###Model 5

metrics = [sm.metrics.IOUScore(threshold=0.5), sm.metrics.FScore(threshold=0.5)]

#Reused parameters in all models

n\_classes=1

activation='sigmoid'

LR = 0.0001

optim = tf.keras.optimizers.Adam(LR)

BACKBONE5 = 'efficientnetb7'

preprocess\_input5 = sm.get\_preprocessing(BACKBONE5)

# preprocess input

X\_train5 = preprocess\_input5(X1)

X\_test5 = preprocess\_input5(X\_test)

# define model

model5 = sm.Unet(BACKBONE5, encoder\_weights='imagenet', classes=n\_classes, activation=activation)

# compile keras model with defined optimozer, loss and metrics

model5.compile(optim, loss='binary\_crossentropy', metrics=metrics)

#model3.compile(optimizer='adam', loss='categorical\_crossentropy', metrics=metrics)

history5=model5.fit(X1,

y1,

batch\_size=8,

epochs=50,

verbose=1,

validation\_data=(X\_test, y\_test))

print(model5.summary())

Downloading data from<https://github.com/Callidior/keras-applications/releases/download/efficientnet/efficientnet-b7_weights_tf_dim_ordering_tf_kernels_autoaugment_notop.h5>

258441216/258434480 [==============================] - 6s 0us/step

258449408/258434480 [==============================] - 6s 0us/step

Model: "model\_7"

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Layer (type) Output Shape Param # Connected to

==================================================================================================

input\_2 (InputLayer) [(None, None, None, 0 []

3)]

stem\_conv (Conv2D) (None, None, None, 1728 ['input\_2[0][0]']

64)

stem\_bn (BatchNormalization) (None, None, None, 256 ['stem\_conv[0][0]']

64)

stem\_activation (Activation) (None, None, None, 0 ['stem\_bn[0][0]']

64)

block1a\_dwconv (DepthwiseConv2 (None, None, None, 576 ['stem\_activation[0][0]']

D) 64)

block1a\_bn (BatchNormalization (None, None, None, 256 ['block1a\_dwconv[0][0]']

) 64)

block1a\_activation (Activation (None, None, None, 0 ['block1a\_bn[0][0]']

) 64)

block1a\_se\_squeeze (GlobalAver (None, 64) 0 ['block1a\_activation[0][0]']

agePooling2D)

block1a\_se\_reshape (Reshape) (None, 1, 1, 64) 0 ['block1a\_se\_squeeze[0][0]']

block1a\_se\_reduce (Conv2D) (None, 1, 1, 16) 1040 ['block1a\_se\_reshape[0][0]']

block1a\_se\_expand (Conv2D) (None, 1, 1, 64) 1088 ['block1a\_se\_reduce[0][0]']

block1a\_se\_excite (Multiply) (None, None, None, 0 ['block1a\_activation[0][0]',

64) 'block1a\_se\_expand[0][0]']

block1a\_project\_conv (Conv2D) (None, None, None, 2048 ['block1a\_se\_excite[0][0]']

32)

block1a\_project\_bn (BatchNorma (None, None, None, 128 ['block1a\_project\_conv[0][0]']

lization) 32)

block1b\_dwconv (DepthwiseConv2 (None, None, None, 288 ['block1a\_project\_bn[0][0]']

D) 32)

block1b\_bn (BatchNormalization (None, None, None, 128 ['block1b\_dwconv[0][0]']

) 32)

block1b\_activation (Activation (None, None, None, 0 ['block1b\_bn[0][0]']

) 32)

block1b\_se\_squeeze (GlobalAver (None, 32) 0 ['block1b\_activation[0][0]']

agePooling2D)

block1b\_se\_reshape (Reshape) (None, 1, 1, 32) 0 ['block1b\_se\_squeeze[0][0]']

block1b\_se\_reduce (Conv2D) (None, 1, 1, 8) 264 ['block1b\_se\_reshape[0][0]']

block1b\_se\_expand (Conv2D) (None, 1, 1, 32) 288 ['block1b\_se\_reduce[0][0]']

block1b\_se\_excite (Multiply) (None, None, None, 0 ['block1b\_activation[0][0]',

32) 'block1b\_se\_expand[0][0]']

block1b\_project\_conv (Conv2D) (None, None, None, 1024 ['block1b\_se\_excite[0][0]']

32)

block1b\_project\_bn (BatchNorma (None, None, None, 128 ['block1b\_project\_conv[0][0]']

lization) 32)

block1b\_drop (FixedDropout) (None, None, None, 0 ['block1b\_project\_bn[0][0]']

32)

block1b\_add (Add) (None, None, None, 0 ['block1b\_drop[0][0]',

32) 'block1a\_project\_bn[0][0]']

block1c\_dwconv (DepthwiseConv2 (None, None, None, 288 ['block1b\_add[0][0]']

D) 32)

block1c\_bn (BatchNormalization (None, None, None, 128 ['block1c\_dwconv[0][0]']

) 32)

block1c\_activation (Activation (None, None, None, 0 ['block1c\_bn[0][0]']

) 32)

block1c\_se\_squeeze (GlobalAver (None, 32) 0 ['block1c\_activation[0][0]']

agePooling2D)

block1c\_se\_reshape (Reshape) (None, 1, 1, 32) 0 ['block1c\_se\_squeeze[0][0]']

block1c\_se\_reduce (Conv2D) (None, 1, 1, 8) 264 ['block1c\_se\_reshape[0][0]']

block1c\_se\_expand (Conv2D) (None, 1, 1, 32) 288 ['block1c\_se\_reduce[0][0]']

block1c\_se\_excite (Multiply) (None, None, None, 0 ['block1c\_activation[0][0]',

32) 'block1c\_se\_expand[0][0]']

block1c\_project\_conv (Conv2D) (None, None, None, 1024 ['block1c\_se\_excite[0][0]']

32)

block1c\_project\_bn (BatchNorma (None, None, None, 128 ['block1c\_project\_conv[0][0]']

lization) 32)

block1c\_drop (FixedDropout) (None, None, None, 0 ['block1c\_project\_bn[0][0]']

32)

block1c\_add (Add) (None, None, None, 0 ['block1c\_drop[0][0]',

32) 'block1b\_add[0][0]']

block1d\_dwconv (DepthwiseConv2 (None, None, None, 288 ['block1c\_add[0][0]']

D) 32)

block1d\_bn (BatchNormalization (None, None, None, 128 ['block1d\_dwconv[0][0]']

) 32)

block1d\_activation (Activation (None, None, None, 0 ['block1d\_bn[0][0]']

) 32)

block1d\_se\_squeeze (GlobalAver (None, 32) 0 ['block1d\_activation[0][0]']

agePooling2D)

block1d\_se\_reshape (Reshape) (None, 1, 1, 32) 0 ['block1d\_se\_squeeze[0][0]']

block1d\_se\_reduce (Conv2D) (None, 1, 1, 8) 264 ['block1d\_se\_reshape[0][0]']

block1d\_se\_expand (Conv2D) (None, 1, 1, 32) 288 ['block1d\_se\_reduce[0][0]']

block1d\_se\_excite (Multiply) (None, None, None, 0 ['block1d\_activation[0][0]',

32) 'block1d\_se\_expand[0][0]']

block1d\_project\_conv (Conv2D) (None, None, None, 1024 ['block1d\_se\_excite[0][0]']

32)

block1d\_project\_bn (BatchNorma (None, None, None, 128 ['block1d\_project\_conv[0][0]']

lization) 32)

block1d\_drop (FixedDropout) (None, None, None, 0 ['block1d\_project\_bn[0][0]']

32)

block1d\_add (Add) (None, None, None, 0 ['block1d\_drop[0][0]',

32) 'block1c\_add[0][0]']

block2a\_expand\_conv (Conv2D) (None, None, None, 6144 ['block1d\_add[0][0]']

192)

block2a\_expand\_bn (BatchNormal (None, None, None, 768 ['block2a\_expand\_conv[0][0]']

ization) 192)

block2a\_expand\_activation (Act (None, None, None, 0 ['block2a\_expand\_bn[0][0]']

ivation) 192)

block2a\_dwconv (DepthwiseConv2 (None, None, None, 1728 ['block2a\_expand\_activation[0][0]

D) 192) ']

block2a\_bn (BatchNormalization (None, None, None, 768 ['block2a\_dwconv[0][0]']

) 192)

block2a\_activation (Activation (None, None, None, 0 ['block2a\_bn[0][0]']

) 192)

block2a\_se\_squeeze (GlobalAver (None, 192) 0 ['block2a\_activation[0][0]']

agePooling2D)

block2a\_se\_reshape (Reshape) (None, 1, 1, 192) 0 ['block2a\_se\_squeeze[0][0]']

block2a\_se\_reduce (Conv2D) (None, 1, 1, 8) 1544 ['block2a\_se\_reshape[0][0]']

block2a\_se\_expand (Conv2D) (None, 1, 1, 192) 1728 ['block2a\_se\_reduce[0][0]']

block2a\_se\_excite (Multiply) (None, None, None, 0 ['block2a\_activation[0][0]',

192) 'block2a\_se\_expand[0][0]']

block2a\_project\_conv (Conv2D) (None, None, None, 9216 ['block2a\_se\_excite[0][0]']

48)

block2a\_project\_bn (BatchNorma (None, None, None, 192 ['block2a\_project\_conv[0][0]']

lization) 48)

block2b\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2a\_project\_bn[0][0]']

288)

block2b\_expand\_bn (BatchNormal (None, None, None, 1152 ['block2b\_expand\_conv[0][0]']

ization) 288)

block2b\_expand\_activation (Act (None, None, None, 0 ['block2b\_expand\_bn[0][0]']

ivation) 288)

block2b\_dwconv (DepthwiseConv2 (None, None, None, 2592 ['block2b\_expand\_activation[0][0]

D) 288) ']

block2b\_bn (BatchNormalization (None, None, None, 1152 ['block2b\_dwconv[0][0]']

) 288)

block2b\_activation (Activation (None, None, None, 0 ['block2b\_bn[0][0]']

) 288)

block2b\_se\_squeeze (GlobalAver (None, 288) 0 ['block2b\_activation[0][0]']

agePooling2D)

block2b\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block2b\_se\_squeeze[0][0]']

block2b\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block2b\_se\_reshape[0][0]']

block2b\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block2b\_se\_reduce[0][0]']

block2b\_se\_excite (Multiply) (None, None, None, 0 ['block2b\_activation[0][0]',

288) 'block2b\_se\_expand[0][0]']

block2b\_project\_conv (Conv2D) (None, None, None, 13824 ['block2b\_se\_excite[0][0]']

48)

block2b\_project\_bn (BatchNorma (None, None, None, 192 ['block2b\_project\_conv[0][0]']

lization) 48)

block2b\_drop (FixedDropout) (None, None, None, 0 ['block2b\_project\_bn[0][0]']

48)

block2b\_add (Add) (None, None, None, 0 ['block2b\_drop[0][0]',

48) 'block2a\_project\_bn[0][0]']

block2c\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2b\_add[0][0]']

288)

block2c\_expand\_bn (BatchNormal (None, None, None, 1152 ['block2c\_expand\_conv[0][0]']

ization) 288)

block2c\_expand\_activation (Act (None, None, None, 0 ['block2c\_expand\_bn[0][0]']

ivation) 288)

block2c\_dwconv (DepthwiseConv2 (None, None, None, 2592 ['block2c\_expand\_activation[0][0]

D) 288) ']

block2c\_bn (BatchNormalization (None, None, None, 1152 ['block2c\_dwconv[0][0]']

) 288)

block2c\_activation (Activation (None, None, None, 0 ['block2c\_bn[0][0]']

