  1517.6   0.070
85    InceptionV3/InceptionV3/Mixed_6b/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   527.6   0.805
86    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   189.9   3.712
87    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Relu
0.2  1511.9   0.070
88    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.710
89    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Relu
```

0.2 1511.3 0.070
90   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.5   3.882
91   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Relu
0.1 1424.0   0.062
92   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Conv2D
103.6   69.3   6.209
93   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Relu
0.1 1333.1   0.066
94   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Conv2D
124.3   84.3   5.917
95   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Relu
0.2 1432.6   0.074
96   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.2   3.912
97   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Relu
0.1 1408.8   0.063
98   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Conv2D
103.6   70.1   6.136
99   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Relu
0.1 1341.9   0.066
100   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Conv2D
103.6   69.0   6.235
101   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Relu
0.1 1326.4   0.067
102   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Conv2D
103.6   69.9   6.157
103   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Relu
0.1 1347.7   0.066
104   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Conv2D
124.3   83.3   5.988
105   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Relu
0.2 1428.8   0.074
106   InceptionV3/InceptionV3/Mixed_6c/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   510.2   0.833
107   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   188.4   3.743
108   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Relu
0.2 1500.0   0.071
109   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.712
110   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Relu
0.2 1510.8   0.070
111   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.4   3.883
112   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Relu
0.1 1439.3   0.061
113   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Conv2D
103.6   69.3   6.212
114   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Relu
0.1 1325.0   0.067
115   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Conv2D
124.3   84.2   5.920
116   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Relu
0.2 1429.2   0.074
117   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.3   3.909
118   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Relu
0.1 1410.0   0.063
119   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Conv2D
103.6   70.1   6.140
120   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Relu
0.1 1338.3   0.066

```
121   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.228
122   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Relu
0.1   1341.2    0.066
123   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.8    6.160
124   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Relu
0.1   1336.6    0.066
125   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.4    5.983
126   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Relu
0.2   1430.0    0.074
127   InceptionV3/InceptionV3/Mixed_6d/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   510.0    0.833
128   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   188.3    3.743
129   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Relu
0.2   1505.0    0.071
130   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9    3.711
131   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Relu
0.2   1507.2    0.070
132   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   189.9    3.712
133   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Relu
0.2   1488.5    0.071
134   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Conv2D
149.2    87.9    6.808
135   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Relu
0.2   1481.6    0.072
136   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Conv2D
149.2    89.1    6.715
137   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Relu
0.2   1506.9    0.070
138   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Conv2D
85.2   190.0    3.710
139   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Relu
0.2   1489.1    0.071
140   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Conv2D
149.2    89.0    6.720
141   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Relu
0.2   1485.7    0.071
142   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Conv2D
149.2    87.9    6.809
143   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Relu
0.2   1486.2    0.071
144   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Conv2D
149.2    89.1    6.718
145   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Relu
0.2   1479.8    0.072
146   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Conv2D
149.2    87.9    6.806
147   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Relu
0.2   1509.0    0.070
148   InceptionV3/InceptionV3/Mixed_6e/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   512.1    0.829
149   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   190.1    3.709
150   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Relu
0.2   1519.5    0.070
151   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   190.0    3.710
152   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Relu
```

```
0.2   1489.0   0.071
153   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Conv2D
70.8   333.8   3.479
154   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Relu
0.1   1147.7   0.035
155   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.710
156   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1511.3   0.070
157   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Conv2D
149.2    87.9   6.806
158   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Relu
0.2   1495.9   0.071
159   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Conv2D
149.2    89.1   6.715
160   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Relu
0.2   1476.2   0.072
161   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Conv2D
42.5   341.9   2.162
162   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Relu
0.0   788.6   0.030
163   InceptionV3/InceptionV3/Mixed_7a/Branch_2/MaxPool_1a_3x3/MaxPool
0.4   1267.3   0.335
164   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Conv2D
52.4   349.5   2.684
165   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Relu
0.1   991.2   0.040
166   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Conv2D
62.9   361.8   3.025
167   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1074.6   0.044
168   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   309.7   2.878
169   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Relu
0.1   1187.5   0.040
170   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Conv2D
56.6   313.7   2.841
171   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Relu
0.1   1194.6   0.040
172   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Conv2D
73.4   340.8   3.671
173   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1173.5   0.047
174   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   341.5   8.809
175   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Relu
0.1   1195.5   0.040
176   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.7   2.850
177   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Relu
0.1   1198.4   0.040
178   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.3   2.836
179   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Relu
0.1   1198.0   0.040
180   InceptionV3/InceptionV3/Mixed_7b/Branch_3/AvgPool_0a_3x3/AvgPool
1.5   369.2   0.430
181   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Conv2D
31.5   367.8   1.700
182   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Relu
0.0   744.5   0.032
183   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Conv2D
83.9   387.8   3.869
```

```
184   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Relu
0.1   1104.2   0.036
185   InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Conv2D
100.7   402.8   4.346
186   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Relu
0.1   1198.3   0.040
187   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   311.6   2.860
188   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Relu
0.1   1186.4   0.040
189   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Conv2D
56.6   314.1   2.838
190   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Relu
0.1   1195.6   0.040
191   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Conv2D
117.4   370.5   5.400
192   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Relu
0.1   1238.4   0.045
193   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   343.0   8.771
194   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Relu
0.1   1198.4   0.040
195   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.7   2.850
196   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Relu
0.1   1201.9   0.040
197   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.3   2.836
198   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Relu
0.1   1183.5   0.040
199   InceptionV3/InceptionV3/Mixed_7c/Branch_3/AvgPool_0a_3x3/AvgPool
2.4   390.3   0.651
200   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Conv2D
50.3   430.5   2.324
201   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Relu
0.0   792.5   0.030
202   InceptionV3/Logits/AvgPool_1a_8x8/AvgPool
0.3   1069.4   0.237
203   InceptionV3/Logits/Dropout_1b/Identity
0.0     0.0   0.001
204   InceptionV3/Logits/Conv2d_1c_1x1/Conv2D
4.1   1326.7   2.952
205   InceptionV3/Predictions/Reshape
0.0   454.5   0.008
206   InceptionV3/Predictions/Softmax
0.0    19.7   0.194
207   InceptionV3/Predictions/Reshape_1
0.0   638.4   0.006
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Total inference time                  567.65
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-------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------
---------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1 -cs 0,1,2
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
```

