

Baseline

latency	DSP
507	27

array-partition factor = 3

loop unroll factor = 6

latency	DSP
263	66

array-partition factor = 3

loop unroll factor = 6

pipeline II = 1 rewind  $\Rightarrow$  put in first loop

latency	DSP
127	93

array-partition factor = 3

loop unroll factor = 6

pipeline II = 1 rewind  $\Rightarrow$  out of loop

latency	DSP
56	300

$\Downarrow$

use m\_axi instead of s\_axilite

latency	DSP
132	1323

array-partition factor = 3

loop unroll factor = 6

pipeline II = 1 rewind  $\Rightarrow$  out of loop

use ap\_none instead of s\_axilite

$\Leftarrow$

$\Rightarrow$  array-partition complete

latency	DSP
27	777

$\Downarrow$

dim = 2

latency	DSP
28	831

latency	DSP
33	1203

$\Downarrow$