) 288)

block2c\_se\_squeeze (GlobalAver (None, 288) 0 ['block2c\_activation[0][0]']

agePooling2D)

block2c\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block2c\_se\_squeeze[0][0]']

block2c\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block2c\_se\_reshape[0][0]']

block2c\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block2c\_se\_reduce[0][0]']

block2c\_se\_excite (Multiply) (None, None, None, 0 ['block2c\_activation[0][0]',

288) 'block2c\_se\_expand[0][0]']

block2c\_project\_conv (Conv2D) (None, None, None, 13824 ['block2c\_se\_excite[0][0]']

48)

block2c\_project\_bn (BatchNorma (None, None, None, 192 ['block2c\_project\_conv[0][0]']

lization) 48)

block2c\_drop (FixedDropout) (None, None, None, 0 ['block2c\_project\_bn[0][0]']

48)

block2c\_add (Add) (None, None, None, 0 ['block2c\_drop[0][0]',

48) 'block2b\_add[0][0]']

block2d\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2c\_add[0][0]']

288)

block2d\_expand\_bn (BatchNormal (None, None, None, 1152 ['block2d\_expand\_conv[0][0]']

ization) 288)

block2d\_expand\_activation (Act (None, None, None, 0 ['block2d\_expand\_bn[0][0]']

ivation) 288)

block2d\_dwconv (DepthwiseConv2 (None, None, None, 2592 ['block2d\_expand\_activation[0][0]

D) 288) ']

block2d\_bn (BatchNormalization (None, None, None, 1152 ['block2d\_dwconv[0][0]']

) 288)

block2d\_activation (Activation (None, None, None, 0 ['block2d\_bn[0][0]']

) 288)

block2d\_se\_squeeze (GlobalAver (None, 288) 0 ['block2d\_activation[0][0]']

agePooling2D)

block2d\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block2d\_se\_squeeze[0][0]']

block2d\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block2d\_se\_reshape[0][0]']

block2d\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block2d\_se\_reduce[0][0]']

block2d\_se\_excite (Multiply) (None, None, None, 0 ['block2d\_activation[0][0]',

288) 'block2d\_se\_expand[0][0]']

block2d\_project\_conv (Conv2D) (None, None, None, 13824 ['block2d\_se\_excite[0][0]']

48)

block2d\_project\_bn (BatchNorma (None, None, None, 192 ['block2d\_project\_conv[0][0]']

lization) 48)

block2d\_drop (FixedDropout) (None, None, None, 0 ['block2d\_project\_bn[0][0]']

48)

block2d\_add (Add) (None, None, None, 0 ['block2d\_drop[0][0]',

48) 'block2c\_add[0][0]']

block2e\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2d\_add[0][0]']

288)

block2e\_expand\_bn (BatchNormal (None, None, None, 1152 ['block2e\_expand\_conv[0][0]']

ization) 288)

block2e\_expand\_activation (Act (None, None, None, 0 ['block2e\_expand\_bn[0][0]']

ivation) 288)

block2e\_dwconv (DepthwiseConv2 (None, None, None, 2592 ['block2e\_expand\_activation[0][0]

D) 288) ']

block2e\_bn (BatchNormalization (None, None, None, 1152 ['block2e\_dwconv[0][0]']

) 288)

block2e\_activation (Activation (None, None, None, 0 ['block2e\_bn[0][0]']

) 288)

block2e\_se\_squeeze (GlobalAver (None, 288) 0 ['block2e\_activation[0][0]']

agePooling2D)

block2e\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block2e\_se\_squeeze[0][0]']

block2e\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block2e\_se\_reshape[0][0]']

block2e\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block2e\_se\_reduce[0][0]']

block2e\_se\_excite (Multiply) (None, None, None, 0 ['block2e\_activation[0][0]',

288) 'block2e\_se\_expand[0][0]']

block2e\_project\_conv (Conv2D) (None, None, None, 13824 ['block2e\_se\_excite[0][0]']

48)

block2e\_project\_bn (BatchNorma (None, None, None, 192 ['block2e\_project\_conv[0][0]']

lization) 48)

block2e\_drop (FixedDropout) (None, None, None, 0 ['block2e\_project\_bn[0][0]']

48)

block2e\_add (Add) (None, None, None, 0 ['block2e\_drop[0][0]',

48) 'block2d\_add[0][0]']

block2f\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2e\_add[0][0]']

288)

block2f\_expand\_bn (BatchNormal (None, None, None, 1152 ['block2f\_expand\_conv[0][0]']

ization) 288)

block2f\_expand\_activation (Act (None, None, None, 0 ['block2f\_expand\_bn[0][0]']

ivation) 288)

block2f\_dwconv (DepthwiseConv2 (None, None, None, 2592 ['block2f\_expand\_activation[0][0]

D) 288) ']

block2f\_bn (BatchNormalization (None, None, None, 1152 ['block2f\_dwconv[0][0]']

) 288)

block2f\_activation (Activation (None, None, None, 0 ['block2f\_bn[0][0]']

) 288)

block2f\_se\_squeeze (GlobalAver (None, 288) 0 ['block2f\_activation[0][0]']

agePooling2D)

block2f\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block2f\_se\_squeeze[0][0]']

block2f\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block2f\_se\_reshape[0][0]']

block2f\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block2f\_se\_reduce[0][0]']

block2f\_se\_excite (Multiply) (None, None, None, 0 ['block2f\_activation[0][0]',

288) 'block2f\_se\_expand[0][0]']

block2f\_project\_conv (Conv2D) (None, None, None, 13824 ['block2f\_se\_excite[0][0]']

48)

block2f\_project\_bn (BatchNorma (None, None, None, 192 ['block2f\_project\_conv[0][0]']

lization) 48)

block2f\_drop (FixedDropout) (None, None, None, 0 ['block2f\_project\_bn[0][0]']

48)

block2f\_add (Add) (None, None, None, 0 ['block2f\_drop[0][0]',

48) 'block2e\_add[0][0]']

block2g\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2f\_add[0][0]']

288)

block2g\_expand\_bn (BatchNormal (None, None, None, 1152 ['block2g\_expand\_conv[0][0]']

ization) 288)

block2g\_expand\_activation (Act (None, None, None, 0 ['block2g\_expand\_bn[0][0]']

ivation) 288)

block2g\_dwconv (DepthwiseConv2 (None, None, None, 2592 ['block2g\_expand\_activation[0][0]

D) 288) ']

block2g\_bn (BatchNormalization (None, None, None, 1152 ['block2g\_dwconv[0][0]']

) 288)

block2g\_activation (Activation (None, None, None, 0 ['block2g\_bn[0][0]']

) 288)

block2g\_se\_squeeze (GlobalAver (None, 288) 0 ['block2g\_activation[0][0]']

agePooling2D)

block2g\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block2g\_se\_squeeze[0][0]']

block2g\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block2g\_se\_reshape[0][0]']

block2g\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block2g\_se\_reduce[0][0]']

block2g\_se\_excite (Multiply) (None, None, None, 0 ['block2g\_activation[0][0]',

288) 'block2g\_se\_expand[0][0]']

block2g\_project\_conv (Conv2D) (None, None, None, 13824 ['block2g\_se\_excite[0][0]']

48)

block2g\_project\_bn (BatchNorma (None, None, None, 192 ['block2g\_project\_conv[0][0]']

lization) 48)

block2g\_drop (FixedDropout) (None, None, None, 0 ['block2g\_project\_bn[0][0]']

48)

block2g\_add (Add) (None, None, None, 0 ['block2g\_drop[0][0]',

48) 'block2f\_add[0][0]']

block3a\_expand\_conv (Conv2D) (None, None, None, 13824 ['block2g\_add[0][0]']

288)

block3a\_expand\_bn (BatchNormal (None, None, None, 1152 ['block3a\_expand\_conv[0][0]']

ization) 288)

block3a\_expand\_activation (Act (None, None, None, 0 ['block3a\_expand\_bn[0][0]']

ivation) 288)

block3a\_dwconv (DepthwiseConv2 (None, None, None, 7200 ['block3a\_expand\_activation[0][0]

D) 288) ']

block3a\_bn (BatchNormalization (None, None, None, 1152 ['block3a\_dwconv[0][0]']

) 288)

block3a\_activation (Activation (None, None, None, 0 ['block3a\_bn[0][0]']

) 288)

block3a\_se\_squeeze (GlobalAver (None, 288) 0 ['block3a\_activation[0][0]']

agePooling2D)

block3a\_se\_reshape (Reshape) (None, 1, 1, 288) 0 ['block3a\_se\_squeeze[0][0]']

block3a\_se\_reduce (Conv2D) (None, 1, 1, 12) 3468 ['block3a\_se\_reshape[0][0]']

block3a\_se\_expand (Conv2D) (None, 1, 1, 288) 3744 ['block3a\_se\_reduce[0][0]']

block3a\_se\_excite (Multiply) (None, None, None, 0 ['block3a\_activation[0][0]',

288) 'block3a\_se\_expand[0][0]']

block3a\_project\_conv (Conv2D) (None, None, None, 23040 ['block3a\_se\_excite[0][0]']

80)

block3a\_project\_bn (BatchNorma (None, None, None, 320 ['block3a\_project\_conv[0][0]']

lization) 80)

block3b\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3a\_project\_bn[0][0]']

480)

block3b\_expand\_bn (BatchNormal (None, None, None, 1920 ['block3b\_expand\_conv[0][0]']

ization) 480)

block3b\_expand\_activation (Act (None, None, None, 0 ['block3b\_expand\_bn[0][0]']

ivation) 480)

block3b\_dwconv (DepthwiseConv2 (None, None, None, 12000 ['block3b\_expand\_activation[0][0]

D) 480) ']

block3b\_bn (BatchNormalization (None, None, None, 1920 ['block3b\_dwconv[0][0]']

) 480)

block3b\_activation (Activation (None, None, None, 0 ['block3b\_bn[0][0]']

) 480)

block3b\_se\_squeeze (GlobalAver (None, 480) 0 ['block3b\_activation[0][0]']

agePooling2D)

block3b\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block3b\_se\_squeeze[0][0]']

block3b\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block3b\_se\_reshape[0][0]']

block3b\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block3b\_se\_reduce[0][0]']

block3b\_se\_excite (Multiply) (None, None, None, 0 ['block3b\_activation[0][0]',

480) 'block3b\_se\_expand[0][0]']

block3b\_project\_conv (Conv2D) (None, None, None, 38400 ['block3b\_se\_excite[0][0]']

80)

block3b\_project\_bn (BatchNorma (None, None, None, 320 ['block3b\_project\_conv[0][0]']

lization) 80)

block3b\_drop (FixedDropout) (None, None, None, 0 ['block3b\_project\_bn[0][0]']

80)

block3b\_add (Add) (None, None, None, 0 ['block3b\_drop[0][0]',

80) 'block3a\_project\_bn[0][0]']

block3c\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3b\_add[0][0]']

480)

block3c\_expand\_bn (BatchNormal (None, None, None, 1920 ['block3c\_expand\_conv[0][0]']

ization) 480)

block3c\_expand\_activation (Act (None, None, None, 0 ['block3c\_expand\_bn[0][0]']

ivation) 480)

block3c\_dwconv (DepthwiseConv2 (None, None, None, 12000 ['block3c\_expand\_activation[0][0]

D) 480) ']

block3c\_bn (BatchNormalization (None, None, None, 1920 ['block3c\_dwconv[0][0]']

) 480)

block3c\_activation (Activation (None, None, None, 0 ['block3c\_bn[0][0]']

) 480)

block3c\_se\_squeeze (GlobalAver (None, 480) 0 ['block3c\_activation[0][0]']

agePooling2D)

block3c\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block3c\_se\_squeeze[0][0]']

block3c\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block3c\_se\_reshape[0][0]']

block3c\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block3c\_se\_reduce[0][0]']

block3c\_se\_excite (Multiply) (None, None, None, 0 ['block3c\_activation[0][0]',

