|  |  |  |  |
| --- | --- | --- | --- |
|  | Memory Size | # of parameter | # of MAC operations |
| INPUT | 224 x 224 x 3 = 150K | 0 | 0 |
| CONV | 224 x 224 x 64 = 3M | 1792 | 86704128 |
| CONV | 224 x 224 x 64 = 3M | 36928 | 2.2G |
| MAXPOOL | 112 x 112 x 64 = 800K | 0 | 0 |
| CONV | 112 x 112 x 64 = 800K | 73856 | 924844032 |
| CONV | 112 x 112 x 128 = 1.6M | 147584 | 1.85G |
| MAXPOOL | 112 x 112 x 128 = 1.6M | 0 | 0 |
| CONV | 56 x 56 x 128 = 400K | 295168 | 924844032 |
| CONV | 56 x 56 x 256 = 800K | 590080 | 1.85G |
| CONV | 56 x 56 x 256 = 800K | 590080 | 1.85G |
| MAXPOOL | 56 x 56 x 256 = 800K | 0 | 0 |
| CONV | 28 x 28 x 256 = 200K | 1180160 | 924844032 |
| CONV | 28 x 28 x 512 = 400K | 2359808 | 1.8G |
| CONV | 28 x 28 x 512 = 400K | 2359808 | 1.8G |
| MAXPOOL | 28 x 28 x 512 = 400K | 0 | 0 |
| CONV | 14 x 14 x 512 = 100K | 2359808 | 462422016 |
| CONV | 14 x 14 x 512 = 100K | 2359808 | 462422016 |
| CONV | 14 x 14 x 512 = 100K | 2359808 | 462422016 |
| MAXPOOL | 14 x 14 x 512 = 100K | 0 | 0 |
| FC 4096 | 7 x 7 x 512 = 25K | 102764544 | 102760448 |
| FC 4096 | 1 x 1 x 4096 = 4096 | 16781312 | 16777216 |
| FC 1000 | 1 x 1 x 4096 = 4096 | 4097000 | 4096000 |

Params: (h\*w\*c+1)\*(num\_kernel)

Mac: (K^2) \* C\_in \* H\_out \* W\_out \* C\_out

https://towardsdatascience.com/the-w3h-of-alexnet-vggnet-resnet-and-inception-7baaaecccc96#:~:text=VGG16%20has%20a%20total%20of,with%20a%20stride%20of%20two.