```
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
```
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.555
Expected:  (1, 1001, 1, 1)
1) 282 0.5570575
-------------------------------------------------------------
```

```
  Obtained values
------------------------------------------------------------
  Obtained Min Pixel Accuracy: 1.3700992800295353% (max allowed=2%), Pass
  Obtained Average Pixel Accuracy: 0.0049697897338774055% (max allowed=1%), Pass
  Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
  Obtained Pixel-wise L2 error: 0.04513529094871169% (max allowed=1%), Pass
  Obtained Global Sum Difference: 0.027712270617485046
------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
mvNCProfile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
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# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
```

binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use frombuffer instead
Time to Execute : 123.19 ms
USB: Myriad Execution Finished
Time to Execute : 106.42 ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary

Detailed Per Layer Profile

Bandwidth   time
Name
MFLOPs (MB/s)   (ms)
==
==
==
==========================
0   input
0.0   0.0   0.002
1   InceptionV1/InceptionV1/Conv2d_1a_7x7/Conv2D
236.0   41.8   7.305
2   InceptionV1/InceptionV1/Conv2d_1a_7x7/Relu
2.4 1897.7   0.807
3   InceptionV1/InceptionV1/MaxPool_2a_3x3/MaxPool
1.8 1350.3   1.134
4   InceptionV1/InceptionV1/Conv2d_2b_1x1/Conv2D
25.7   475.7   0.821
5   InceptionV1/InceptionV1/Conv2d_2b_1x1/Relu
0.6 1723.8   0.222
6   InceptionV1/InceptionV1/Conv2d_2c_3x3/Conv2D
693.6   49.9 11.910
7   InceptionV1/InceptionV1/Conv2d_2c_3x3/Relu
1.8 1878.4   0.612
8   InceptionV1/InceptionV1/MaxPool_3a_3x3/MaxPool
1.4 1404.1   0.818
9   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Conv2D
19.3   563.1   0.552
10   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Relu
0.2 1336.1   0.072
11   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   457.9   0.704
12   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Relu
0.2 1427.8   0.101
13   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Conv2D
173.4   74.2   4.781
14   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Relu
0.3 1540.3   0.124
15   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Conv2D
4.8 1040.6   0.282
16   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Relu
0.0   419.1   0.057
17   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   76.8   0.427
18   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Relu
0.1   841.4   0.057
19   InceptionV1/InceptionV1/Mixed_3b/Branch_3/MaxPool_0a_3x3/MaxPool
1.4   647.0   0.444
20   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Conv2D
9.6   659.3   0.453
21   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Relu

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0.1    835.8    0.057
22     InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Conv2D
51.4    451.9    0.986
23     InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Relu
0.3    1573.2    0.122
24     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Conv2D
51.4    450.7    0.989
25     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Relu
0.3    1547.1    0.124
26     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Conv2D
346.8    73.6    8.341
27     InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Relu
0.5    1672.3    0.172
28     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Conv2D
12.8    885.1    0.450
29     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Relu
0.1    841.6    0.057
30     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Conv2D
43.4    90.8    1.110
31     InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Relu
0.2    1431.1    0.100
32     InceptionV1/InceptionV1/Mixed_3c/Branch_3/MaxPool_0a_3x3/MaxPool
1.8    673.5    0.569
33     InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Conv2D
25.7    648.6    0.639
34     InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Relu
0.2    1321.8    0.072
35     InceptionV1/InceptionV1/MaxPool_4a_3x3/MaxPool
0.8    1218.6    0.590
36     InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Conv2D
36.1    365.0    0.974
37     InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Relu
0.1    1169.6    0.062
38     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Conv2D
18.1    489.1    0.547
39     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Relu
0.1    638.0    0.057
40     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Conv2D
70.4    176.3    2.150
41     InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Relu
0.1    1208.7    0.065
42     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Conv2D
3.0    759.7    0.256
43     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Relu
0.0    105.8    0.057
44     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Conv2D
2.7    67.0    0.288
45     InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Relu
0.0    314.8    0.057
46     InceptionV1/InceptionV1/Mixed_4b/Branch_3/MaxPool_0a_3x3/MaxPool
0.8    605.8    0.298
47     InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Conv2D
12.0    617.4    0.386
48     InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Relu
0.0    422.5    0.057
49     InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Conv2D
32.1    324.8    1.071
50     InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Relu
0.1    1084.0    0.055
51     InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Conv2D
22.5    383.6    0.785
52     InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Relu
0.1    744.3    0.057
```

```
53    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Conv2D
88.5   171.4   2.759
54    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Relu
0.1   1255.1   0.067
55    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   572.1   0.376
56    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Relu
0.0   162.2   0.056
57    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   97.2   0.365
58    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Relu
0.0   423.8   0.057
59    InceptionV1/InceptionV1/Mixed_4c/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   632.9   0.304
60    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   620.4   0.409
61    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Relu
0.0   421.1   0.057
62    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Conv2D
25.7   386.6   0.819
63    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Relu
0.1   846.3   0.057
64    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Conv2D
25.7   389.5   0.813
65    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Relu
0.1   842.7   0.057
66    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Conv2D
115.6   180.6   3.383
67    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Relu
0.2   1325.2   0.073
68    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Conv2D
4.8   572.1   0.376
69    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Relu
0.0   161.6   0.056
70    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   97.4   0.364
71    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Relu
0.0   423.6   0.057
72    InceptionV1/InceptionV1/Mixed_4d/Branch_3/MaxPool_0a_3x3/MaxPool
0.9   633.0   0.304
73    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   625.6   0.406
74    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Relu
0.0   419.6   0.057
75    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Conv2D
22.5   368.8   0.816
76    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Relu
0.1   745.0   0.056
77    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   487.2   0.682
78    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Relu
0.1   939.9   0.058
79    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Conv2D
146.3   256.5   2.987
80    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Relu
0.2   1316.2   0.082
81    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Conv2D
6.4   731.8   0.304
82    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Relu
0.0   206.6   0.058
83    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   127.1   0.372
84    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Relu
```