480) 'block3c\_se\_expand[0][0]']

block3c\_project\_conv (Conv2D) (None, None, None, 38400 ['block3c\_se\_excite[0][0]']

80)

block3c\_project\_bn (BatchNorma (None, None, None, 320 ['block3c\_project\_conv[0][0]']

lization) 80)

block3c\_drop (FixedDropout) (None, None, None, 0 ['block3c\_project\_bn[0][0]']

80)

block3c\_add (Add) (None, None, None, 0 ['block3c\_drop[0][0]',

80) 'block3b\_add[0][0]']

block3d\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3c\_add[0][0]']

480)

block3d\_expand\_bn (BatchNormal (None, None, None, 1920 ['block3d\_expand\_conv[0][0]']

ization) 480)

block3d\_expand\_activation (Act (None, None, None, 0 ['block3d\_expand\_bn[0][0]']

ivation) 480)

block3d\_dwconv (DepthwiseConv2 (None, None, None, 12000 ['block3d\_expand\_activation[0][0]

D) 480) ']

block3d\_bn (BatchNormalization (None, None, None, 1920 ['block3d\_dwconv[0][0]']

) 480)

block3d\_activation (Activation (None, None, None, 0 ['block3d\_bn[0][0]']

) 480)

block3d\_se\_squeeze (GlobalAver (None, 480) 0 ['block3d\_activation[0][0]']

agePooling2D)

block3d\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block3d\_se\_squeeze[0][0]']

block3d\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block3d\_se\_reshape[0][0]']

block3d\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block3d\_se\_reduce[0][0]']

block3d\_se\_excite (Multiply) (None, None, None, 0 ['block3d\_activation[0][0]',

480) 'block3d\_se\_expand[0][0]']

block3d\_project\_conv (Conv2D) (None, None, None, 38400 ['block3d\_se\_excite[0][0]']

80)

block3d\_project\_bn (BatchNorma (None, None, None, 320 ['block3d\_project\_conv[0][0]']

lization) 80)

block3d\_drop (FixedDropout) (None, None, None, 0 ['block3d\_project\_bn[0][0]']

80)

block3d\_add (Add) (None, None, None, 0 ['block3d\_drop[0][0]',

80) 'block3c\_add[0][0]']

block3e\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3d\_add[0][0]']

480)

block3e\_expand\_bn (BatchNormal (None, None, None, 1920 ['block3e\_expand\_conv[0][0]']

ization) 480)

block3e\_expand\_activation (Act (None, None, None, 0 ['block3e\_expand\_bn[0][0]']

ivation) 480)

block3e\_dwconv (DepthwiseConv2 (None, None, None, 12000 ['block3e\_expand\_activation[0][0]

D) 480) ']

block3e\_bn (BatchNormalization (None, None, None, 1920 ['block3e\_dwconv[0][0]']

) 480)

block3e\_activation (Activation (None, None, None, 0 ['block3e\_bn[0][0]']

) 480)

block3e\_se\_squeeze (GlobalAver (None, 480) 0 ['block3e\_activation[0][0]']

agePooling2D)

block3e\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block3e\_se\_squeeze[0][0]']

block3e\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block3e\_se\_reshape[0][0]']

block3e\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block3e\_se\_reduce[0][0]']

block3e\_se\_excite (Multiply) (None, None, None, 0 ['block3e\_activation[0][0]',

480) 'block3e\_se\_expand[0][0]']

block3e\_project\_conv (Conv2D) (None, None, None, 38400 ['block3e\_se\_excite[0][0]']

80)

block3e\_project\_bn (BatchNorma (None, None, None, 320 ['block3e\_project\_conv[0][0]']

lization) 80)

block3e\_drop (FixedDropout) (None, None, None, 0 ['block3e\_project\_bn[0][0]']

80)

block3e\_add (Add) (None, None, None, 0 ['block3e\_drop[0][0]',

80) 'block3d\_add[0][0]']

block3f\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3e\_add[0][0]']

480)

block3f\_expand\_bn (BatchNormal (None, None, None, 1920 ['block3f\_expand\_conv[0][0]']

ization) 480)

block3f\_expand\_activation (Act (None, None, None, 0 ['block3f\_expand\_bn[0][0]']

ivation) 480)

block3f\_dwconv (DepthwiseConv2 (None, None, None, 12000 ['block3f\_expand\_activation[0][0]

D) 480) ']

block3f\_bn (BatchNormalization (None, None, None, 1920 ['block3f\_dwconv[0][0]']

) 480)

block3f\_activation (Activation (None, None, None, 0 ['block3f\_bn[0][0]']

) 480)

block3f\_se\_squeeze (GlobalAver (None, 480) 0 ['block3f\_activation[0][0]']

agePooling2D)

block3f\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block3f\_se\_squeeze[0][0]']

block3f\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block3f\_se\_reshape[0][0]']

block3f\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block3f\_se\_reduce[0][0]']

block3f\_se\_excite (Multiply) (None, None, None, 0 ['block3f\_activation[0][0]',

480) 'block3f\_se\_expand[0][0]']

block3f\_project\_conv (Conv2D) (None, None, None, 38400 ['block3f\_se\_excite[0][0]']

80)

block3f\_project\_bn (BatchNorma (None, None, None, 320 ['block3f\_project\_conv[0][0]']

lization) 80)

block3f\_drop (FixedDropout) (None, None, None, 0 ['block3f\_project\_bn[0][0]']

80)

block3f\_add (Add) (None, None, None, 0 ['block3f\_drop[0][0]',

80) 'block3e\_add[0][0]']

block3g\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3f\_add[0][0]']

480)

block3g\_expand\_bn (BatchNormal (None, None, None, 1920 ['block3g\_expand\_conv[0][0]']

ization) 480)

block3g\_expand\_activation (Act (None, None, None, 0 ['block3g\_expand\_bn[0][0]']

ivation) 480)

block3g\_dwconv (DepthwiseConv2 (None, None, None, 12000 ['block3g\_expand\_activation[0][0]

D) 480) ']

block3g\_bn (BatchNormalization (None, None, None, 1920 ['block3g\_dwconv[0][0]']

) 480)

block3g\_activation (Activation (None, None, None, 0 ['block3g\_bn[0][0]']

) 480)

block3g\_se\_squeeze (GlobalAver (None, 480) 0 ['block3g\_activation[0][0]']

agePooling2D)

block3g\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block3g\_se\_squeeze[0][0]']

block3g\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block3g\_se\_reshape[0][0]']

block3g\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block3g\_se\_reduce[0][0]']

block3g\_se\_excite (Multiply) (None, None, None, 0 ['block3g\_activation[0][0]',

480) 'block3g\_se\_expand[0][0]']

block3g\_project\_conv (Conv2D) (None, None, None, 38400 ['block3g\_se\_excite[0][0]']

80)

block3g\_project\_bn (BatchNorma (None, None, None, 320 ['block3g\_project\_conv[0][0]']

lization) 80)

block3g\_drop (FixedDropout) (None, None, None, 0 ['block3g\_project\_bn[0][0]']

80)

block3g\_add (Add) (None, None, None, 0 ['block3g\_drop[0][0]',

80) 'block3f\_add[0][0]']

block4a\_expand\_conv (Conv2D) (None, None, None, 38400 ['block3g\_add[0][0]']

480)

block4a\_expand\_bn (BatchNormal (None, None, None, 1920 ['block4a\_expand\_conv[0][0]']

ization) 480)

block4a\_expand\_activation (Act (None, None, None, 0 ['block4a\_expand\_bn[0][0]']

ivation) 480)

block4a\_dwconv (DepthwiseConv2 (None, None, None, 4320 ['block4a\_expand\_activation[0][0]

D) 480) ']

block4a\_bn (BatchNormalization (None, None, None, 1920 ['block4a\_dwconv[0][0]']

) 480)

block4a\_activation (Activation (None, None, None, 0 ['block4a\_bn[0][0]']

) 480)

block4a\_se\_squeeze (GlobalAver (None, 480) 0 ['block4a\_activation[0][0]']

agePooling2D)

block4a\_se\_reshape (Reshape) (None, 1, 1, 480) 0 ['block4a\_se\_squeeze[0][0]']

block4a\_se\_reduce (Conv2D) (None, 1, 1, 20) 9620 ['block4a\_se\_reshape[0][0]']

block4a\_se\_expand (Conv2D) (None, 1, 1, 480) 10080 ['block4a\_se\_reduce[0][0]']

block4a\_se\_excite (Multiply) (None, None, None, 0 ['block4a\_activation[0][0]',

480) 'block4a\_se\_expand[0][0]']

block4a\_project\_conv (Conv2D) (None, None, None, 76800 ['block4a\_se\_excite[0][0]']

160)

block4a\_project\_bn (BatchNorma (None, None, None, 640 ['block4a\_project\_conv[0][0]']

lization) 160)

block4b\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4a\_project\_bn[0][0]']

960)

block4b\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4b\_expand\_conv[0][0]']

ization) 960)

block4b\_expand\_activation (Act (None, None, None, 0 ['block4b\_expand\_bn[0][0]']

ivation) 960)

block4b\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4b\_expand\_activation[0][0]

D) 960) ']

block4b\_bn (BatchNormalization (None, None, None, 3840 ['block4b\_dwconv[0][0]']

) 960)

block4b\_activation (Activation (None, None, None, 0 ['block4b\_bn[0][0]']

) 960)

block4b\_se\_squeeze (GlobalAver (None, 960) 0 ['block4b\_activation[0][0]']

agePooling2D)

block4b\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4b\_se\_squeeze[0][0]']

block4b\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4b\_se\_reshape[0][0]']

block4b\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4b\_se\_reduce[0][0]']

block4b\_se\_excite (Multiply) (None, None, None, 0 ['block4b\_activation[0][0]',

960) 'block4b\_se\_expand[0][0]']

block4b\_project\_conv (Conv2D) (None, None, None, 153600 ['block4b\_se\_excite[0][0]']

160)

block4b\_project\_bn (BatchNorma (None, None, None, 640 ['block4b\_project\_conv[0][0]']

lization) 160)

block4b\_drop (FixedDropout) (None, None, None, 0 ['block4b\_project\_bn[0][0]']

160)

block4b\_add (Add) (None, None, None, 0 ['block4b\_drop[0][0]',

160) 'block4a\_project\_bn[0][0]']

block4c\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4b\_add[0][0]']

960)

block4c\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4c\_expand\_conv[0][0]']

ization) 960)

block4c\_expand\_activation (Act (None, None, None, 0 ['block4c\_expand\_bn[0][0]']

ivation) 960)

block4c\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4c\_expand\_activation[0][0]

D) 960) ']

block4c\_bn (BatchNormalization (None, None, None, 3840 ['block4c\_dwconv[0][0]']

) 960)

block4c\_activation (Activation (None, None, None, 0 ['block4c\_bn[0][0]']

) 960)

block4c\_se\_squeeze (GlobalAver (None, 960) 0 ['block4c\_activation[0][0]']

agePooling2D)

block4c\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4c\_se\_squeeze[0][0]']

block4c\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4c\_se\_reshape[0][0]']

block4c\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4c\_se\_reduce[0][0]']

block4c\_se\_excite (Multiply) (None, None, None, 0 ['block4c\_activation[0][0]',

960) 'block4c\_se\_expand[0][0]']

block4c\_project\_conv (Conv2D) (None, None, None, 153600 ['block4c\_se\_excite[0][0]']

160)

block4c\_project\_bn (BatchNorma (None, None, None, 640 ['block4c\_project\_conv[0][0]']

lization) 160)

block4c\_drop (FixedDropout) (None, None, None, 0 ['block4c\_project\_bn[0][0]']

