

SHAPE PARAMETERS OF AlexNet AND ITS RS DATAFLOW MAPPING PARAMETERS ON EYERISS. THIS MAPPING ASSUMES A BATCH SIZE (N) OF 4

Layer	H/W	R/S	E/F	C	M	U	m	n	e	p	q	r	t
CONV1	227	11	55	3	64	4	64	1	7	16	1	1	2
CONV2	31	5	27	64	192	1	64	1	27	16	2	1	1
CONV3	15	3	13	192	384	1	64	4	13	16	4	1	4
CONV4	15	3	13	384	256	1	64	4	13	16	3	2	2
CONV5	15	3	13	256	256	1	64	4	13	16	3	2	2

H/W: height and width for ifmap.

R/S: height and width for filter.

E/F: height and width for ofmap.

C: number of ifmap / filter channels.

M: number of filters / number of ofmap channels.

N: batch size of ifmaps.

U: stride number.

m: number of ofmap channels stored in the global buffer.

n: number of ifmaps used in a processing pass.

e: width of PE set (strip mining if necessary).

p: number of filters processed by a PE set.

q: number of channels processed by a PE set.

r: number of PE sets that process different channels in the PE array.

t: number of PE sets that process different filters in the PE array.

p x t: Number of filters processed by a PE array.

q x r: Number of channels processed by a PE array.