```
0.0    420.5    0.057
85    InceptionV1/InceptionV1/Mixed_4e/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    633.2    0.304
86    InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Conv2D
12.8    624.5    0.407
87    InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Relu
0.0    420.9    0.057
88    InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Conv2D
53.0    299.5    1.521
89    InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Relu
0.2    1321.3    0.073
90    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Conv2D
33.1    280.0    1.281
91    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Relu
0.1    1068.8    0.056
92    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Conv2D
180.6    190.2    4.939
93    InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Relu
0.2    1391.7    0.086
94    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Conv2D
6.6    490.8    0.468
95    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Relu
0.0    215.5    0.056
96    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Conv2D
14.5    175.2    0.471
97    InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Relu
0.1    839.8    0.057
98    InceptionV1/InceptionV1/Mixed_4f/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    626.3    0.317
99    InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Conv2D
26.5    457.1    0.714
100    InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Relu
0.1    849.8    0.057
101    InceptionV1/InceptionV1/MaxPool_5a_2x2/MaxPool
0.2    950.1    0.329
102    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
20.9    603.6    0.803
103    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.0    430.7    0.057
104    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
13.0    561.7    0.591
105    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.0    270.2    0.056
106    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Conv2D
45.2    523.6    1.708
107    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Relu
0.0    530.7    0.058
108    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
2.6    325.3    0.395
109    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.0    54.9    0.056
110    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Conv2D
3.6    231.3    0.318
111    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Relu
0.0    218.9    0.056
112    InceptionV1/InceptionV1/Mixed_5b/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    542.7    0.146
113    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
10.4    557.3    0.504
114    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.0    218.7    0.056
115    InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
31.3    588.3    1.169
```

```
116   InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.1    647.9   0.057
117   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Conv2D
15.7   652.0   0.587
118   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Relu
0.0    324.3   0.056
119   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Conv2D
65.0   521.8   2.461
120   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Relu
0.1    646.9   0.057
121   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
3.9    371.4   0.415
122   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.0     80.9   0.057
123   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4    336.7   0.327
124   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.0    219.6   0.056
125   InceptionV1/InceptionV1/Mixed_5c/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    541.4   0.147
126   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   554.7   0.507
127   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.0    219.1   0.056
128   InceptionV1/Logits/MaxPool_0a_7x7/AvgPool
0.1    415.9   0.235
129   InceptionV1/Logits/Dropout_0b/Identity
0.0      0.0   0.001
130   InceptionV1/Logits/Conv2d_0c_1x1/Conv2D
2.1   1503.7   1.303
131   InceptionV1/Logits/Predictions/Reshape
0.0    510.2   0.007
132   InceptionV1/Logits/Predictions/Softmax
0.0     20.0   0.191
133   InceptionV1/Logits/Predictions/Reshape_1
0.0    589.0   0.006
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------
Total inference time                  93.72
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------
Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1
-cs 2,1,0
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
```

```
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


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---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.2495
Expected:  (1, 1001, 1, 1)
1) 282 0.25380206
------------------------------------------------------------
 Obtained values
------------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.6904285177588463% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0071906676114987582% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.073060147478341% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.01826833374798298
------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
```

```
pi@SFS-1:~/ncsdk/examples/tensorflow $ make
make -C inception_v3/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
mvNCProfile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
Time to Execute :  612.12  ms
USB: Myriad Execution Finished
Time to Execute :  586.04  ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary
```

```
Detailed Per Layer Profile

Bandwidth   time
#     Name
MFLOPs (MB/s)   (ms)
====================================================================================
====================================================================================
====================================================================================
===========================
0    input
0.0   0.0   0.004
1    InceptionV3/InceptionV3/Conv2d_1a_3x3/Conv2D
38.4   113.6   4.517
2    InceptionV3/InceptionV3/Conv2d_1a_3x3/Relu
2.1  1897.3   0.714
3    InceptionV3/InceptionV3/Conv2d_2a_3x3/Conv2D
398.3   69.7  19.701
4    InceptionV3/InceptionV3/Conv2d_2a_3x3/Relu
2.1  1901.1   0.694
5    InceptionV3/InceptionV3/Conv2d_2b_3x3/Conv2D
796.6   38.0  35.647
6    InceptionV3/InceptionV3/Conv2d_2b_3x3/Relu
4.1  1929.5   1.367
7    InceptionV3/InceptionV3/MaxPool_3a_3x3/MaxPool
3.1  1440.6   1.831
8    InceptionV3/InceptionV3/Conv2d_3b_1x1/Conv2D
54.6   222.7   2.966
9    InceptionV3/InceptionV3/Conv2d_3b_1x1/Relu
1.3  1859.4   0.437
10   InceptionV3/InceptionV3/Conv2d_4a_3x3/Conv2D
1393.7   19.6  55.031
11   InceptionV3/InceptionV3/Conv2d_4a_3x3/Relu
2.9  1915.3   0.964
12   InceptionV3/InceptionV3/MaxPool_5a_3x3/MaxPool
2.1  1281.4   1.441
13   InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
30.1   355.8   1.327
14   InceptionV3/InceptionV3/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.2  1620.2   0.092
15   InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
22.6   451.0   1.034
16   InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.2  1509.4   0.074
17   InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Conv2D
188.2   29.7   8.699
18   InceptionV3/InceptionV3/Mixed_5b/Branch_1/Conv2d_0b_5x5/Relu
0.2  1618.3   0.092
19   InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
30.1   353.5   1.336
20   InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.2  1597.4   0.094
21   InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.703
22   InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0b_3x3/Relu
0.4  1710.4   0.131
23   InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Conv2D
203.2   43.0   8.893
24   InceptionV3/InceptionV3/Mixed_5b/Branch_2/Conv2d_0c_3x3/Relu
0.4  1702.8   0.132
25   InceptionV3/InceptionV3/Mixed_5b/Branch_3/AvgPool_0a_3x3/AvgPool
4.2   595.0   0.755
26   InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
```

15.1   606.8   0.759
27   InceptionV3/InceptionV3/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.1 1338.7   0.056
28   InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
40.1   357.7   1.760
29   InceptionV3/InceptionV3/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.2 1619.3   0.092
30   InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Conv2D
30.1   478.7   1.299
31   InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv2d_0b_1x1/Relu
0.2 1484.4   0.076
32   InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Conv2D
188.2   29.8   8.697
33   InceptionV3/InceptionV3/Mixed_5c/Branch_1/Conv_1_0c_5x5/Relu
0.2 1620.0   0.092
34   InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
40.1   359.1   1.753
35   InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.2 1589.8   0.094
36   InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.699
37   InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.4 1712.7   0.131
38   InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Conv2D
203.2   43.1   8.888
39   InceptionV3/InceptionV3/Mixed_5c/Branch_2/Conv2d_0c_3x3/Relu
0.4 1697.8   0.132
40   InceptionV3/InceptionV3/Mixed_5c/Branch_3/AvgPool_0a_3x3/AvgPool
5.6   617.8   0.969
41   InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
40.1   356.0   1.768
42   InceptionV3/InceptionV3/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.2 1621.3   0.092
43   InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Conv2D
45.2   361.3   1.960
44   InceptionV3/InceptionV3/Mixed_5d/Branch_0/Conv2d_0a_1x1/Relu
0.2 1615.2   0.093
45   InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Conv2D
33.9   476.1   1.469
46   InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0a_1x1/Relu
0.2 1507.8   0.074
47   InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Conv2D
188.2   29.8   8.694
48   InceptionV3/InceptionV3/Mixed_5d/Branch_1/Conv2d_0b_5x5/Relu
0.2 1623.3   0.092
49   InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Conv2D
45.2   363.0   1.951
50   InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0a_1x1/Relu
0.2 1627.4   0.092
51   InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Conv2D
135.5   29.3   8.705
52   InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0b_3x3/Relu
0.4 1717.9   0.131
53   InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Conv2D
203.2   43.1   8.885
54   InceptionV3/InceptionV3/Mixed_5d/Branch_2/Conv2d_0c_3x3/Relu
0.4 1698.6   0.132
55   InceptionV3/InceptionV3/Mixed_5d/Branch_3/AvgPool_0a_3x3/AvgPool
6.4   611.0   1.102
56   InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Conv2D
45.2   360.1   1.966
57   InceptionV3/InceptionV3/Mixed_5d/Branch_3/Conv2d_0b_1x1/Relu
0.2 1624.7   0.092