160)

block4c\_add (Add) (None, None, None, 0 ['block4c\_drop[0][0]',

160) 'block4b\_add[0][0]']

block4d\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4c\_add[0][0]']

960)

block4d\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4d\_expand\_conv[0][0]']

ization) 960)

block4d\_expand\_activation (Act (None, None, None, 0 ['block4d\_expand\_bn[0][0]']

ivation) 960)

block4d\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4d\_expand\_activation[0][0]

D) 960) ']

block4d\_bn (BatchNormalization (None, None, None, 3840 ['block4d\_dwconv[0][0]']

) 960)

block4d\_activation (Activation (None, None, None, 0 ['block4d\_bn[0][0]']

) 960)

block4d\_se\_squeeze (GlobalAver (None, 960) 0 ['block4d\_activation[0][0]']

agePooling2D)

block4d\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4d\_se\_squeeze[0][0]']

block4d\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4d\_se\_reshape[0][0]']

block4d\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4d\_se\_reduce[0][0]']

block4d\_se\_excite (Multiply) (None, None, None, 0 ['block4d\_activation[0][0]',

960) 'block4d\_se\_expand[0][0]']

block4d\_project\_conv (Conv2D) (None, None, None, 153600 ['block4d\_se\_excite[0][0]']

160)

block4d\_project\_bn (BatchNorma (None, None, None, 640 ['block4d\_project\_conv[0][0]']

lization) 160)

block4d\_drop (FixedDropout) (None, None, None, 0 ['block4d\_project\_bn[0][0]']

160)

block4d\_add (Add) (None, None, None, 0 ['block4d\_drop[0][0]',

160) 'block4c\_add[0][0]']

block4e\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4d\_add[0][0]']

960)

block4e\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4e\_expand\_conv[0][0]']

ization) 960)

block4e\_expand\_activation (Act (None, None, None, 0 ['block4e\_expand\_bn[0][0]']

ivation) 960)

block4e\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4e\_expand\_activation[0][0]

D) 960) ']

block4e\_bn (BatchNormalization (None, None, None, 3840 ['block4e\_dwconv[0][0]']

) 960)

block4e\_activation (Activation (None, None, None, 0 ['block4e\_bn[0][0]']

) 960)

block4e\_se\_squeeze (GlobalAver (None, 960) 0 ['block4e\_activation[0][0]']

agePooling2D)

block4e\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4e\_se\_squeeze[0][0]']

block4e\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4e\_se\_reshape[0][0]']

block4e\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4e\_se\_reduce[0][0]']

block4e\_se\_excite (Multiply) (None, None, None, 0 ['block4e\_activation[0][0]',

960) 'block4e\_se\_expand[0][0]']

block4e\_project\_conv (Conv2D) (None, None, None, 153600 ['block4e\_se\_excite[0][0]']

160)

block4e\_project\_bn (BatchNorma (None, None, None, 640 ['block4e\_project\_conv[0][0]']

lization) 160)

block4e\_drop (FixedDropout) (None, None, None, 0 ['block4e\_project\_bn[0][0]']

160)

block4e\_add (Add) (None, None, None, 0 ['block4e\_drop[0][0]',

160) 'block4d\_add[0][0]']

block4f\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4e\_add[0][0]']

960)

block4f\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4f\_expand\_conv[0][0]']

ization) 960)

block4f\_expand\_activation (Act (None, None, None, 0 ['block4f\_expand\_bn[0][0]']

ivation) 960)

block4f\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4f\_expand\_activation[0][0]

D) 960) ']

block4f\_bn (BatchNormalization (None, None, None, 3840 ['block4f\_dwconv[0][0]']

) 960)

block4f\_activation (Activation (None, None, None, 0 ['block4f\_bn[0][0]']

) 960)

block4f\_se\_squeeze (GlobalAver (None, 960) 0 ['block4f\_activation[0][0]']

agePooling2D)

block4f\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4f\_se\_squeeze[0][0]']

block4f\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4f\_se\_reshape[0][0]']

block4f\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4f\_se\_reduce[0][0]']

block4f\_se\_excite (Multiply) (None, None, None, 0 ['block4f\_activation[0][0]',

960) 'block4f\_se\_expand[0][0]']

block4f\_project\_conv (Conv2D) (None, None, None, 153600 ['block4f\_se\_excite[0][0]']

160)

block4f\_project\_bn (BatchNorma (None, None, None, 640 ['block4f\_project\_conv[0][0]']

lization) 160)

block4f\_drop (FixedDropout) (None, None, None, 0 ['block4f\_project\_bn[0][0]']

160)

block4f\_add (Add) (None, None, None, 0 ['block4f\_drop[0][0]',

160) 'block4e\_add[0][0]']

block4g\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4f\_add[0][0]']

960)

block4g\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4g\_expand\_conv[0][0]']

ization) 960)

block4g\_expand\_activation (Act (None, None, None, 0 ['block4g\_expand\_bn[0][0]']

ivation) 960)

block4g\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4g\_expand\_activation[0][0]

D) 960) ']

block4g\_bn (BatchNormalization (None, None, None, 3840 ['block4g\_dwconv[0][0]']

) 960)

block4g\_activation (Activation (None, None, None, 0 ['block4g\_bn[0][0]']

) 960)

block4g\_se\_squeeze (GlobalAver (None, 960) 0 ['block4g\_activation[0][0]']

agePooling2D)

block4g\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4g\_se\_squeeze[0][0]']

block4g\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4g\_se\_reshape[0][0]']

block4g\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4g\_se\_reduce[0][0]']

block4g\_se\_excite (Multiply) (None, None, None, 0 ['block4g\_activation[0][0]',

960) 'block4g\_se\_expand[0][0]']

block4g\_project\_conv (Conv2D) (None, None, None, 153600 ['block4g\_se\_excite[0][0]']

160)

block4g\_project\_bn (BatchNorma (None, None, None, 640 ['block4g\_project\_conv[0][0]']

lization) 160)

block4g\_drop (FixedDropout) (None, None, None, 0 ['block4g\_project\_bn[0][0]']

160)

block4g\_add (Add) (None, None, None, 0 ['block4g\_drop[0][0]',

160) 'block4f\_add[0][0]']

block4h\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4g\_add[0][0]']

960)

block4h\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4h\_expand\_conv[0][0]']

ization) 960)

block4h\_expand\_activation (Act (None, None, None, 0 ['block4h\_expand\_bn[0][0]']

ivation) 960)

block4h\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4h\_expand\_activation[0][0]

D) 960) ']

block4h\_bn (BatchNormalization (None, None, None, 3840 ['block4h\_dwconv[0][0]']

) 960)

block4h\_activation (Activation (None, None, None, 0 ['block4h\_bn[0][0]']

) 960)

block4h\_se\_squeeze (GlobalAver (None, 960) 0 ['block4h\_activation[0][0]']

agePooling2D)

block4h\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4h\_se\_squeeze[0][0]']

block4h\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4h\_se\_reshape[0][0]']

block4h\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4h\_se\_reduce[0][0]']

block4h\_se\_excite (Multiply) (None, None, None, 0 ['block4h\_activation[0][0]',

960) 'block4h\_se\_expand[0][0]']

block4h\_project\_conv (Conv2D) (None, None, None, 153600 ['block4h\_se\_excite[0][0]']

160)

block4h\_project\_bn (BatchNorma (None, None, None, 640 ['block4h\_project\_conv[0][0]']

lization) 160)

block4h\_drop (FixedDropout) (None, None, None, 0 ['block4h\_project\_bn[0][0]']

160)

block4h\_add (Add) (None, None, None, 0 ['block4h\_drop[0][0]',

160) 'block4g\_add[0][0]']

block4i\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4h\_add[0][0]']

960)

block4i\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4i\_expand\_conv[0][0]']

ization) 960)

block4i\_expand\_activation (Act (None, None, None, 0 ['block4i\_expand\_bn[0][0]']

ivation) 960)

block4i\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4i\_expand\_activation[0][0]

D) 960) ']

block4i\_bn (BatchNormalization (None, None, None, 3840 ['block4i\_dwconv[0][0]']

) 960)

block4i\_activation (Activation (None, None, None, 0 ['block4i\_bn[0][0]']

) 960)

block4i\_se\_squeeze (GlobalAver (None, 960) 0 ['block4i\_activation[0][0]']

agePooling2D)

block4i\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4i\_se\_squeeze[0][0]']

block4i\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4i\_se\_reshape[0][0]']

block4i\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4i\_se\_reduce[0][0]']

block4i\_se\_excite (Multiply) (None, None, None, 0 ['block4i\_activation[0][0]',

960) 'block4i\_se\_expand[0][0]']

block4i\_project\_conv (Conv2D) (None, None, None, 153600 ['block4i\_se\_excite[0][0]']

160)

block4i\_project\_bn (BatchNorma (None, None, None, 640 ['block4i\_project\_conv[0][0]']

lization) 160)

block4i\_drop (FixedDropout) (None, None, None, 0 ['block4i\_project\_bn[0][0]']

160)

block4i\_add (Add) (None, None, None, 0 ['block4i\_drop[0][0]',

160) 'block4h\_add[0][0]']

block4j\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4i\_add[0][0]']

960)

block4j\_expand\_bn (BatchNormal (None, None, None, 3840 ['block4j\_expand\_conv[0][0]']

ization) 960)

block4j\_expand\_activation (Act (None, None, None, 0 ['block4j\_expand\_bn[0][0]']

ivation) 960)

block4j\_dwconv (DepthwiseConv2 (None, None, None, 8640 ['block4j\_expand\_activation[0][0]

D) 960) ']

block4j\_bn (BatchNormalization (None, None, None, 3840 ['block4j\_dwconv[0][0]']

) 960)

block4j\_activation (Activation (None, None, None, 0 ['block4j\_bn[0][0]']

) 960)

block4j\_se\_squeeze (GlobalAver (None, 960) 0 ['block4j\_activation[0][0]']

agePooling2D)

block4j\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block4j\_se\_squeeze[0][0]']

block4j\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block4j\_se\_reshape[0][0]']

block4j\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block4j\_se\_reduce[0][0]']

block4j\_se\_excite (Multiply) (None, None, None, 0 ['block4j\_activation[0][0]',

960) 'block4j\_se\_expand[0][0]']

block4j\_project\_conv (Conv2D) (None, None, None, 153600 ['block4j\_se\_excite[0][0]']

160)

block4j\_project\_bn (BatchNorma (None, None, None, 640 ['block4j\_project\_conv[0][0]']

lization) 160)

block4j\_drop (FixedDropout) (None, None, None, 0 ['block4j\_project\_bn[0][0]']

160)

block4j\_add (Add) (None, None, None, 0 ['block4j\_drop[0][0]',

160) 'block4i\_add[0][0]']

block5a\_expand\_conv (Conv2D) (None, None, None, 153600 ['block4j\_add[0][0]']

960)

block5a\_expand\_bn (BatchNormal (None, None, None, 3840 ['block5a\_expand\_conv[0][0]']

ization) 960)

block5a\_expand\_activation (Act (None, None, None, 0 ['block5a\_expand\_bn[0][0]']

ivation) 960)

block5a\_dwconv (DepthwiseConv2 (None, None, None, 24000 ['block5a\_expand\_activation[0][0]

D) 960) ']

block5a\_bn (BatchNormalization (None, None, None, 3840 ['block5a\_dwconv[0][0]']

) 960)

block5a\_activation (Activation (None, None, None, 0 ['block5a\_bn[0][0]']

