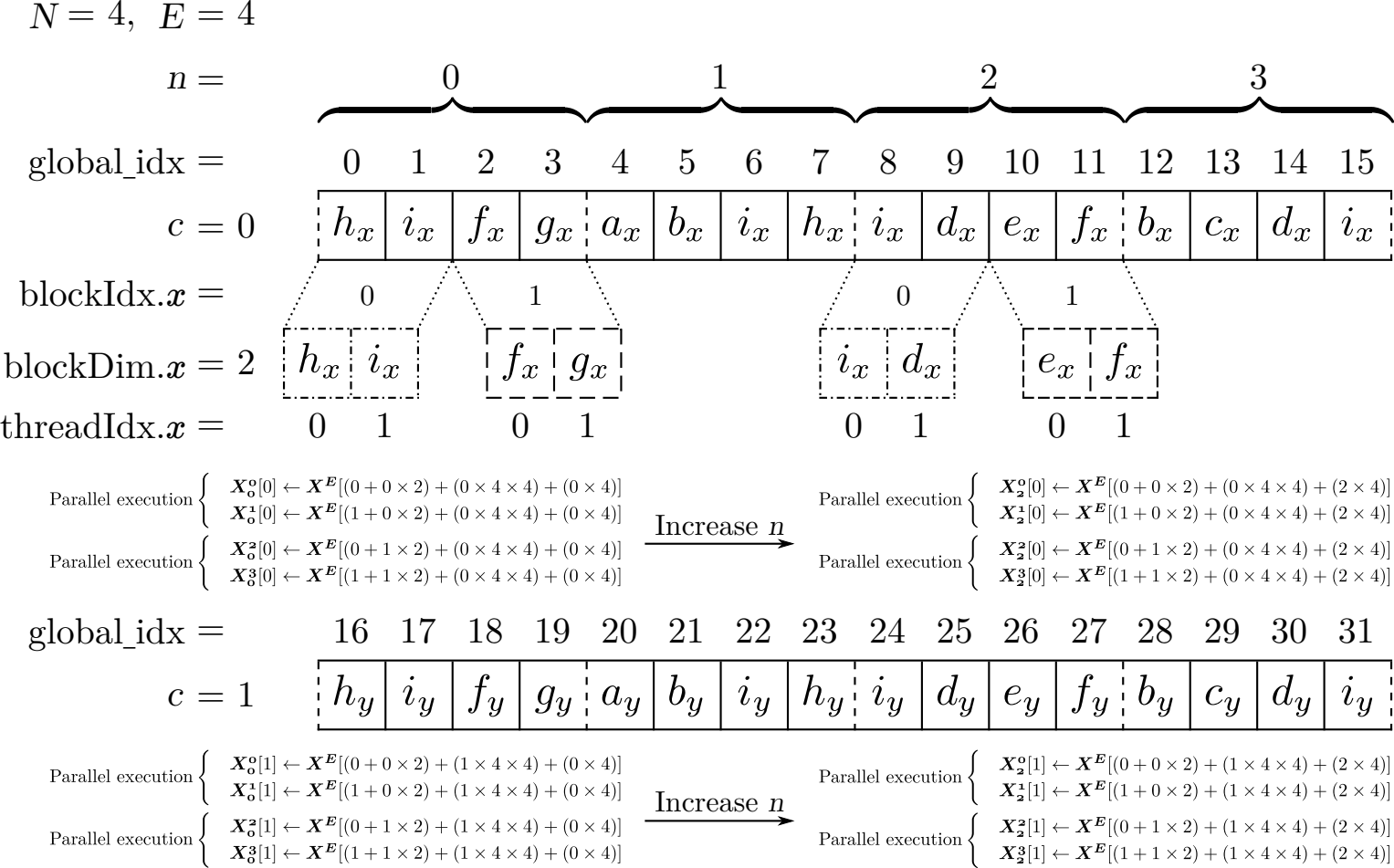
$N = 4,\ E = 4$
$n =$
0
1
2
3
global_idx =
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
$c = 0$
$h_x$ $i_x$ $f_x$ $g_x$ $a_x$ $b_x$ $i_x$ $h_x$ $i_x$ $d_x$ $e_x$ $f_x$ $b_x$ $c_x$ $d_x$ $i_x$
blockIdx.$x$ =
0
1
0
1
blockDim.$x$ = 2
$h_x$ $i_x$
$f_x$ $g_x$
$i_x$ $d_x$
$e_x$ $f_x$
threadIdx.$x$ =
0 1 0 1 0 1 0 1
Parallel execution
$\boldsymbol{X_o^0}[0] \leftarrow \boldsymbol{X^E}[(0+0\times2)+(0\times4\times4)+(0\times4)]$
$\boldsymbol{X_o^1}[0] \leftarrow \boldsymbol{X^E}[(1+0\times2)+(0\times4\times4)+(0\times4)]$
Parallel execution
$\boldsymbol{X_o^2}[0] \leftarrow \boldsymbol{X^E}[(0+1\times2)+(0\times4\times4)+(0\times4)]$
$\boldsymbol{X_o^3}[0] \leftarrow \boldsymbol{X^E}[(1+1\times2)+(0\times4\times4)+(0\times4)]$
Increase $n$
Parallel execution
$\boldsymbol{X_2^0}[0] \leftarrow \boldsymbol{X^E}[(0+0\times2)+(0\times4\times4)+(2\times4)]$
$\boldsymbol{X_2^1}[0] \leftarrow \boldsymbol{X^E}[(1+0\times2)+(0\times4\times4)+(2\times4)]$
Parallel execution
$\boldsymbol{X_2^2}[0] \leftarrow \boldsymbol{X^E}[(0+1\times2)+(0\times4\times4)+(2\times4)]$
$\boldsymbol{X_2^3}[0] \leftarrow \boldsymbol{X^E}[(1+1\times2)+(0\times4\times4)+(2\times4)]$
global_idx =
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
$c = 1$
$h_y$ $i_y$ $f_y$ $g_y$ $a_y$ $b_y$ $i_y$ $h_y$ $i_y$ $d_y$ $e_y$ $f_y$ $b_y$ $c_y$ $d_y$ $i_y$
Parallel execution
$\boldsymbol{X_o^0}[1] \leftarrow \boldsymbol{X^E}[(0+0\times2)+(1\times4\times4)+(0\times4)]$
$\boldsymbol{X_o^1}[1] \leftarrow \boldsymbol{X^E}[(1+0\times2)+(1\times4\times4)+(0\times4)]$
Parallel execution
$\boldsymbol{X_o^2}[1] \leftarrow \boldsymbol{X^E}[(0+1\times2)+(1\times4\times4)+(0\times4)]$
$\boldsymbol{X_o^3}[1] \leftarrow \boldsymbol{X^E}[(1+1\times2)+(1\times4\times4)+(0\times4)]$
Increase $n$
Parallel execution
$\boldsymbol{X_2^0}[1] \leftarrow \boldsymbol{X^E}[(0+0\times2)+(1\times4\times4)+(2\times4)]$
$\boldsymbol{X_2^1}[1] \leftarrow \boldsymbol{X^E}[(1+0\times2)+(1\times4\times4)+(2\times4)]$
Parallel execution
$\boldsymbol{X_2^2}[1] \leftarrow \boldsymbol{X^E}[(0+1\times2)+(1\times4\times4)+(2\times4)]$
$\boldsymbol{X_2^3}[1] \leftarrow \boldsymbol{X^E}[(1+1\times2)+(1\times4\times4)+(2\times4)]$