

Table 6.5: SPOC-128 hardware area estimate and implementation results

<b>Component</b>	<b>Estimate per unit [GE]</b>	<b>Count</b>	<b>Estimate per component [GE]</b>
State registers	3.75	256	960
SSb	154 <sup>†</sup>	2	308
Other XORs	2.00	$2 \times (64 + 64)$	512
Permutation without muxes (estimate)			1780
round/step muxes	2.00	256	512
min load muxes	2.00	64	128
LFSR for constants	64 <sup>†</sup>		64
Permutation with muxes (estimate)			2484
i_data/ o_data muxes	2.00	$5 \times 32 \times 2 = 320$	640
XORs for mode	2.00	$3 \times 32 \times 2 = 192$	384
Additional ctrl muxes	2.00	$128 + 32 = 160$	320
Additional ctrl XORs	2.00	15	30
Hardware for the mode (estimate)			1374
Complete datapath (estimate)			3858
Synthesized result <sup>†</sup>			4358
State machine (synthesized result <sup>†</sup> )			247
SPOC_module (estimate)			4105
Synthesized result <sup>†</sup>			4605

<sup>†</sup> pre-PAR implementation results