) 960)

block5a\_se\_squeeze (GlobalAver (None, 960) 0 ['block5a\_activation[0][0]']

agePooling2D)

block5a\_se\_reshape (Reshape) (None, 1, 1, 960) 0 ['block5a\_se\_squeeze[0][0]']

block5a\_se\_reduce (Conv2D) (None, 1, 1, 40) 38440 ['block5a\_se\_reshape[0][0]']

block5a\_se\_expand (Conv2D) (None, 1, 1, 960) 39360 ['block5a\_se\_reduce[0][0]']

block5a\_se\_excite (Multiply) (None, None, None, 0 ['block5a\_activation[0][0]',

960) 'block5a\_se\_expand[0][0]']

block5a\_project\_conv (Conv2D) (None, None, None, 215040 ['block5a\_se\_excite[0][0]']

224)

block5a\_project\_bn (BatchNorma (None, None, None, 896 ['block5a\_project\_conv[0][0]']

lization) 224)

block5b\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5a\_project\_bn[0][0]']

1344)

block5b\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5b\_expand\_conv[0][0]']

ization) 1344)

block5b\_expand\_activation (Act (None, None, None, 0 ['block5b\_expand\_bn[0][0]']

ivation) 1344)

block5b\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5b\_expand\_activation[0][0]

D) 1344) ']

block5b\_bn (BatchNormalization (None, None, None, 5376 ['block5b\_dwconv[0][0]']

) 1344)

block5b\_activation (Activation (None, None, None, 0 ['block5b\_bn[0][0]']

) 1344)

block5b\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5b\_activation[0][0]']

agePooling2D)

block5b\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5b\_se\_squeeze[0][0]']

block5b\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5b\_se\_reshape[0][0]']

block5b\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5b\_se\_reduce[0][0]']

block5b\_se\_excite (Multiply) (None, None, None, 0 ['block5b\_activation[0][0]',

1344) 'block5b\_se\_expand[0][0]']

block5b\_project\_conv (Conv2D) (None, None, None, 301056 ['block5b\_se\_excite[0][0]']

224)

block5b\_project\_bn (BatchNorma (None, None, None, 896 ['block5b\_project\_conv[0][0]']

lization) 224)

block5b\_drop (FixedDropout) (None, None, None, 0 ['block5b\_project\_bn[0][0]']

224)

block5b\_add (Add) (None, None, None, 0 ['block5b\_drop[0][0]',

224) 'block5a\_project\_bn[0][0]']

block5c\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5b\_add[0][0]']

1344)

block5c\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5c\_expand\_conv[0][0]']

ization) 1344)

block5c\_expand\_activation (Act (None, None, None, 0 ['block5c\_expand\_bn[0][0]']

ivation) 1344)

block5c\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5c\_expand\_activation[0][0]

D) 1344) ']

block5c\_bn (BatchNormalization (None, None, None, 5376 ['block5c\_dwconv[0][0]']

) 1344)

block5c\_activation (Activation (None, None, None, 0 ['block5c\_bn[0][0]']

) 1344)

block5c\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5c\_activation[0][0]']

agePooling2D)

block5c\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5c\_se\_squeeze[0][0]']

block5c\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5c\_se\_reshape[0][0]']

block5c\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5c\_se\_reduce[0][0]']

block5c\_se\_excite (Multiply) (None, None, None, 0 ['block5c\_activation[0][0]',

1344) 'block5c\_se\_expand[0][0]']

block5c\_project\_conv (Conv2D) (None, None, None, 301056 ['block5c\_se\_excite[0][0]']

224)

block5c\_project\_bn (BatchNorma (None, None, None, 896 ['block5c\_project\_conv[0][0]']

lization) 224)

block5c\_drop (FixedDropout) (None, None, None, 0 ['block5c\_project\_bn[0][0]']

224)

block5c\_add (Add) (None, None, None, 0 ['block5c\_drop[0][0]',

224) 'block5b\_add[0][0]']

block5d\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5c\_add[0][0]']

1344)

block5d\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5d\_expand\_conv[0][0]']

ization) 1344)

block5d\_expand\_activation (Act (None, None, None, 0 ['block5d\_expand\_bn[0][0]']

ivation) 1344)

block5d\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5d\_expand\_activation[0][0]

D) 1344) ']

block5d\_bn (BatchNormalization (None, None, None, 5376 ['block5d\_dwconv[0][0]']

) 1344)

block5d\_activation (Activation (None, None, None, 0 ['block5d\_bn[0][0]']

) 1344)

block5d\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5d\_activation[0][0]']

agePooling2D)

block5d\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5d\_se\_squeeze[0][0]']

block5d\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5d\_se\_reshape[0][0]']

block5d\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5d\_se\_reduce[0][0]']

block5d\_se\_excite (Multiply) (None, None, None, 0 ['block5d\_activation[0][0]',

1344) 'block5d\_se\_expand[0][0]']

block5d\_project\_conv (Conv2D) (None, None, None, 301056 ['block5d\_se\_excite[0][0]']

224)

block5d\_project\_bn (BatchNorma (None, None, None, 896 ['block5d\_project\_conv[0][0]']

lization) 224)

block5d\_drop (FixedDropout) (None, None, None, 0 ['block5d\_project\_bn[0][0]']

224)

block5d\_add (Add) (None, None, None, 0 ['block5d\_drop[0][0]',

224) 'block5c\_add[0][0]']

block5e\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5d\_add[0][0]']

1344)

block5e\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5e\_expand\_conv[0][0]']

ization) 1344)

block5e\_expand\_activation (Act (None, None, None, 0 ['block5e\_expand\_bn[0][0]']

ivation) 1344)

block5e\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5e\_expand\_activation[0][0]

D) 1344) ']

block5e\_bn (BatchNormalization (None, None, None, 5376 ['block5e\_dwconv[0][0]']

) 1344)

block5e\_activation (Activation (None, None, None, 0 ['block5e\_bn[0][0]']

) 1344)

block5e\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5e\_activation[0][0]']

agePooling2D)

block5e\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5e\_se\_squeeze[0][0]']

block5e\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5e\_se\_reshape[0][0]']

block5e\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5e\_se\_reduce[0][0]']

block5e\_se\_excite (Multiply) (None, None, None, 0 ['block5e\_activation[0][0]',

1344) 'block5e\_se\_expand[0][0]']

block5e\_project\_conv (Conv2D) (None, None, None, 301056 ['block5e\_se\_excite[0][0]']

224)

block5e\_project\_bn (BatchNorma (None, None, None, 896 ['block5e\_project\_conv[0][0]']

lization) 224)

block5e\_drop (FixedDropout) (None, None, None, 0 ['block5e\_project\_bn[0][0]']

224)

block5e\_add (Add) (None, None, None, 0 ['block5e\_drop[0][0]',

224) 'block5d\_add[0][0]']

block5f\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5e\_add[0][0]']

1344)

block5f\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5f\_expand\_conv[0][0]']

ization) 1344)

block5f\_expand\_activation (Act (None, None, None, 0 ['block5f\_expand\_bn[0][0]']

ivation) 1344)

block5f\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5f\_expand\_activation[0][0]

D) 1344) ']

block5f\_bn (BatchNormalization (None, None, None, 5376 ['block5f\_dwconv[0][0]']

) 1344)

block5f\_activation (Activation (None, None, None, 0 ['block5f\_bn[0][0]']

) 1344)

block5f\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5f\_activation[0][0]']

agePooling2D)

block5f\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5f\_se\_squeeze[0][0]']

block5f\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5f\_se\_reshape[0][0]']

block5f\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5f\_se\_reduce[0][0]']

block5f\_se\_excite (Multiply) (None, None, None, 0 ['block5f\_activation[0][0]',

1344) 'block5f\_se\_expand[0][0]']

block5f\_project\_conv (Conv2D) (None, None, None, 301056 ['block5f\_se\_excite[0][0]']

224)

block5f\_project\_bn (BatchNorma (None, None, None, 896 ['block5f\_project\_conv[0][0]']

lization) 224)

block5f\_drop (FixedDropout) (None, None, None, 0 ['block5f\_project\_bn[0][0]']

224)

block5f\_add (Add) (None, None, None, 0 ['block5f\_drop[0][0]',

224) 'block5e\_add[0][0]']

block5g\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5f\_add[0][0]']

1344)

block5g\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5g\_expand\_conv[0][0]']

ization) 1344)

block5g\_expand\_activation (Act (None, None, None, 0 ['block5g\_expand\_bn[0][0]']

ivation) 1344)

block5g\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5g\_expand\_activation[0][0]

D) 1344) ']

block5g\_bn (BatchNormalization (None, None, None, 5376 ['block5g\_dwconv[0][0]']

) 1344)

block5g\_activation (Activation (None, None, None, 0 ['block5g\_bn[0][0]']

) 1344)

block5g\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5g\_activation[0][0]']

agePooling2D)

block5g\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5g\_se\_squeeze[0][0]']

block5g\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5g\_se\_reshape[0][0]']

block5g\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5g\_se\_reduce[0][0]']

block5g\_se\_excite (Multiply) (None, None, None, 0 ['block5g\_activation[0][0]',

1344) 'block5g\_se\_expand[0][0]']

block5g\_project\_conv (Conv2D) (None, None, None, 301056 ['block5g\_se\_excite[0][0]']

224)

block5g\_project\_bn (BatchNorma (None, None, None, 896 ['block5g\_project\_conv[0][0]']

lization) 224)

block5g\_drop (FixedDropout) (None, None, None, 0 ['block5g\_project\_bn[0][0]']

224)

block5g\_add (Add) (None, None, None, 0 ['block5g\_drop[0][0]',

224) 'block5f\_add[0][0]']

block5h\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5g\_add[0][0]']

1344)

block5h\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5h\_expand\_conv[0][0]']

ization) 1344)

block5h\_expand\_activation (Act (None, None, None, 0 ['block5h\_expand\_bn[0][0]']

ivation) 1344)

block5h\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5h\_expand\_activation[0][0]

D) 1344) ']

block5h\_bn (BatchNormalization (None, None, None, 5376 ['block5h\_dwconv[0][0]']

) 1344)

block5h\_activation (Activation (None, None, None, 0 ['block5h\_bn[0][0]']

) 1344)

block5h\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5h\_activation[0][0]']

agePooling2D)

block5h\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5h\_se\_squeeze[0][0]']

block5h\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5h\_se\_reshape[0][0]']

block5h\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5h\_se\_reduce[0][0]']

block5h\_se\_excite (Multiply) (None, None, None, 0 ['block5h\_activation[0][0]',

1344) 'block5h\_se\_expand[0][0]']

block5h\_project\_conv (Conv2D) (None, None, None, 301056 ['block5h\_se\_excite[0][0]']

224)

block5h\_project\_bn (BatchNorma (None, None, None, 896 ['block5h\_project\_conv[0][0]']

lization) 224)

block5h\_drop (FixedDropout) (None, None, None, 0 ['block5h\_project\_bn[0][0]']

224)

block5h\_add (Add) (None, None, None, 0 ['block5h\_drop[0][0]',

224) 'block5g\_add[0][0]']

block5i\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5h\_add[0][0]']

1344)

block5i\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5i\_expand\_conv[0][0]']

ization) 1344)

block5i\_expand\_activation (Act (None, None, None, 0 ['block5i\_expand\_bn[0][0]']

ivation) 1344)

block5i\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5i\_expand\_activation[0][0]

D) 1344) ']

block5i\_bn (BatchNormalization (None, None, None, 5376 ['block5i\_dwconv[0][0]']

) 1344)

block5i\_activation (Activation (None, None, None, 0 ['block5i\_bn[0][0]']

) 1344)

block5i\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5i\_activation[0][0]']

agePooling2D)

block5i\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5i\_se\_squeeze[0][0]']

block5i\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5i\_se\_reshape[0][0]']

block5i\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5i\_se\_reduce[0][0]']

block5i\_se\_excite (Multiply) (None, None, None, 0 ['block5i\_activation[0][0]',