```
58    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Conv2D
575.3   101.9   25.243
59    InceptionV3/InceptionV3/Mixed_6a/Branch_0/Conv2d_1a_1x1/Relu
0.3   1699.2   0.125
60    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Conv2D
45.2   363.0   1.951
61    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1611.3   0.093
62    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Conv2D
135.5    29.3   8.700
63    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_0b_3x3/Relu
0.4   1710.1   0.131
64    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Conv2D
47.9   156.6   2.444
65    InceptionV3/InceptionV3/Mixed_6a/Branch_1/Conv2d_1a_1x1/Relu
0.1   1267.1   0.042
66    InceptionV3/InceptionV3/Mixed_6a/Branch_2/MaxPool_1a_3x3/MaxPool
0.7   1415.3   0.476
67    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.713
68    InceptionV3/InceptionV3/Mixed_6b/Branch_0/Conv2d_0a_1x1/Relu
0.2   1512.9   0.070
69    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Conv2D
56.8   235.3   2.597
70    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1361.2   0.052
71    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Conv2D
66.3    80.3   3.606
72    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0b_1x7/Relu
0.1   1350.3   0.052
73    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Conv2D
99.4    88.8   4.495
74    InceptionV3/InceptionV3/Mixed_6b/Branch_1/Conv2d_0c_7x1/Relu
0.2   1502.3   0.071
75    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Conv2D
56.8   235.3   2.597
76    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1356.2   0.052
77    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Conv2D
66.3    81.6   3.550
78    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0b_7x1/Relu
0.1   1321.0   0.054
79    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Conv2D
66.3    80.2   3.610
80    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0c_1x7/Relu
0.1   1357.6   0.052
81    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Conv2D
66.3    81.4   3.557
82    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0d_7x1/Relu
0.1   1341.6   0.053
83    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Conv2D
99.4    87.8   4.545
84    InceptionV3/InceptionV3/Mixed_6b/Branch_2/Conv2d_0e_1x7/Relu
0.2   1515.9   0.070
85    InceptionV3/InceptionV3/Mixed_6b/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   529.4   0.802
86    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   190.0   3.711
87    InceptionV3/InceptionV3/Mixed_6b/Branch_3/Conv2d_0b_1x1/Relu
0.2   1512.0   0.070
88    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   189.9   3.711
89    InceptionV3/InceptionV3/Mixed_6c/Branch_0/Conv2d_0a_1x1/Relu
```

0.2 1506.4 0.070
90   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.6   3.881
91   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0a_1x1/Relu
0.1 1442.6   0.061
92   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Conv2D
103.6   69.3   6.207
93   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0b_1x7/Relu
0.1 1344.6   0.066
94   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Conv2D
124.3   84.2   5.920
95   InceptionV3/InceptionV3/Mixed_6c/Branch_1/Conv2d_0c_7x1/Relu
0.2 1436.8   0.074
96   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.2   3.913
97   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0a_1x1/Relu
0.1 1407.0   0.063
98   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Conv2D
103.6   70.1   6.138
99   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0b_7x1/Relu
0.1 1363.2   0.065
100   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Conv2D
103.6   69.1   6.224
101   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0c_1x7/Relu
0.1 1342.6   0.066
102   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Conv2D
103.6   69.9   6.154
103   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0d_7x1/Relu
0.1 1340.3   0.066
104   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Conv2D
124.3   83.3   5.986
105   InceptionV3/InceptionV3/Mixed_6c/Branch_2/Conv2d_0e_1x7/Relu
0.2 1432.0   0.074
106   InceptionV3/InceptionV3/Mixed_6c/Branch_3/AvgPool_0a_3x3/AvgPool
4.0   524.2   0.810
107   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Conv2D
85.2   188.4   3.742
108   InceptionV3/InceptionV3/Mixed_6c/Branch_3/Conv2d_0b_1x1/Relu
0.2 1499.5   0.071
109   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Conv2D
85.2   190.0   3.711
110   InceptionV3/InceptionV3/Mixed_6d/Branch_0/Conv2d_0a_1x1/Relu
0.2 1498.9   0.071
111   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Conv2D
71.0   169.4   3.883
112   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0a_1x1/Relu
0.1 1411.3   0.063
113   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Conv2D
103.6   69.3   6.206
114   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0b_1x7/Relu
0.1 1337.0   0.066
115   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Conv2D
124.3   84.3   5.919
116   InceptionV3/InceptionV3/Mixed_6d/Branch_1/Conv2d_0c_7x1/Relu
0.2 1426.9   0.074
117   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Conv2D
71.0   168.2   3.912
118   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0a_1x1/Relu
0.1 1405.9   0.063
119   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Conv2D
103.6   70.1   6.135
120   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0b_7x1/Relu
0.1 1346.1   0.066

