	Activation shape	Activation size	# parameters
① Input	(32,32,3)	3072	0
② CONV1 (f=5, s=1)	(28,28,8)	6272	208
③ POOL1	(14,14,8)	1568	0
④ CONV2 (f=5, s=1)	(10,10,16)	1600	416
⑤ POOL2	(5,5,16)	400	0
⑥ FC1	(120,1)	120	48001
⑦ FC2	(84,1)	84	10081
⑧ Softmax	(10,1)	10.	841

hight.size   chanel (R GB)

① Input ⟶ colored image with size $32 \times 32 \times 3$

activation size $= 32 \times 32 \times 3 = 3072$ width size

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② CONV1 (filter size = 5, stride = 1)   and # filters = 8

output image size $= \dfrac{32 - 5 + 2(0)}{1} + 1 = 28$

∴ activation shape (28, 28, 8) & activation size $= 28 \times 28 \times 8 = 6272$

parameters $= 5 * 5 * 8 + 8 = 208$

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③ pool size = 2   ∴ The output image $= 28/2 = 14$

Note: number of filter will not change

activation shape (14, 14, 8)

activation size $= 14 \times 14 * 8 = 1568$

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④ Conv2 (filter size = 5, stride = 1) and # filters = 16

output image size = $\frac{14 - 5 + 2(0)}{1} + 1 = 10$

∴ activation shape (5, 5, 16) & activation size = 10 * 10 * 16 = 1600

parameters = 5 * 5 * 16 + 16 = 416

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⑤ pool size = 2   ∴ The output image = 10/2 = 5

Note: number of filter will not change

activation shape (5, 5, 16)

activation size = 5 * 5 * 16 = 400

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⑥ # hidden nodes (120)

activation size = 120 * 1 = 120

parameters = 120 * 400 + 1 = 48001
                        ↓
            from the previous layer

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⑦ # hidden nodes (84)

activation size = 84 * 1 = 84

parameters = 84 * 120 + 1 = 10081
                        ↓
            from the previous layer

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⑧ # ouput = 10 & activation size = 10 * 1 = 10

parameter = 10 * 84 + 1 = 841   from the last layer