1344) 'block5i\_se\_expand[0][0]']

block5i\_project\_conv (Conv2D) (None, None, None, 301056 ['block5i\_se\_excite[0][0]']

224)

block5i\_project\_bn (BatchNorma (None, None, None, 896 ['block5i\_project\_conv[0][0]']

lization) 224)

block5i\_drop (FixedDropout) (None, None, None, 0 ['block5i\_project\_bn[0][0]']

224)

block5i\_add (Add) (None, None, None, 0 ['block5i\_drop[0][0]',

224) 'block5h\_add[0][0]']

block5j\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5i\_add[0][0]']

1344)

block5j\_expand\_bn (BatchNormal (None, None, None, 5376 ['block5j\_expand\_conv[0][0]']

ization) 1344)

block5j\_expand\_activation (Act (None, None, None, 0 ['block5j\_expand\_bn[0][0]']

ivation) 1344)

block5j\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block5j\_expand\_activation[0][0]

D) 1344) ']

block5j\_bn (BatchNormalization (None, None, None, 5376 ['block5j\_dwconv[0][0]']

) 1344)

block5j\_activation (Activation (None, None, None, 0 ['block5j\_bn[0][0]']

) 1344)

block5j\_se\_squeeze (GlobalAver (None, 1344) 0 ['block5j\_activation[0][0]']

agePooling2D)

block5j\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block5j\_se\_squeeze[0][0]']

block5j\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block5j\_se\_reshape[0][0]']

block5j\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block5j\_se\_reduce[0][0]']

block5j\_se\_excite (Multiply) (None, None, None, 0 ['block5j\_activation[0][0]',

1344) 'block5j\_se\_expand[0][0]']

block5j\_project\_conv (Conv2D) (None, None, None, 301056 ['block5j\_se\_excite[0][0]']

224)

block5j\_project\_bn (BatchNorma (None, None, None, 896 ['block5j\_project\_conv[0][0]']

lization) 224)

block5j\_drop (FixedDropout) (None, None, None, 0 ['block5j\_project\_bn[0][0]']

224)

block5j\_add (Add) (None, None, None, 0 ['block5j\_drop[0][0]',

224) 'block5i\_add[0][0]']

block6a\_expand\_conv (Conv2D) (None, None, None, 301056 ['block5j\_add[0][0]']

1344)

block6a\_expand\_bn (BatchNormal (None, None, None, 5376 ['block6a\_expand\_conv[0][0]']

ization) 1344)

block6a\_expand\_activation (Act (None, None, None, 0 ['block6a\_expand\_bn[0][0]']

ivation) 1344)

block6a\_dwconv (DepthwiseConv2 (None, None, None, 33600 ['block6a\_expand\_activation[0][0]

D) 1344) ']

block6a\_bn (BatchNormalization (None, None, None, 5376 ['block6a\_dwconv[0][0]']

) 1344)

block6a\_activation (Activation (None, None, None, 0 ['block6a\_bn[0][0]']

) 1344)

block6a\_se\_squeeze (GlobalAver (None, 1344) 0 ['block6a\_activation[0][0]']

agePooling2D)

block6a\_se\_reshape (Reshape) (None, 1, 1, 1344) 0 ['block6a\_se\_squeeze[0][0]']

block6a\_se\_reduce (Conv2D) (None, 1, 1, 56) 75320 ['block6a\_se\_reshape[0][0]']

block6a\_se\_expand (Conv2D) (None, 1, 1, 1344) 76608 ['block6a\_se\_reduce[0][0]']

block6a\_se\_excite (Multiply) (None, None, None, 0 ['block6a\_activation[0][0]',

1344) 'block6a\_se\_expand[0][0]']

block6a\_project\_conv (Conv2D) (None, None, None, 516096 ['block6a\_se\_excite[0][0]']

384)

block6a\_project\_bn (BatchNorma (None, None, None, 1536 ['block6a\_project\_conv[0][0]']

lization) 384)

block6b\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6a\_project\_bn[0][0]']

2304)

block6b\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6b\_expand\_conv[0][0]']

ization) 2304)

block6b\_expand\_activation (Act (None, None, None, 0 ['block6b\_expand\_bn[0][0]']

ivation) 2304)

block6b\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6b\_expand\_activation[0][0]

D) 2304) ']

block6b\_bn (BatchNormalization (None, None, None, 9216 ['block6b\_dwconv[0][0]']

) 2304)

block6b\_activation (Activation (None, None, None, 0 ['block6b\_bn[0][0]']

) 2304)

block6b\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6b\_activation[0][0]']

agePooling2D)

block6b\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6b\_se\_squeeze[0][0]']

block6b\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6b\_se\_reshape[0][0]']

block6b\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6b\_se\_reduce[0][0]']

block6b\_se\_excite (Multiply) (None, None, None, 0 ['block6b\_activation[0][0]',

2304) 'block6b\_se\_expand[0][0]']

block6b\_project\_conv (Conv2D) (None, None, None, 884736 ['block6b\_se\_excite[0][0]']

384)

block6b\_project\_bn (BatchNorma (None, None, None, 1536 ['block6b\_project\_conv[0][0]']

lization) 384)

block6b\_drop (FixedDropout) (None, None, None, 0 ['block6b\_project\_bn[0][0]']

384)

block6b\_add (Add) (None, None, None, 0 ['block6b\_drop[0][0]',

384) 'block6a\_project\_bn[0][0]']

block6c\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6b\_add[0][0]']

2304)

block6c\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6c\_expand\_conv[0][0]']

ization) 2304)

block6c\_expand\_activation (Act (None, None, None, 0 ['block6c\_expand\_bn[0][0]']

ivation) 2304)

block6c\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6c\_expand\_activation[0][0]

D) 2304) ']

block6c\_bn (BatchNormalization (None, None, None, 9216 ['block6c\_dwconv[0][0]']

) 2304)

block6c\_activation (Activation (None, None, None, 0 ['block6c\_bn[0][0]']

) 2304)

block6c\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6c\_activation[0][0]']

agePooling2D)

block6c\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6c\_se\_squeeze[0][0]']

block6c\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6c\_se\_reshape[0][0]']

block6c\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6c\_se\_reduce[0][0]']

block6c\_se\_excite (Multiply) (None, None, None, 0 ['block6c\_activation[0][0]',

2304) 'block6c\_se\_expand[0][0]']

block6c\_project\_conv (Conv2D) (None, None, None, 884736 ['block6c\_se\_excite[0][0]']

384)

block6c\_project\_bn (BatchNorma (None, None, None, 1536 ['block6c\_project\_conv[0][0]']

lization) 384)

block6c\_drop (FixedDropout) (None, None, None, 0 ['block6c\_project\_bn[0][0]']

384)

block6c\_add (Add) (None, None, None, 0 ['block6c\_drop[0][0]',

384) 'block6b\_add[0][0]']

block6d\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6c\_add[0][0]']

2304)

block6d\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6d\_expand\_conv[0][0]']

ization) 2304)

block6d\_expand\_activation (Act (None, None, None, 0 ['block6d\_expand\_bn[0][0]']

ivation) 2304)

block6d\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6d\_expand\_activation[0][0]

D) 2304) ']

block6d\_bn (BatchNormalization (None, None, None, 9216 ['block6d\_dwconv[0][0]']

) 2304)

block6d\_activation (Activation (None, None, None, 0 ['block6d\_bn[0][0]']

) 2304)

block6d\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6d\_activation[0][0]']

agePooling2D)

block6d\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6d\_se\_squeeze[0][0]']

block6d\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6d\_se\_reshape[0][0]']

block6d\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6d\_se\_reduce[0][0]']

block6d\_se\_excite (Multiply) (None, None, None, 0 ['block6d\_activation[0][0]',

2304) 'block6d\_se\_expand[0][0]']

block6d\_project\_conv (Conv2D) (None, None, None, 884736 ['block6d\_se\_excite[0][0]']

384)

block6d\_project\_bn (BatchNorma (None, None, None, 1536 ['block6d\_project\_conv[0][0]']

lization) 384)

block6d\_drop (FixedDropout) (None, None, None, 0 ['block6d\_project\_bn[0][0]']

384)

block6d\_add (Add) (None, None, None, 0 ['block6d\_drop[0][0]',

384) 'block6c\_add[0][0]']

block6e\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6d\_add[0][0]']

2304)

block6e\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6e\_expand\_conv[0][0]']

ization) 2304)

block6e\_expand\_activation (Act (None, None, None, 0 ['block6e\_expand\_bn[0][0]']

ivation) 2304)

block6e\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6e\_expand\_activation[0][0]

D) 2304) ']

block6e\_bn (BatchNormalization (None, None, None, 9216 ['block6e\_dwconv[0][0]']

) 2304)

block6e\_activation (Activation (None, None, None, 0 ['block6e\_bn[0][0]']

) 2304)

block6e\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6e\_activation[0][0]']

agePooling2D)

block6e\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6e\_se\_squeeze[0][0]']

block6e\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6e\_se\_reshape[0][0]']

block6e\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6e\_se\_reduce[0][0]']

block6e\_se\_excite (Multiply) (None, None, None, 0 ['block6e\_activation[0][0]',

2304) 'block6e\_se\_expand[0][0]']

block6e\_project\_conv (Conv2D) (None, None, None, 884736 ['block6e\_se\_excite[0][0]']

384)

block6e\_project\_bn (BatchNorma (None, None, None, 1536 ['block6e\_project\_conv[0][0]']

lization) 384)

block6e\_drop (FixedDropout) (None, None, None, 0 ['block6e\_project\_bn[0][0]']

384)

block6e\_add (Add) (None, None, None, 0 ['block6e\_drop[0][0]',

384) 'block6d\_add[0][0]']

block6f\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6e\_add[0][0]']

2304)

block6f\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6f\_expand\_conv[0][0]']

ization) 2304)

block6f\_expand\_activation (Act (None, None, None, 0 ['block6f\_expand\_bn[0][0]']

ivation) 2304)

block6f\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6f\_expand\_activation[0][0]

D) 2304) ']

block6f\_bn (BatchNormalization (None, None, None, 9216 ['block6f\_dwconv[0][0]']

) 2304)

block6f\_activation (Activation (None, None, None, 0 ['block6f\_bn[0][0]']

) 2304)

block6f\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6f\_activation[0][0]']

agePooling2D)

block6f\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6f\_se\_squeeze[0][0]']

block6f\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6f\_se\_reshape[0][0]']

block6f\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6f\_se\_reduce[0][0]']

block6f\_se\_excite (Multiply) (None, None, None, 0 ['block6f\_activation[0][0]',

2304) 'block6f\_se\_expand[0][0]']

block6f\_project\_conv (Conv2D) (None, None, None, 884736 ['block6f\_se\_excite[0][0]']

384)

block6f\_project\_bn (BatchNorma (None, None, None, 1536 ['block6f\_project\_conv[0][0]']

lization) 384)

block6f\_drop (FixedDropout) (None, None, None, 0 ['block6f\_project\_bn[0][0]']

384)

block6f\_add (Add) (None, None, None, 0 ['block6f\_drop[0][0]',

384) 'block6e\_add[0][0]']

block6g\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6f\_add[0][0]']

2304)

block6g\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6g\_expand\_conv[0][0]']

ization) 2304)

block6g\_expand\_activation (Act (None, None, None, 0 ['block6g\_expand\_bn[0][0]']

ivation) 2304)

block6g\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6g\_expand\_activation[0][0]

D) 2304) ']

block6g\_bn (BatchNormalization (None, None, None, 9216 ['block6g\_dwconv[0][0]']

) 2304)

block6g\_activation (Activation (None, None, None, 0 ['block6g\_bn[0][0]']

) 2304)

block6g\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6g\_activation[0][0]']

agePooling2D)

block6g\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6g\_se\_squeeze[0][0]']

block6g\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6g\_se\_reshape[0][0]']

block6g\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6g\_se\_reduce[0][0]']

block6g\_se\_excite (Multiply) (None, None, None, 0 ['block6g\_activation[0][0]',

