| layer name | output size | 18-layer | 34-layer | 50-layer | 101-layer | 152-layer |
|------------|-------------|--|---|--|--|--|
| conv1 | 112×112 | 7×7, 64, stride 2 | | | | |
| | 56×56 | 3×3 max pool, stride 2 | | | | |
| conv2_x | | $\left[\begin{array}{c}3\times3,64\\3\times3,64\end{array}\right]\times2$ | $\left[\begin{array}{c}3\times3,64\\3\times3,64\end{array}\right]\times3$ | $\begin{bmatrix} 1 \times 1, 64 \\ 3 \times 3, 64 \\ 1 \times 1, 256 \end{bmatrix} \times 3$ | $ \begin{bmatrix} 1 \times 1, 64 \\ 3 \times 3, 64 \\ 1 \times 1, 256 \end{bmatrix} \times 3 $ | $ \left[\begin{array}{c} 1 \times 1, 64 \\ 3 \times 3, 64 \\ 1 \times 1, 256 \end{array} \right] \times 3 $ |
| conv3_x | 28×28 | $\left[\begin{array}{c} 3\times3, 128\\ 3\times3, 128 \end{array}\right] \times 2$ | $\left[\begin{array}{c}3\times3,128\\3\times3,128\end{array}\right]\times4$ | $ \left[\begin{array}{c} 1 \times 1, 128 \\ 3 \times 3, 128 \\ 1 \times 1, 512 \end{array}\right] \times 4 $ | $ \left[\begin{array}{c} 1 \times 1, 128 \\ 3 \times 3, 128 \\ 1 \times 1, 512 \end{array}\right] \times 4 $ | $ \left[\begin{array}{c} 1 \times 1, 128 \\ 3 \times 3, 128 \\ 1 \times 1, 512 \end{array}\right] \times 8 $ |
| conv4_x | 14×14 | $\left[\begin{array}{c}3\times3,256\\3\times3,256\end{array}\right]\times2$ | $\left[\begin{array}{c}3\times3,256\\3\times3,256\end{array}\right]\times6$ | $\begin{bmatrix} 1 \times 1, 256 \\ 3 \times 3, 256 \\ 1 \times 1, 1024 \end{bmatrix} \times 6$ | $ \left[\begin{array}{c} 1 \times 1, 256 \\ 3 \times 3, 256 \\ 1 \times 1, 1024 \end{array}\right] \times 23 $ | $ \left[\begin{array}{c} 1 \times 1, 256 \\ 3 \times 3, 256 \\ 1 \times 1, 1024 \end{array}\right] \times 36 $ |
| conv5_x | 7×7 | $\left[\begin{array}{c}3\times3,512\\3\times3,512\end{array}\right]\times2$ | $\left[\begin{array}{c}3\times3,512\\3\times3,512\end{array}\right]\times3$ | $\begin{bmatrix} 1 \times 1, 512 \\ 3 \times 3, 512 \\ 1 \times 1, 2048 \end{bmatrix} \times 3$ | $ \left[\begin{array}{c} 1 \times 1, 512 \\ 3 \times 3, 512 \\ 1 \times 1, 2048 \end{array}\right] \times 3 $ | $ \left[\begin{array}{c} 1 \times 1, 512 \\ 3 \times 3, 512 \\ 1 \times 1, 2048 \end{array}\right] \times 3 $ |
| | 1×1 | average pool, 1000-d fc, softmax | | | | |
| FLOPs | | 1.8×10^{9} | 3.6×10^{9} | 3.8×10^{9} | 7.6×10^9 | 11.3×10 ⁹ |