```
121   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Conv2D
103.6    69.1    6.228
122   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0c_1x7/Relu
0.1  1342.4    0.066
123   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Conv2D
103.6    69.9    6.160
124   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0d_7x1/Relu
0.1  1354.1    0.065
125   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Conv2D
124.3    83.4    5.980
126   InceptionV3/InceptionV3/Mixed_6d/Branch_2/Conv2d_0e_1x7/Relu
0.2  1424.1    0.075
127   InceptionV3/InceptionV3/Mixed_6d/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    510.9    0.831
128   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    188.2    3.746
129   InceptionV3/InceptionV3/Mixed_6d/Branch_3/Conv2d_0b_1x1/Relu
0.2  1497.7    0.071
130   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.713
131   InceptionV3/InceptionV3/Mixed_6e/Branch_0/Conv2d_0a_1x1/Relu
0.2  1506.0    0.071
132   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.713
133   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0a_1x1/Relu
0.2  1473.1    0.072
134   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Conv2D
149.2    87.8    6.813
135   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0b_1x7/Relu
0.2  1509.9    0.070
136   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Conv2D
149.2    89.1    6.716
137   InceptionV3/InceptionV3/Mixed_6e/Branch_1/Conv2d_0c_7x1/Relu
0.2  1498.4    0.071
138   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Conv2D
85.2    189.9    3.713
139   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0a_1x1/Relu
0.2  1489.3    0.071
140   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Conv2D
149.2    89.1    6.713
141   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0b_7x1/Relu
0.2  1490.7    0.071
142   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Conv2D
149.2    87.9    6.805
143   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0c_1x7/Relu
0.2  1487.9    0.071
144   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Conv2D
149.2    89.1    6.718
145   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0d_7x1/Relu
0.2  1496.6    0.071
146   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Conv2D
149.2    87.9    6.806
147   InceptionV3/InceptionV3/Mixed_6e/Branch_2/Conv2d_0e_1x7/Relu
0.2  1503.3    0.071
148   InceptionV3/InceptionV3/Mixed_6e/Branch_3/AvgPool_0a_3x3/AvgPool
4.0    511.9    0.830
149   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Conv2D
85.2    189.9    3.711
150   InceptionV3/InceptionV3/Mixed_6e/Branch_3/Conv2d_0b_1x1/Relu
0.2  1510.3    0.070
151   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Conv2D
85.2    190.0    3.710
152   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_0a_1x1/Relu
```

```
0.2   1488.9   0.071
153   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Conv2D
70.8   333.8   3.479
154   InceptionV3/InceptionV3/Mixed_7a/Branch_0/Conv2d_1a_3x3/Relu
0.1   1126.1   0.035
155   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Conv2D
85.2   190.1   3.709
156   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0a_1x1/Relu
0.2   1495.0   0.071
157   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Conv2D
149.2   87.9   6.805
158   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0b_1x7/Relu
0.2   1490.9   0.071
159   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Conv2D
149.2   89.1   6.718
160   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_0c_7x1/Relu
0.2   1480.2   0.072
161   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Conv2D
42.5   341.9   2.162
162   InceptionV3/InceptionV3/Mixed_7a/Branch_1/Conv2d_1a_3x3/Relu
0.0   784.8   0.030
163   InceptionV3/InceptionV3/Mixed_7a/Branch_2/MaxPool_1a_3x3/MaxPool
0.4   1273.5   0.334
164   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Conv2D
52.4   350.2   2.678
165   InceptionV3/InceptionV3/Mixed_7b/Branch_0/Conv2d_0a_1x1/Relu
0.1   1006.3   0.039
166   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Conv2D
62.9   361.8   3.025
167   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0a_1x1/Relu
0.1   1080.7   0.044
168   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   309.4   2.881
169   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_1x3/Relu
0.1   1186.9   0.040
170   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Conv2D
56.6   313.7   2.841
171   InceptionV3/InceptionV3/Mixed_7b/Branch_1/Conv2d_0b_3x1/Relu
0.1   1188.7   0.040
172   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Conv2D
73.4   341.0   3.668
173   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0a_1x1/Relu
0.1   1153.9   0.048
174   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   341.8   8.802
175   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0b_3x3/Relu
0.1   1181.8   0.040
176   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.6   2.852
177   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0c_1x3/Relu
0.1   1193.3   0.040
178   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   314.1   2.838
179   InceptionV3/InceptionV3/Mixed_7b/Branch_2/Conv2d_0d_3x1/Relu
0.1   1190.6   0.040
180   InceptionV3/InceptionV3/Mixed_7b/Branch_3/AvgPool_0a_3x3/AvgPool
1.5   369.5   0.429
181   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Conv2D
31.5   367.2   1.703
182   InceptionV3/InceptionV3/Mixed_7b/Branch_3/Conv2d_0b_1x1/Relu
0.0   706.6   0.034
183   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Conv2D
83.9   388.6   3.862
```

```
184   InceptionV3/InceptionV3/Mixed_7c/Branch_0/Conv2d_0a_1x1/Relu
0.1   1095.2   0.036
185   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Conv2D
100.7   403.2   4.342
186   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0a_1x1/Relu
0.1   1180.1   0.040
187   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Conv2D
56.6   312.0   2.857
188   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0b_1x3/Relu
0.1   1186.1   0.040
189   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Conv2D
56.6   315.2   2.828
190   InceptionV3/InceptionV3/Mixed_7c/Branch_1/Conv2d_0c_3x1/Relu
0.1   1190.6   0.040
191   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Conv2D
117.4   370.7   5.398
192   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0a_1x1/Relu
0.1   1291.1   0.043
193   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Conv2D
198.2   343.1   8.770
194   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0b_3x3/Relu
0.1   1202.8   0.040
195   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Conv2D
56.6   312.2   2.855
196   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0c_1x3/Relu
0.1   1206.2   0.039
197   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Conv2D
56.6   313.6   2.842
198   InceptionV3/InceptionV3/Mixed_7c/Branch_2/Conv2d_0d_3x1/Relu
0.1   1182.5   0.040
199   InceptionV3/InceptionV3/Mixed_7c/Branch_3/AvgPool_0a_3x3/AvgPool
2.4   390.4   0.650
200   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Conv2D
50.3   430.4   2.324
201   InceptionV3/InceptionV3/Mixed_7c/Branch_3/Conv2d_0b_1x1/Relu
0.0   792.5   0.030
202   InceptionV3/Logits/AvgPool_1a_8x8/AvgPool
0.3   1069.6   0.237
203   InceptionV3/Logits/Dropout_1b/Identity
0.0     0.0   0.001
204   InceptionV3/Logits/Conv2d_1c_1x1/Conv2D
4.1   1327.0   2.951
205   InceptionV3/Predictions/Reshape
0.0   452.7   0.008
206   InceptionV3/Predictions/Softmax
0.0    19.7   0.194
207   InceptionV3/Predictions/Reshape_1
0.0   625.3   0.006
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Total inference time                    567.60
-----------------------------------------------------------------------------------
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-----------------------------------------------------------------------------------
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Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1 -cs 0,1,2
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
```