2304) 'block6g\_se\_expand[0][0]']

block6g\_project\_conv (Conv2D) (None, None, None, 884736 ['block6g\_se\_excite[0][0]']

384)

block6g\_project\_bn (BatchNorma (None, None, None, 1536 ['block6g\_project\_conv[0][0]']

lization) 384)

block6g\_drop (FixedDropout) (None, None, None, 0 ['block6g\_project\_bn[0][0]']

384)

block6g\_add (Add) (None, None, None, 0 ['block6g\_drop[0][0]',

384) 'block6f\_add[0][0]']

block6h\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6g\_add[0][0]']

2304)

block6h\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6h\_expand\_conv[0][0]']

ization) 2304)

block6h\_expand\_activation (Act (None, None, None, 0 ['block6h\_expand\_bn[0][0]']

ivation) 2304)

block6h\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6h\_expand\_activation[0][0]

D) 2304) ']

block6h\_bn (BatchNormalization (None, None, None, 9216 ['block6h\_dwconv[0][0]']

) 2304)

block6h\_activation (Activation (None, None, None, 0 ['block6h\_bn[0][0]']

) 2304)

block6h\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6h\_activation[0][0]']

agePooling2D)

block6h\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6h\_se\_squeeze[0][0]']

block6h\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6h\_se\_reshape[0][0]']

block6h\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6h\_se\_reduce[0][0]']

block6h\_se\_excite (Multiply) (None, None, None, 0 ['block6h\_activation[0][0]',

2304) 'block6h\_se\_expand[0][0]']

block6h\_project\_conv (Conv2D) (None, None, None, 884736 ['block6h\_se\_excite[0][0]']

384)

block6h\_project\_bn (BatchNorma (None, None, None, 1536 ['block6h\_project\_conv[0][0]']

lization) 384)

block6h\_drop (FixedDropout) (None, None, None, 0 ['block6h\_project\_bn[0][0]']

384)

block6h\_add (Add) (None, None, None, 0 ['block6h\_drop[0][0]',

384) 'block6g\_add[0][0]']

block6i\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6h\_add[0][0]']

2304)

block6i\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6i\_expand\_conv[0][0]']

ization) 2304)

block6i\_expand\_activation (Act (None, None, None, 0 ['block6i\_expand\_bn[0][0]']

ivation) 2304)

block6i\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6i\_expand\_activation[0][0]

D) 2304) ']

block6i\_bn (BatchNormalization (None, None, None, 9216 ['block6i\_dwconv[0][0]']

) 2304)

block6i\_activation (Activation (None, None, None, 0 ['block6i\_bn[0][0]']

) 2304)

block6i\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6i\_activation[0][0]']

agePooling2D)

block6i\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6i\_se\_squeeze[0][0]']

block6i\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6i\_se\_reshape[0][0]']

block6i\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6i\_se\_reduce[0][0]']

block6i\_se\_excite (Multiply) (None, None, None, 0 ['block6i\_activation[0][0]',

2304) 'block6i\_se\_expand[0][0]']

block6i\_project\_conv (Conv2D) (None, None, None, 884736 ['block6i\_se\_excite[0][0]']

384)

block6i\_project\_bn (BatchNorma (None, None, None, 1536 ['block6i\_project\_conv[0][0]']

lization) 384)

block6i\_drop (FixedDropout) (None, None, None, 0 ['block6i\_project\_bn[0][0]']

384)

block6i\_add (Add) (None, None, None, 0 ['block6i\_drop[0][0]',

384) 'block6h\_add[0][0]']

block6j\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6i\_add[0][0]']

2304)

block6j\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6j\_expand\_conv[0][0]']

ization) 2304)

block6j\_expand\_activation (Act (None, None, None, 0 ['block6j\_expand\_bn[0][0]']

ivation) 2304)

block6j\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6j\_expand\_activation[0][0]

D) 2304) ']

block6j\_bn (BatchNormalization (None, None, None, 9216 ['block6j\_dwconv[0][0]']

) 2304)

block6j\_activation (Activation (None, None, None, 0 ['block6j\_bn[0][0]']

) 2304)

block6j\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6j\_activation[0][0]']

agePooling2D)

block6j\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6j\_se\_squeeze[0][0]']

block6j\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6j\_se\_reshape[0][0]']

block6j\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6j\_se\_reduce[0][0]']

block6j\_se\_excite (Multiply) (None, None, None, 0 ['block6j\_activation[0][0]',

2304) 'block6j\_se\_expand[0][0]']

block6j\_project\_conv (Conv2D) (None, None, None, 884736 ['block6j\_se\_excite[0][0]']

384)

block6j\_project\_bn (BatchNorma (None, None, None, 1536 ['block6j\_project\_conv[0][0]']

lization) 384)

block6j\_drop (FixedDropout) (None, None, None, 0 ['block6j\_project\_bn[0][0]']

384)

block6j\_add (Add) (None, None, None, 0 ['block6j\_drop[0][0]',

384) 'block6i\_add[0][0]']

block6k\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6j\_add[0][0]']

2304)

block6k\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6k\_expand\_conv[0][0]']

ization) 2304)

block6k\_expand\_activation (Act (None, None, None, 0 ['block6k\_expand\_bn[0][0]']

ivation) 2304)

block6k\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6k\_expand\_activation[0][0]

D) 2304) ']

block6k\_bn (BatchNormalization (None, None, None, 9216 ['block6k\_dwconv[0][0]']

) 2304)

block6k\_activation (Activation (None, None, None, 0 ['block6k\_bn[0][0]']

) 2304)

block6k\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6k\_activation[0][0]']

agePooling2D)

block6k\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6k\_se\_squeeze[0][0]']

block6k\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6k\_se\_reshape[0][0]']

block6k\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6k\_se\_reduce[0][0]']

block6k\_se\_excite (Multiply) (None, None, None, 0 ['block6k\_activation[0][0]',

2304) 'block6k\_se\_expand[0][0]']

block6k\_project\_conv (Conv2D) (None, None, None, 884736 ['block6k\_se\_excite[0][0]']

384)

block6k\_project\_bn (BatchNorma (None, None, None, 1536 ['block6k\_project\_conv[0][0]']

lization) 384)

block6k\_drop (FixedDropout) (None, None, None, 0 ['block6k\_project\_bn[0][0]']

384)

block6k\_add (Add) (None, None, None, 0 ['block6k\_drop[0][0]',

384) 'block6j\_add[0][0]']

block6l\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6k\_add[0][0]']

2304)

block6l\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6l\_expand\_conv[0][0]']

ization) 2304)

block6l\_expand\_activation (Act (None, None, None, 0 ['block6l\_expand\_bn[0][0]']

ivation) 2304)

block6l\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6l\_expand\_activation[0][0]

D) 2304) ']

block6l\_bn (BatchNormalization (None, None, None, 9216 ['block6l\_dwconv[0][0]']

) 2304)

block6l\_activation (Activation (None, None, None, 0 ['block6l\_bn[0][0]']

) 2304)

block6l\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6l\_activation[0][0]']

agePooling2D)

block6l\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6l\_se\_squeeze[0][0]']

block6l\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6l\_se\_reshape[0][0]']

block6l\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6l\_se\_reduce[0][0]']

block6l\_se\_excite (Multiply) (None, None, None, 0 ['block6l\_activation[0][0]',

2304) 'block6l\_se\_expand[0][0]']

block6l\_project\_conv (Conv2D) (None, None, None, 884736 ['block6l\_se\_excite[0][0]']

384)

block6l\_project\_bn (BatchNorma (None, None, None, 1536 ['block6l\_project\_conv[0][0]']

lization) 384)

block6l\_drop (FixedDropout) (None, None, None, 0 ['block6l\_project\_bn[0][0]']

384)

block6l\_add (Add) (None, None, None, 0 ['block6l\_drop[0][0]',

384) 'block6k\_add[0][0]']

block6m\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6l\_add[0][0]']

2304)

block6m\_expand\_bn (BatchNormal (None, None, None, 9216 ['block6m\_expand\_conv[0][0]']

ization) 2304)

block6m\_expand\_activation (Act (None, None, None, 0 ['block6m\_expand\_bn[0][0]']

ivation) 2304)

block6m\_dwconv (DepthwiseConv2 (None, None, None, 57600 ['block6m\_expand\_activation[0][0]

D) 2304) ']

block6m\_bn (BatchNormalization (None, None, None, 9216 ['block6m\_dwconv[0][0]']

) 2304)

block6m\_activation (Activation (None, None, None, 0 ['block6m\_bn[0][0]']

) 2304)

block6m\_se\_squeeze (GlobalAver (None, 2304) 0 ['block6m\_activation[0][0]']

agePooling2D)

block6m\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block6m\_se\_squeeze[0][0]']

block6m\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block6m\_se\_reshape[0][0]']

block6m\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block6m\_se\_reduce[0][0]']

block6m\_se\_excite (Multiply) (None, None, None, 0 ['block6m\_activation[0][0]',

2304) 'block6m\_se\_expand[0][0]']

block6m\_project\_conv (Conv2D) (None, None, None, 884736 ['block6m\_se\_excite[0][0]']

384)

block6m\_project\_bn (BatchNorma (None, None, None, 1536 ['block6m\_project\_conv[0][0]']

lization) 384)

block6m\_drop (FixedDropout) (None, None, None, 0 ['block6m\_project\_bn[0][0]']

384)

block6m\_add (Add) (None, None, None, 0 ['block6m\_drop[0][0]',

384) 'block6l\_add[0][0]']

block7a\_expand\_conv (Conv2D) (None, None, None, 884736 ['block6m\_add[0][0]']

2304)

block7a\_expand\_bn (BatchNormal (None, None, None, 9216 ['block7a\_expand\_conv[0][0]']

ization) 2304)

block7a\_expand\_activation (Act (None, None, None, 0 ['block7a\_expand\_bn[0][0]']

ivation) 2304)

block7a\_dwconv (DepthwiseConv2 (None, None, None, 20736 ['block7a\_expand\_activation[0][0]

D) 2304) ']

block7a\_bn (BatchNormalization (None, None, None, 9216 ['block7a\_dwconv[0][0]']

) 2304)

block7a\_activation (Activation (None, None, None, 0 ['block7a\_bn[0][0]']

) 2304)

block7a\_se\_squeeze (GlobalAver (None, 2304) 0 ['block7a\_activation[0][0]']

agePooling2D)

block7a\_se\_reshape (Reshape) (None, 1, 1, 2304) 0 ['block7a\_se\_squeeze[0][0]']

block7a\_se\_reduce (Conv2D) (None, 1, 1, 96) 221280 ['block7a\_se\_reshape[0][0]']

block7a\_se\_expand (Conv2D) (None, 1, 1, 2304) 223488 ['block7a\_se\_reduce[0][0]']

block7a\_se\_excite (Multiply) (None, None, None, 0 ['block7a\_activation[0][0]',

2304) 'block7a\_se\_expand[0][0]']

block7a\_project\_conv (Conv2D) (None, None, None, 1474560 ['block7a\_se\_excite[0][0]']

640)

block7a\_project\_bn (BatchNorma (None, None, None, 2560 ['block7a\_project\_conv[0][0]']

lization) 640)

block7b\_expand\_conv (Conv2D) (None, None, None, 2457600 ['block7a\_project\_bn[0][0]']

3840)

block7b\_expand\_bn (BatchNormal (None, None, None, 15360 ['block7b\_expand\_conv[0][0]']

ization) 3840)

block7b\_expand\_activation (Act (None, None, None, 0 ['block7b\_expand\_bn[0][0]']

ivation) 3840)

block7b\_dwconv (DepthwiseConv2 (None, None, None, 34560 ['block7b\_expand\_activation[0][0]

