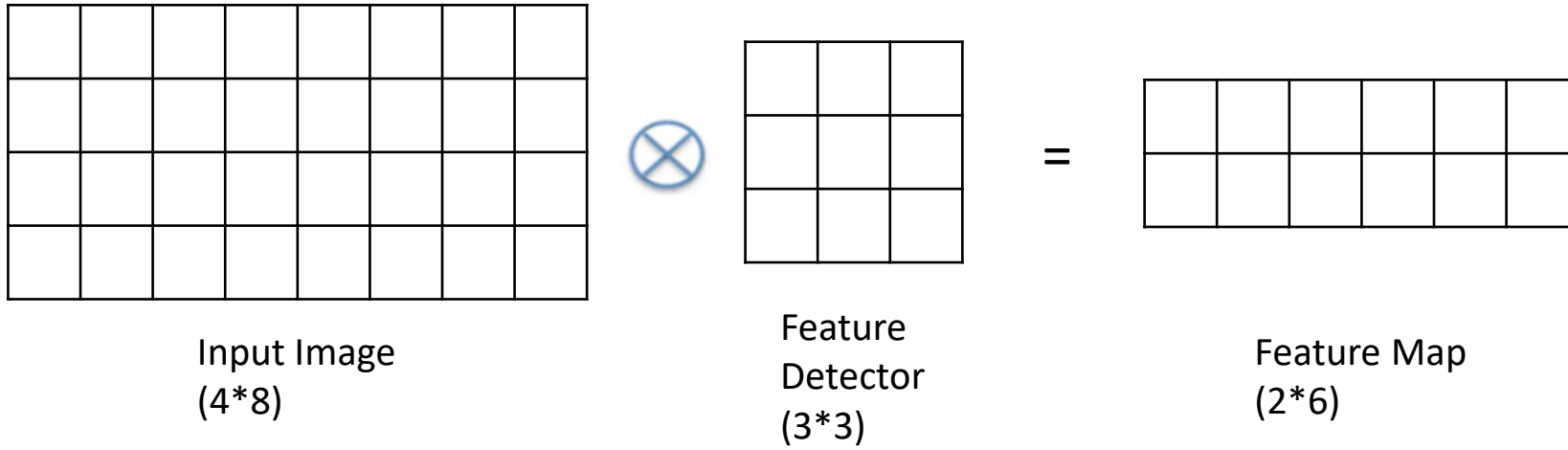
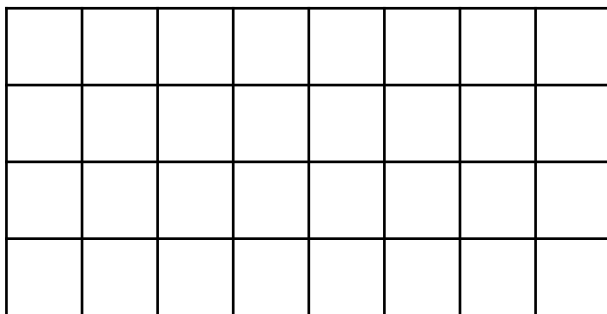


Research of AI accelerator

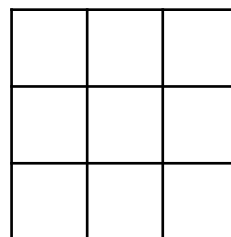
Con2d Transformation



Split input image with weight

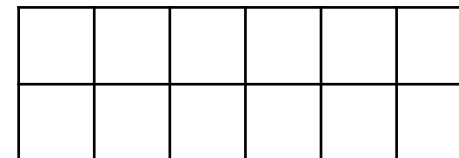


Input Image
(4*8)



Feature
Detector
(3*3)

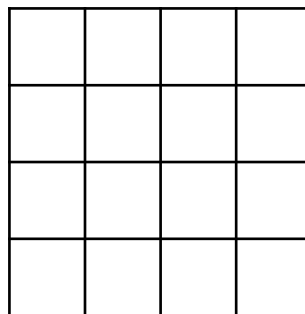
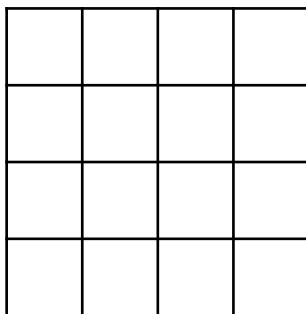
=



Feature Map
(2*6)



Split image



Input Image
(4*8)



Feature
Detector
(3*3)

=

Feature Map
(2*6)



Split image

				0	0
				0	0
				0	0
				0	0

Zero padding

0	0				
0	0				
0	0				
0	0				

Zero padding

Input Image
(4*8)



Feature
Detector
(3*3)

=

Feature Map
(2*6)



Split image

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				0	0
				0	0

Zero padding



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Zero padding



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Input Image
(4*8)



Feature
Detector
(3*3)

=

Feature Map
(2*6)



Split image

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Input Image
(4*8)



Feature
Detector
(3*3)

=

Feature Map
(2*6)



Split image

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				0	0

Zero padding



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Zero padding



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Zero padding

Follow up

1. If the output size is 2 (2×3), how to split the input image to get the result ?
2. To consider input s/ weight and output stationary to do the optimization.
3. Split input image along height and dimension.