```
   from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
   from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
   return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
   return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
   assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
   assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#327']
# Network Output tensors ['InceptionV3/Predictions/Reshape_1:0#653']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.555
Expected:  (1, 1001, 1, 1)
1) 282 0.5570575
-------------------------------------------------------------
```

```
 Obtained values
-----------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.3700992800295353% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0049697897338774055% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.04513529094871169% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.027712270617485046
-----------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
make -C inception_v1/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
test -f output/inception-v1.meta || ((wget
http://download.tensorflow.org/models/inception_v1_2016_08_28.tar.gz && tar zxf
inception_v1_2016_08_28.tar.gz && rm inception_v1_2016_08_28.tar.gz) &&
./inception-v1.py)
mvNCProfile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

```
****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
--------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
```

binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use frombuffer instead
Time to Execute : 123.25 ms
USB: Myriad Execution Finished
Time to Execute : 105.24 ms
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.
Network Summary

Detailed Per Layer Profile

Bandwidth   time
Name
MFLOPs (MB/s)   (ms)
==
==
==
===========================
0   input
0.0   0.0   0.030
1   InceptionV1/InceptionV1/Conv2d_1a_7x7/Conv2D
236.0   41.7   7.311
2   InceptionV1/InceptionV1/Conv2d_1a_7x7/Relu
2.4 1895.9   0.808
3   InceptionV1/InceptionV1/MaxPool_2a_3x3/MaxPool
1.8 1350.3   1.134
4   InceptionV1/InceptionV1/Conv2d_2b_1x1/Conv2D
25.7   480.6   0.813
5   InceptionV1/InceptionV1/Conv2d_2b_1x1/Relu
0.6 1729.5   0.221
6   InceptionV1/InceptionV1/Conv2d_2c_3x3/Conv2D
693.6   49.8 11.935
7   InceptionV1/InceptionV1/Conv2d_2c_3x3/Relu
1.8 1885.1   0.609
8   InceptionV1/InceptionV1/MaxPool_3a_3x3/MaxPool
1.4 1403.2   0.819
9   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Conv2D
19.3   558.4   0.556
10   InceptionV1/InceptionV1/Mixed_3b/Branch_0/Conv2d_0a_1x1/Relu
0.2 1329.1   0.072
11   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Conv2D
28.9   456.5   0.706
12   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0a_1x1/Relu
0.2 1427.9   0.101
13   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Conv2D
173.4   75.8   4.682
14   InceptionV1/InceptionV1/Mixed_3b/Branch_1/Conv2d_0b_3x3/Relu
0.3 1509.0   0.127
15   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Conv2D
4.8 1041.8   0.281
16   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0a_1x1/Relu
0.0   417.0   0.057
17   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Conv2D
7.2   76.6   0.428
18   InceptionV1/InceptionV1/Mixed_3b/Branch_2/Conv2d_0b_3x3/Relu
0.1   842.8   0.057
19   InceptionV1/InceptionV1/Mixed_3b/Branch_3/MaxPool_0a_3x3/MaxPool
1.4   646.3   0.445
20   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Conv2D
9.6   658.4   0.454
21   InceptionV1/InceptionV1/Mixed_3b/Branch_3/Conv2d_0b_1x1/Relu

```
0.1   834.6   0.057
22    InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Conv2D
51.4   450.7   0.989
23    InceptionV1/InceptionV1/Mixed_3c/Branch_0/Conv2d_0a_1x1/Relu
0.3  1542.3   0.124
24    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Conv2D
51.4   451.5   0.987
25    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0a_1x1/Relu
0.3  1532.1   0.125
26    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Conv2D
346.8    73.8   8.317
27    InceptionV1/InceptionV1/Mixed_3c/Branch_1/Conv2d_0b_3x3/Relu
0.5  1672.2   0.172
28    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Conv2D
12.8   887.3   0.449
29    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0a_1x1/Relu
0.1   835.9   0.057
30    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Conv2D
43.4    90.6   1.112
31    InceptionV1/InceptionV1/Mixed_3c/Branch_2/Conv2d_0b_3x3/Relu
0.2  1430.9   0.100
32    InceptionV1/InceptionV1/Mixed_3c/Branch_3/MaxPool_0a_3x3/MaxPool
1.8   674.2   0.568
33    InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Conv2D
25.7   650.4   0.637
34    InceptionV1/InceptionV1/Mixed_3c/Branch_3/Conv2d_0b_1x1/Relu
0.2  1322.3   0.072
35    InceptionV1/InceptionV1/MaxPool_4a_3x3/MaxPool
0.8  1218.0   0.590
36    InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Conv2D
36.1   371.7   0.957
37    InceptionV1/InceptionV1/Mixed_4b/Branch_0/Conv2d_0a_1x1/Relu
0.1  1206.3   0.060
38    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Conv2D
18.1   489.1   0.547
39    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0a_1x1/Relu
0.1   633.1   0.057
40    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Conv2D
70.4   174.4   2.174
41    InceptionV1/InceptionV1/Mixed_4b/Branch_1/Conv2d_0b_3x3/Relu
0.1  1172.9   0.067
42    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Conv2D
3.0   760.7   0.255
43    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0a_1x1/Relu
0.0   106.0   0.057
44    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Conv2D
2.7    67.1   0.287
45    InceptionV1/InceptionV1/Mixed_4b/Branch_2/Conv2d_0b_3x3/Relu
0.0   314.1   0.057
46    InceptionV1/InceptionV1/Mixed_4b/Branch_3/MaxPool_0a_3x3/MaxPool
0.8   605.3   0.298
47    InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Conv2D
12.0   615.4   0.387
48    InceptionV1/InceptionV1/Mixed_4b/Branch_3/Conv2d_0b_1x1/Relu
0.0   422.5   0.057
49    InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Conv2D
32.1   327.7   1.062
50    InceptionV1/InceptionV1/Mixed_4c/Branch_0/Conv2d_0a_1x1/Relu
0.1  1081.7   0.056