D) 3840) ']

block7b\_bn (BatchNormalization (None, None, None, 15360 ['block7b\_dwconv[0][0]']

) 3840)

block7b\_activation (Activation (None, None, None, 0 ['block7b\_bn[0][0]']

) 3840)

block7b\_se\_squeeze (GlobalAver (None, 3840) 0 ['block7b\_activation[0][0]']

agePooling2D)

block7b\_se\_reshape (Reshape) (None, 1, 1, 3840) 0 ['block7b\_se\_squeeze[0][0]']

block7b\_se\_reduce (Conv2D) (None, 1, 1, 160) 614560 ['block7b\_se\_reshape[0][0]']

block7b\_se\_expand (Conv2D) (None, 1, 1, 3840) 618240 ['block7b\_se\_reduce[0][0]']

block7b\_se\_excite (Multiply) (None, None, None, 0 ['block7b\_activation[0][0]',

3840) 'block7b\_se\_expand[0][0]']

block7b\_project\_conv (Conv2D) (None, None, None, 2457600 ['block7b\_se\_excite[0][0]']

640)

block7b\_project\_bn (BatchNorma (None, None, None, 2560 ['block7b\_project\_conv[0][0]']

lization) 640)

block7b\_drop (FixedDropout) (None, None, None, 0 ['block7b\_project\_bn[0][0]']

640)

block7b\_add (Add) (None, None, None, 0 ['block7b\_drop[0][0]',

640) 'block7a\_project\_bn[0][0]']

block7c\_expand\_conv (Conv2D) (None, None, None, 2457600 ['block7b\_add[0][0]']

3840)

block7c\_expand\_bn (BatchNormal (None, None, None, 15360 ['block7c\_expand\_conv[0][0]']

ization) 3840)

block7c\_expand\_activation (Act (None, None, None, 0 ['block7c\_expand\_bn[0][0]']

ivation) 3840)

block7c\_dwconv (DepthwiseConv2 (None, None, None, 34560 ['block7c\_expand\_activation[0][0]

D) 3840) ']

block7c\_bn (BatchNormalization (None, None, None, 15360 ['block7c\_dwconv[0][0]']

) 3840)

block7c\_activation (Activation (None, None, None, 0 ['block7c\_bn[0][0]']

) 3840)

block7c\_se\_squeeze (GlobalAver (None, 3840) 0 ['block7c\_activation[0][0]']

agePooling2D)

block7c\_se\_reshape (Reshape) (None, 1, 1, 3840) 0 ['block7c\_se\_squeeze[0][0]']

block7c\_se\_reduce (Conv2D) (None, 1, 1, 160) 614560 ['block7c\_se\_reshape[0][0]']

block7c\_se\_expand (Conv2D) (None, 1, 1, 3840) 618240 ['block7c\_se\_reduce[0][0]']

block7c\_se\_excite (Multiply) (None, None, None, 0 ['block7c\_activation[0][0]',

3840) 'block7c\_se\_expand[0][0]']

block7c\_project\_conv (Conv2D) (None, None, None, 2457600 ['block7c\_se\_excite[0][0]']

640)

block7c\_project\_bn (BatchNorma (None, None, None, 2560 ['block7c\_project\_conv[0][0]']

lization) 640)

block7c\_drop (FixedDropout) (None, None, None, 0 ['block7c\_project\_bn[0][0]']

640)

block7c\_add (Add) (None, None, None, 0 ['block7c\_drop[0][0]',

640) 'block7b\_add[0][0]']

block7d\_expand\_conv (Conv2D) (None, None, None, 2457600 ['block7c\_add[0][0]']

3840)

block7d\_expand\_bn (BatchNormal (None, None, None, 15360 ['block7d\_expand\_conv[0][0]']

ization) 3840)

block7d\_expand\_activation (Act (None, None, None, 0 ['block7d\_expand\_bn[0][0]']

ivation) 3840)

block7d\_dwconv (DepthwiseConv2 (None, None, None, 34560 ['block7d\_expand\_activation[0][0]

D) 3840) ']

block7d\_bn (BatchNormalization (None, None, None, 15360 ['block7d\_dwconv[0][0]']

) 3840)

block7d\_activation (Activation (None, None, None, 0 ['block7d\_bn[0][0]']

) 3840)

block7d\_se\_squeeze (GlobalAver (None, 3840) 0 ['block7d\_activation[0][0]']

agePooling2D)

block7d\_se\_reshape (Reshape) (None, 1, 1, 3840) 0 ['block7d\_se\_squeeze[0][0]']

block7d\_se\_reduce (Conv2D) (None, 1, 1, 160) 614560 ['block7d\_se\_reshape[0][0]']

block7d\_se\_expand (Conv2D) (None, 1, 1, 3840) 618240 ['block7d\_se\_reduce[0][0]']

block7d\_se\_excite (Multiply) (None, None, None, 0 ['block7d\_activation[0][0]',

3840) 'block7d\_se\_expand[0][0]']

block7d\_project\_conv (Conv2D) (None, None, None, 2457600 ['block7d\_se\_excite[0][0]']

640)

block7d\_project\_bn (BatchNorma (None, None, None, 2560 ['block7d\_project\_conv[0][0]']

lization) 640)

block7d\_drop (FixedDropout) (None, None, None, 0 ['block7d\_project\_bn[0][0]']

640)

block7d\_add (Add) (None, None, None, 0 ['block7d\_drop[0][0]',

640) 'block7c\_add[0][0]']

top\_conv (Conv2D) (None, None, None, 1638400 ['block7d\_add[0][0]']

2560)

top\_bn (BatchNormalization) (None, None, None, 10240 ['top\_conv[0][0]']

2560)

top\_activation (Activation) (None, None, None, 0 ['top\_bn[0][0]']

2560)

decoder\_stage0\_upsampling (UpS (None, None, None, 0 ['top\_activation[0][0]']

ampling2D) 2560)

decoder\_stage0\_concat (Concate (None, None, None, 0 ['decoder\_stage0\_upsampling[0][0]

nate) 3904) ',

'block6a\_expand\_activation[0][0]

']

decoder\_stage0a\_conv (Conv2D) (None, None, None, 8994816 ['decoder\_stage0\_concat[0][0]']

256)

decoder\_stage0a\_bn (BatchNorma (None, None, None, 1024 ['decoder\_stage0a\_conv[0][0]']

lization) 256)

decoder\_stage0a\_relu (Activati (None, None, None, 0 ['decoder\_stage0a\_bn[0][0]']

on) 256)

decoder\_stage0b\_conv (Conv2D) (None, None, None, 589824 ['decoder\_stage0a\_relu[0][0]']

256)

decoder\_stage0b\_bn (BatchNorma (None, None, None, 1024 ['decoder\_stage0b\_conv[0][0]']

lization) 256)

decoder\_stage0b\_relu (Activati (None, None, None, 0 ['decoder\_stage0b\_bn[0][0]']

on) 256)

decoder\_stage1\_upsampling (UpS (None, None, None, 0 ['decoder\_stage0b\_relu[0][0]']

ampling2D) 256)

decoder\_stage1\_concat (Concate (None, None, None, 0 ['decoder\_stage1\_upsampling[0][0]

nate) 736) ',

'block4a\_expand\_activation[0][0]

']

decoder\_stage1a\_conv (Conv2D) (None, None, None, 847872 ['decoder\_stage1\_concat[0][0]']

128)

decoder\_stage1a\_bn (BatchNorma (None, None, None, 512 ['decoder\_stage1a\_conv[0][0]']

lization) 128)

decoder\_stage1a\_relu (Activati (None, None, None, 0 ['decoder\_stage1a\_bn[0][0]']

on) 128)

decoder\_stage1b\_conv (Conv2D) (None, None, None, 147456 ['decoder\_stage1a\_relu[0][0]']

128)

decoder\_stage1b\_bn (BatchNorma (None, None, None, 512 ['decoder\_stage1b\_conv[0][0]']

lization) 128)

decoder\_stage1b\_relu (Activati (None, None, None, 0 ['decoder\_stage1b\_bn[0][0]']

on) 128)

decoder\_stage2\_upsampling (UpS (None, None, None, 0 ['decoder\_stage1b\_relu[0][0]']

ampling2D) 128)

decoder\_stage2\_concat (Concate (None, None, None, 0 ['decoder\_stage2\_upsampling[0][0]

nate) 416) ',

'block3a\_expand\_activation[0][0]

']

decoder\_stage2a\_conv (Conv2D) (None, None, None, 239616 ['decoder\_stage2\_concat[0][0]']

64)

decoder\_stage2a\_bn (BatchNorma (None, None, None, 256 ['decoder\_stage2a\_conv[0][0]']

lization) 64)

decoder\_stage2a\_relu (Activati (None, None, None, 0 ['decoder\_stage2a\_bn[0][0]']

on) 64)

decoder\_stage2b\_conv (Conv2D) (None, None, None, 36864 ['decoder\_stage2a\_relu[0][0]']

64)

decoder\_stage2b\_bn (BatchNorma (None, None, None, 256 ['decoder\_stage2b\_conv[0][0]']

lization) 64)

decoder\_stage2b\_relu (Activati (None, None, None, 0 ['decoder\_stage2b\_bn[0][0]']

on) 64)

decoder\_stage3\_upsampling (UpS (None, None, None, 0 ['decoder\_stage2b\_relu[0][0]']

ampling2D) 64)

decoder\_stage3\_concat (Concate (None, None, None, 0 ['decoder\_stage3\_upsampling[0][0]

nate) 256) ',

'block2a\_expand\_activation[0][0]

']

decoder\_stage3a\_conv (Conv2D) (None, None, None, 73728 ['decoder\_stage3\_concat[0][0]']

32)

decoder\_stage3a\_bn (BatchNorma (None, None, None, 128 ['decoder\_stage3a\_conv[0][0]']

lization) 32)

decoder\_stage3a\_relu (Activati (None, None, None, 0 ['decoder\_stage3a\_bn[0][0]']

on) 32)

decoder\_stage3b\_conv (Conv2D) (None, None, None, 9216 ['decoder\_stage3a\_relu[0][0]']

32)

decoder\_stage3b\_bn (BatchNorma (None, None, None, 128 ['decoder\_stage3b\_conv[0][0]']

lization) 32)

decoder\_stage3b\_relu (Activati (None, None, None, 0 ['decoder\_stage3b\_bn[0][0]']

on) 32)

decoder\_stage4\_upsampling (UpS (None, None, None, 0 ['decoder\_stage3b\_relu[0][0]']

ampling2D) 32)

decoder\_stage4a\_conv (Conv2D) (None, None, None, 4608 ['decoder\_stage4\_upsampling[0][0]

16) ']

decoder\_stage4a\_bn (BatchNorma (None, None, None, 64 ['decoder\_stage4a\_conv[0][0]']

lization) 16)

decoder\_stage4a\_relu (Activati (None, None, None, 0 ['decoder\_stage4a\_bn[0][0]']

on) 16)

decoder\_stage4b\_conv (Conv2D) (None, None, None, 2304 ['decoder\_stage4a\_relu[0][0]']

16)

decoder\_stage4b\_bn (BatchNorma (None, None, None, 64 ['decoder\_stage4b\_conv[0][0]']

lization) 16)

decoder\_stage4b\_relu (Activati (None, None, None, 0 ['decoder\_stage4b\_bn[0][0]']

on) 16)

final\_conv (Conv2D) (None, None, None, 145 ['decoder\_stage4b\_relu[0][0]']

1)

sigmoid (Activation) (None, None, None, 0 ['final\_conv[0][0]']

1)

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Total params: 75,048,097

Trainable params: 74,735,393

Non-trainable params: 312,704

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None