## 256 div 128 bits

### Sequential Implementations

<table>
<thead>
<tr>
<th>K</th>
<th>FF</th>
<th>LUTs</th>
<th>Slices</th>
<th>minPeriod</th>
<th>#cycles</th>
<th>Total Time (ns)</th>
<th>areaxdelay</th>
<th>speed-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>non_rest_1</td>
<td>1</td>
<td>1296</td>
<td>198</td>
<td>1016</td>
<td>7.4</td>
<td>256</td>
<td>1894.4</td>
<td>1924.7</td>
</tr>
<tr>
<td>non_rest_2</td>
<td>2</td>
<td>1295</td>
<td>2073</td>
<td>1045</td>
<td>13.4</td>
<td>128</td>
<td>1715.2</td>
<td>1792.4</td>
</tr>
<tr>
<td>non_rest_3</td>
<td>3</td>
<td>1296</td>
<td>2122</td>
<td>1009</td>
<td>20.8</td>
<td>86</td>
<td>1745.8</td>
<td>1937.8</td>
</tr>
<tr>
<td>non_rest_4</td>
<td>4</td>
<td>1293</td>
<td>2329</td>
<td>1174</td>
<td>26.9</td>
<td>64</td>
<td>1721.6</td>
<td>2021.2</td>
</tr>
<tr>
<td>non_rest_5</td>
<td>5</td>
<td>1296</td>
<td>2460</td>
<td>1230</td>
<td>32.8</td>
<td>52</td>
<td>1705.6</td>
<td>2114.9</td>
</tr>
<tr>
<td>non_rest_6</td>
<td>6</td>
<td>1293</td>
<td>2586</td>
<td>1303</td>
<td>39.6</td>
<td>43</td>
<td>1702.8</td>
<td>2218.7</td>
</tr>
<tr>
<td>non_rest_8</td>
<td>8</td>
<td>1290</td>
<td>2841</td>
<td>1433</td>
<td>52.5</td>
<td>32</td>
<td>1680.0</td>
<td>2407.4</td>
</tr>
<tr>
<td>non_rest_10</td>
<td>10</td>
<td>1293</td>
<td>3100</td>
<td>1564</td>
<td>65.6</td>
<td>25</td>
<td>1640.0</td>
<td>2565.0</td>
</tr>
<tr>
<td>non_rest_12</td>
<td>12</td>
<td>1296</td>
<td>336</td>
<td>1696</td>
<td>77.7</td>
<td>22</td>
<td>1709.4</td>
<td>2899.1</td>
</tr>
<tr>
<td>non_rest_16</td>
<td>16</td>
<td>1285</td>
<td>3865</td>
<td>1952</td>
<td>104.1</td>
<td>16</td>
<td>1665.6</td>
<td>3251.3</td>
</tr>
</tbody>
</table>

### Arch1

<table>
<thead>
<tr>
<th>K</th>
<th>FF</th>
<th>LUTs</th>
<th>Slices</th>
<th>minPeriod</th>
<th>#cycles</th>
<th>Total Time (ns)</th>
<th>areaxdelay</th>
<th>speed-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4_a1</td>
<td>2</td>
<td>1421</td>
<td>1552</td>
<td>1174</td>
<td>8.2</td>
<td>128</td>
<td>1049.6</td>
<td>1232.2</td>
</tr>
<tr>
<td>R8_a1</td>
<td>3</td>
<td>1687</td>
<td>3313</td>
<td>2061</td>
<td>10.3</td>
<td>86</td>
<td>885.8</td>
<td>1825.6</td>
</tr>
<tr>
<td>R16_a1</td>
<td>4</td>
<td>2192</td>
<td>7488</td>
<td>4881</td>
<td>10.4</td>
<td>64</td>
<td>665.6</td>
<td>3248.8</td>
</tr>
</tbody>
</table>

### Arch2

<table>
<thead>
<tr>
<th>K</th>
<th>FF</th>
<th>LUTs</th>
<th>Slices</th>
<th>minPeriod</th>
<th>#cycles</th>
<th>Total Time (ns)</th>
<th>areaxdelay</th>
<th>speed-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4_a2</td>
<td>2</td>
<td>1292</td>
<td>1038</td>
<td>851</td>
<td>7.6</td>
<td>128</td>
<td>972.8</td>
<td>827.9</td>
</tr>
<tr>
<td>R8_a2</td>
<td>3</td>
<td>1552</td>
<td>1941</td>
<td>1373</td>
<td>10.0</td>
<td>86</td>
<td>860.0</td>
<td>1180.8</td>
</tr>
<tr>
<td>R16_a2</td>
<td>4</td>
<td>2050</td>
<td>3865</td>
<td>2345</td>
<td>10.7</td>
<td>64</td>
<td>684.8</td>
<td>1605.9</td>
</tr>
<tr>
<td>R32_a2</td>
<td>5</td>
<td>3055</td>
<td>7590</td>
<td>4226</td>
<td>12.7</td>
<td>52</td>
<td>660.4</td>
<td>2790.9</td>
</tr>
</tbody>
</table>

### LowLevel

<table>
<thead>
<tr>
<th>K</th>
<th>FF</th>
<th>LUTs</th>
<th>Slices</th>
<th>minPeriod</th>
<th>#cycles</th>
<th>Total Time (ns)</th>
<th>areaxdelay</th>
<th>speed-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4_a1_low</td>
<td>2</td>
<td>1293</td>
<td>1561</td>
<td>1111</td>
<td>7.5</td>
<td>128</td>
<td>960.0</td>
<td>1066.6</td>
</tr>
<tr>
<td>R8_a1_low</td>
<td>3</td>
<td>1555</td>
<td>3240</td>
<td>1959</td>
<td>8.2</td>
<td>86</td>
<td>705.2</td>
<td>1381.5</td>
</tr>
<tr>
<td>R16_a1_low</td>
<td>4</td>
<td>2061</td>
<td>6703</td>
<td>3704</td>
<td>8.6</td>
<td>64</td>
<td>550.4</td>
<td>2038.7</td>
</tr>
<tr>
<td>R16_a2_low</td>
<td>4</td>
<td>2070</td>
<td>3932</td>
<td>2340</td>
<td>8.6</td>
<td>64</td>
<td>550.4</td>
<td>1287.9</td>
</tr>
</tbody>
</table>