51    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Conv2D
22.5   382.4   0.787
52    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0a_1x1/Relu
0.1   744.0   0.057
```

```
53    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Conv2D
88.5   171.3   2.760
54    InceptionV1/InceptionV1/Mixed_4c/Branch_1/Conv2d_0b_3x3/Relu
0.1   1258.3   0.067
55    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Conv2D
4.8    572.6   0.375
56    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0a_1x1/Relu
0.0    162.2   0.056
57    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4     97.8   0.363
58    InceptionV1/InceptionV1/Mixed_4c/Branch_2/Conv2d_0b_3x3/Relu
0.0    419.2   0.057
59    InceptionV1/InceptionV1/Mixed_4c/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    633.4   0.304
60    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Conv2D
12.8    625.6   0.406
61    InceptionV1/InceptionV1/Mixed_4c/Branch_3/Conv2d_0b_1x1/Relu
0.0    405.3   0.059
62    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Conv2D
25.7    392.0   0.808
63    InceptionV1/InceptionV1/Mixed_4d/Branch_0/Conv2d_0a_1x1/Relu
0.1    846.9   0.057
64    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Conv2D
25.7    396.1   0.799
65    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0a_1x1/Relu
0.1    841.7   0.057
66    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Conv2D
115.6   175.4   3.483
67    InceptionV1/InceptionV1/Mixed_4d/Branch_1/Conv2d_0b_3x3/Relu
0.2   1313.3   0.073
68    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Conv2D
4.8    571.8   0.376
69    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0a_1x1/Relu
0.0    162.3   0.056
70    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Conv2D
5.4     97.7   0.363
71    InceptionV1/InceptionV1/Mixed_4d/Branch_2/Conv2d_0b_3x3/Relu
0.0    420.6   0.057
72    InceptionV1/InceptionV1/Mixed_4d/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    632.9   0.304
73    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Conv2D
12.8    625.9   0.406
74    InceptionV1/InceptionV1/Mixed_4d/Branch_3/Conv2d_0b_1x1/Relu
0.0    421.9   0.057
75    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Conv2D
22.5    380.7   0.791
76    InceptionV1/InceptionV1/Mixed_4e/Branch_0/Conv2d_0a_1x1/Relu
0.1    740.4   0.057
77    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Conv2D
28.9    487.4   0.682
78    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0a_1x1/Relu
0.1    941.4   0.057
79    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Conv2D
146.3   256.6   2.986
80    InceptionV1/InceptionV1/Mixed_4e/Branch_1/Conv2d_0b_3x3/Relu
0.2   1349.2   0.080
81    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Conv2D
6.4    732.0   0.304
82    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0a_1x1/Relu
0.0    207.8   0.058
83    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Conv2D
7.2    127.9   0.369
84    InceptionV1/InceptionV1/Mixed_4e/Branch_2/Conv2d_0b_3x3/Relu
```

```
0.0    421.1    0.057
85     InceptionV1/InceptionV1/Mixed_4e/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    632.0    0.304
86     InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Conv2D
12.8   626.4    0.406
87     InceptionV1/InceptionV1/Mixed_4e/Branch_3/Conv2d_0b_1x1/Relu
0.0    418.6    0.057
88     InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Conv2D
53.0   301.0    1.514
89     InceptionV1/InceptionV1/Mixed_4f/Branch_0/Conv2d_0a_1x1/Relu
0.2    1337.0   0.072
90     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Conv2D
33.1   283.4    1.266
91     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0a_1x1/Relu
0.1    1078.6   0.056
92     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Conv2D
180.6  193.8    4.847
93     InceptionV1/InceptionV1/Mixed_4f/Branch_1/Conv2d_0b_3x3/Relu
0.2    1386.3   0.087
94     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Conv2D
6.6    489.2    0.469
95     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0a_1x1/Relu
0.0    215.5    0.056
96     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Conv2D
14.5   174.8    0.472
97     InceptionV1/InceptionV1/Mixed_4f/Branch_2/Conv2d_0b_3x3/Relu
0.1    848.4    0.057
98     InceptionV1/InceptionV1/Mixed_4f/Branch_3/MaxPool_0a_3x3/MaxPool
0.9    625.0    0.317
99     InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Conv2D
26.5   460.4    0.709
100    InceptionV1/InceptionV1/Mixed_4f/Branch_3/Conv2d_0b_1x1/Relu
0.1    849.4    0.057
101    InceptionV1/InceptionV1/MaxPool_5a_2x2/MaxPool
0.2    951.8    0.328
102    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Conv2D
20.9   639.4    0.758
103    InceptionV1/InceptionV1/Mixed_5b/Branch_0/Conv2d_0a_1x1/Relu
0.0    428.1    0.057
104    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Conv2D
13.0   563.0    0.590
105    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0a_1x1/Relu
0.0    260.5    0.059
106    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Conv2D
45.2   556.0    1.609
107    InceptionV1/InceptionV1/Mixed_5b/Branch_1/Conv2d_0b_3x3/Relu
0.0    531.6    0.057
108    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Conv2D
2.6    326.7    0.394
109    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_1x1/Relu
0.0    54.8     0.056
110    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Conv2D
3.6    231.0    0.318
111    InceptionV1/InceptionV1/Mixed_5b/Branch_2/Conv2d_0a_3x3/Relu
0.0    219.2    0.056
112    InceptionV1/InceptionV1/Mixed_5b/Branch_3/MaxPool_0a_3x3/MaxPool
0.4    543.0    0.146
113    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   558.4    0.503
114    InceptionV1/InceptionV1/Mixed_5b/Branch_3/Conv2d_0b_1x1/Relu
0.0    219.7    0.056
115    InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Conv2D
31.3   598.6    1.149
```

```
116   InceptionV1/InceptionV1/Mixed_5c/Branch_0/Conv2d_0a_1x1/Relu
0.1   642.0   0.057
117   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Conv2D
15.7   649.7   0.589
118   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0a_1x1/Relu
