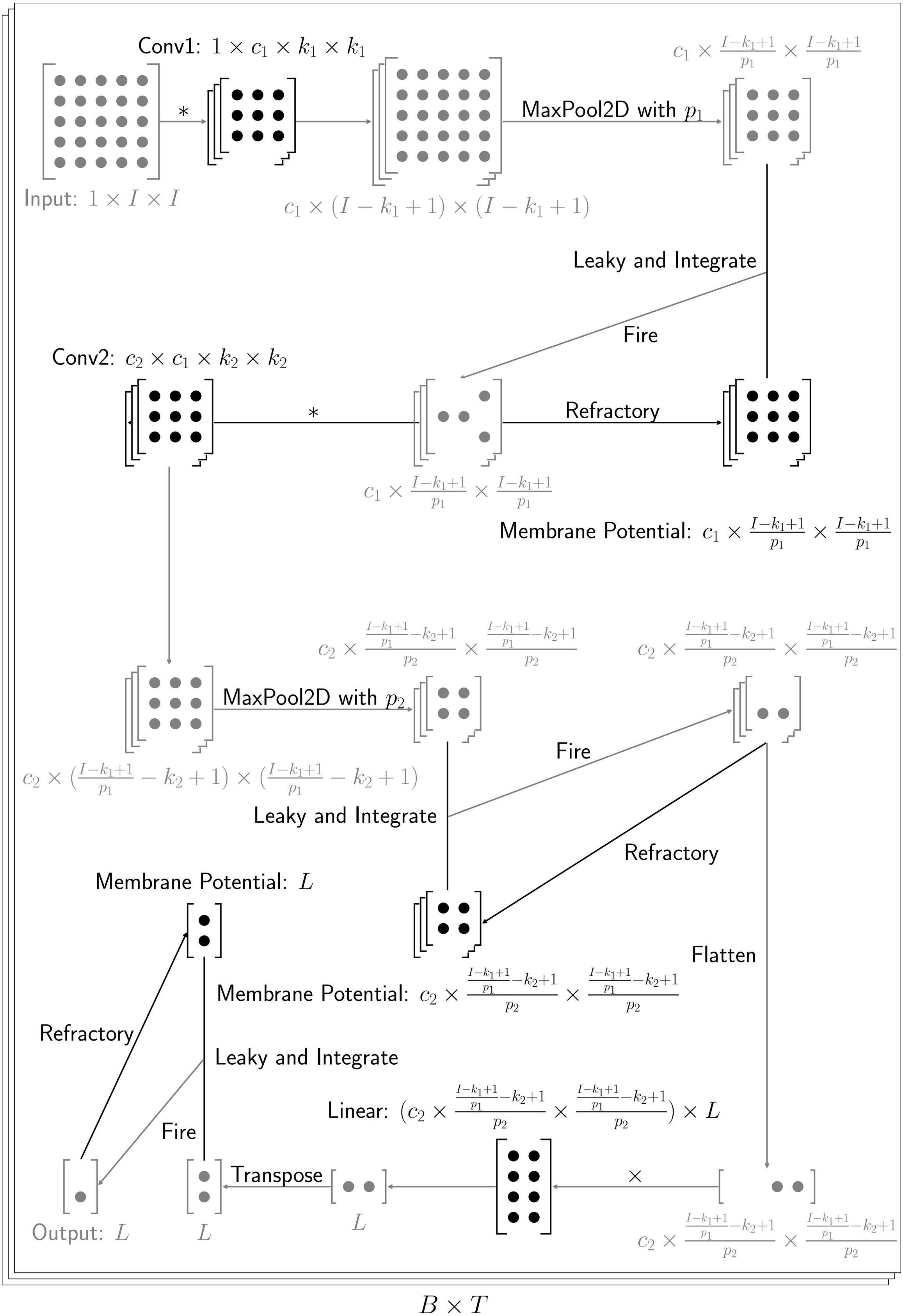
Conv1: $1 \times c_1 \times k_1 \times k_1$
Input: $1 \times I \times I$
$*$
$c_1 \times (I - k_1 + 1) \times (I - k_1 + 1)$
MaxPool2D with p_1
$c_1 \times \frac{I-k_1+1}{p_1} \times \frac{I-k_1+1}{p_1}$
Leaky and Integrate
Fire
Conv2: $c_2 \times c_1 \times k_2 \times k_2$
$*$
$c_1 \times \frac{I-k_1+1}{p_1} \times \frac{I-k_1+1}{p_1}$
Refractory
Membrane Potential: $c_1 \times \frac{I-k_1+1}{p_1} \times \frac{I-k_1+1}{p_1}$
MaxPool2D with p_2
$c_2 \times (\frac{I-k_1+1}{p_1} - k_2 + 1) \times (\frac{I-k_1+1}{p_1} - k_2 + 1)$
$c_2 \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2} \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2}$
$c_2 \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2} \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2}$
Fire
Leaky and Integrate
Refractory
Membrane Potential: L
Flatten
Membrane Potential: $c_2 \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2} \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2}$
Refractory
Leaky and Integrate
Fire
Linear: $(c_2 \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2} \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2}) \times L$
Transpose
$\times$
Output: L
L
L
$c_2 \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2} \times \frac{\frac{I-k_1+1}{p_1}-k_2+1}{p_2}$
$B \times T$