Simulation Results steps

Daniel Moreno Manzano

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1 First Step

	<u> Table 1:</u>	Benchma:	rk used
Benchmark	# qubits	# gates	two-qubit gates (%)
$4gt11_{82}$	5	27	67

Table 2: Step 1 results

Mapper	Init. place	t_1	t_2	meas. err.	p. success	f	$\overline{V_Q}$
No	No	3000	3000	0.03	0.99	0.98879	390
minextendrc	No	3000	3000	0.03	0.96	0.9404637	1582
$\operatorname{minextendrc}$	Yes	3000	3000	0.03	0.98	0.9675513	1038
$\min extend$	No	3000	3000	0.03	0.98	0.944128	1264
$\min extend$	Yes	3000	3000	0.03	0.98	0.9585909	834
base	No	3000	3000	0.03	0.97	0.92331	1062
base	Yes	3000	3000	0.03	0.97	0.92331	1062

Table 3: Other mapper statistics

Mapper	Init. place	# qubits (after mapping)	depth	# SWAPS
No	No	5	84	0
minextendrc	No	7	237	17
$\operatorname{minextendrc}$	Yes	6	174	10
$\min extend$	No	8	228	16
$\min extend$	Yes	6	165	9
base	No	6	228	16
base	Yes	6	228	16