0.0   322.1   0.057
119   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Conv2D
65.0   514.8   2.495
120   InceptionV1/InceptionV1/Mixed_5c/Branch_1/Conv2d_0b_3x3/Relu
0.1   645.5   0.057
121   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Conv2D
3.9   371.8   0.414
122   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0a_1x1/Relu
0.0    80.9   0.057
123   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Conv2D
5.4   335.0   0.329
124   InceptionV1/InceptionV1/Mixed_5c/Branch_2/Conv2d_0b_3x3/Relu
0.0   219.1   0.056
125   InceptionV1/InceptionV1/Mixed_5c/Branch_3/MaxPool_0a_3x3/MaxPool
0.4   541.4   0.147
126   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Conv2D
10.4   555.3   0.506
127   InceptionV1/InceptionV1/Mixed_5c/Branch_3/Conv2d_0b_1x1/Relu
0.0   218.7   0.056
128   InceptionV1/Logits/MaxPool_0a_7x7/AvgPool
0.1   415.5   0.235
129   InceptionV1/Logits/Dropout_0b/Identity
0.0     0.0   0.001
130   InceptionV1/Logits/Conv2d_0c_1x1/Conv2D
2.1  1497.0   1.309
131   InceptionV1/Logits/Predictions/Reshape
0.0   487.9   0.008
132   InceptionV1/Logits/Predictions/Softmax
0.0    20.0   0.191
133   InceptionV1/Logits/Predictions/Reshape_1
0.0   573.5   0.007
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
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Total inference time                 93.46
--------------------------------------------------------------------------------
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Generating Profile Report 'output_report.html'...
mvNCCheck --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1 -i ../../data/images/cat.jpg -metric top1
-cs 2,1,0
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
```

```
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
```
mvNCCheck v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v1.data-00000-of-00001******
```
output/inception-v1.meta
output tensor shape (1, 1, 1, 1001)
/usr/local/lib/python3.5/dist-packages/skimage/io/_io.py:49: UserWarning: `as_grey` has
been deprecated in favor of `as_gray`
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:105: UserWarning:
The default mode, 'constant', will be changed to 'reflect' in skimage 0.15.
/usr/local/lib/python3.5/dist-packages/skimage/transform/_warps.py:110: UserWarning:
Anti-aliasing will be enabled by default in skimage 0.15 to avoid aliasing artifacts when
down-sampling images.
Fusing DeptwiseConv + Pointwise Convolution into plain Convolution
Fusing Add and Batch after Convolution
Fusing Pad and Convolution2D
Fusing BatchNorm and Scale after Convolution
Replacing BN with Bias&Scale
Fusing Permute and Flatten
Fusing Eltwise and Relu
Eliminate layers that have been parsed as NoOp
Evaluating input and weigths for each hw layer
-------------------------------------


---------------------
---------------------
# Network Input tensors ['input:0#201']
# Network Output tensors ['InceptionV1/Logits/Predictions/Reshape_1:0#401']
Blob generated
USB: Transferring Data...
/usr/local/lib/python3.5/dist-packages/mvnc/mvncapi.py:418: DeprecationWarning: The
binary mode of fromstring is deprecated, as it behaves surprisingly on unicode inputs. Use
frombuffer instead
USB: Myriad Execution Finished
Output is in Channel Minor format
USB: Myriad Connection Closing.
USB: Myriad Connection Closed.

Result: Validation Pass

Result:  (1, 1001, 1, 1)
1) 282 0.2495
Expected:  (1, 1001, 1, 1)
1) 282 0.25380206
------------------------------------------------------------
 Obtained values
------------------------------------------------------------
 Obtained Min Pixel Accuracy: 1.6904285177588463% (max allowed=2%), Pass
 Obtained Average Pixel Accuracy: 0.0071906676114987582% (max allowed=1%), Pass
 Obtained Percentage of wrong values: 0.0% (max allowed=0%), Pass
 Obtained Pixel-wise L2 error: 0.073060147478341% (max allowed=1%), Pass
 Obtained Global Sum Difference: 0.01826833374798298
------------------------------------------------------------
test -f graph || mvNCCompile --new-parser -s 12 output/inception-v1.meta -in=input
-on=InceptionV1/Logits/Predictions/Reshape_1
make[1]: Leaving directory '/home/pi/ncsdk/examples/tensorflow/inception_v1'
```

```
pi@SFS-1:~/ncsdk/examples/tensorflow $ make
make -C inception_v3/.
make[1]: Entering directory '/home/pi/ncsdk/examples/tensorflow/inception_v3'
test -f output/inception-v3.meta || ((wget
http://download.tensorflow.org/models/inception_v3_2016_08_28.tar.gz && tar zxf
inception_v3_2016_08_28.tar.gz && rm inception_v3_2016_08_28.tar.gz) &&
./inception-v3.py)
mvNCProfile --new-parser -s 4 output/inception-v3.meta -in=input
-on=InceptionV3/Predictions/Reshape_1
/usr/lib/python3/dist-packages/scipy/_lib/_numpy_compat.py:10: DeprecationWarning:
Importing from numpy.testing.nosetester is deprecated, import from numpy.testing instead.
  from numpy.testing.nosetester import import_nose
/usr/lib/python3/dist-packages/scipy/stats/morestats.py:16: DeprecationWarning:
Importing from numpy.testing.decorators is deprecated, import from numpy.testing instead.
  from numpy.testing.decorators import setastest
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: compiletime version 3.4
of module 'tensorflow.python.framework.fast_tensor_util' does not match runtime version
3.5
  return f(*args, **kwds)
/usr/lib/python3.5/importlib/_bootstrap.py:222: RuntimeWarning: builtins.type size
changed, may indicate binary incompatibility. Expected 432, got 412
  return f(*args, **kwds)
/usr/local/bin/ncsdk/Controllers/Parsers/TensorFlowParser/Convolution.py:46:
SyntaxWarning: assertion is always true, perhaps remove parentheses?
  assert(False, "Layer type not supported by Convolution: " + obj.type)
/usr/local/bin/ncsdk/Controllers/Parsers/Phases.py:322: SyntaxWarning: assertion is
always true, perhaps remove parentheses?
  assert(len(pred) == 1, "Slice not supported to have >1 predecessors")
mvNCProfile v02.00, Copyright @ Intel Corporation 2017

****** Info: No Weights provided. inferred path:
output/inception-v3.data-00000-of-00001******
output/inception-v3.meta
```