Circuit name: E:\github\quantum\_compiler\_optim\examples\3\_17\_13.qasm (requires 16 qubits)

Before mapping: 36 22

After mapping: 110 68

The mapping required 0 seconds

after optimize: 94 59

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4\_49\_16.qasm (requires 16 qubits)

Before mapping: 6 5

After mapping: 13 10

The mapping required 0 seconds

after optimize: 13 10

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt4-v0\_72.qasm (requires 16 qubits)

Before mapping: 258 137

After mapping: 854 486

The mapping required 0.005 seconds

after optimize: 856 482

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt4-v0\_73.qasm (requires 16 qubits)

Before mapping: 395 227

After mapping: 1342 799

The mapping required 0.009 seconds

after optimize: 1346 787

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt4-v0\_78.qasm (requires 16 qubits)

Before mapping: 235 137

After mapping: 827 496

The mapping required 0.003 seconds

after optimize: 799 478

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt4-v0\_79.qasm (requires 16 qubits)

Before mapping: 231 132

After mapping: 787 471

The mapping required 0.003 seconds

after optimize: 755 453

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt4-v0\_80.qasm (requires 16 qubits)

Before mapping: 179 101

After mapping: 653 383

The mapping required 0.007 seconds

after optimize: 605 348

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt4-v1\_74.qasm (requires 16 qubits)

Before mapping: 273 154

After mapping: 905 541

The mapping required 0.005 seconds

after optimize: 896 523

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt5\_75.qasm (requires 16 qubits)

Before mapping: 83 47

After mapping: 291 169

The mapping required 0.001 seconds

after optimize: 277 143

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt5\_76.qasm (requires 16 qubits)

Before mapping: 91 56

After mapping: 343 192

The mapping required 0.002 seconds

after optimize: 334 198

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt5\_77.qasm (requires 16 qubits)

Before mapping: 131 74

After mapping: 440 266

The mapping required 0.002 seconds

after optimize: 404 235

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt10-v1\_81.qasm (requires 16 qubits)

Before mapping: 148 84

After mapping: 475 283

The mapping required 0.002 seconds

after optimize: 475 283

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt11\_82.qasm (requires 16 qubits)

Before mapping: 27 20

After mapping: 121 70

The mapping required 0.001 seconds

after optimize: 111 64

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt11\_83.qasm (requires 16 qubits)

Before mapping: 23 16

After mapping: 89 52

The mapping required 0 seconds

after optimize: 85 51

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt11\_84.qasm (requires 16 qubits)

Before mapping: 18 11

After mapping: 51 30

The mapping required 0 seconds

after optimize: 51 30

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt12-v0\_86.qasm (requires 16 qubits)

Before mapping: 251 135

After mapping: 874 492

The mapping required 0.007 seconds

after optimize: 824 464

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt12-v0\_87.qasm (requires 16 qubits)

Before mapping: 247 131

After mapping: 841 469

The mapping required 0.008 seconds

after optimize: 798 448

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt12-v0\_88.qasm (requires 16 qubits)

Before mapping: 194 108

After mapping: 713 422

The mapping required 0.007 seconds

after optimize: 622 374

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt13\_90.qasm (requires 16 qubits)

Before mapping: 107 65

After mapping: 402 228

The mapping required 0.001 seconds

after optimize: 369 219

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt13\_91.qasm (requires 16 qubits)

Before mapping: 103 61

After mapping: 373 212

The mapping required 0.002 seconds

after optimize: 340 203

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt13\_92.qasm (requires 16 qubits)

Before mapping: 66 38

After mapping: 220 132

The mapping required 0.001 seconds

after optimize: 227 122

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4gt13-v1\_93.qasm (requires 16 qubits)

Before mapping: 68 39

After mapping: 233 140

The mapping required 0.001 seconds

after optimize: 213 130

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4mod5-bdd\_287.qasm (requires 16 qubits)

Before mapping: 70 41

After mapping: 253 142

The mapping required 0 seconds

after optimize: 200 127

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4mod5-v0\_18.qasm (requires 16 qubits)

Before mapping: 69 40

After mapping: 222 137

The mapping required 0.001 seconds

after optimize: 43086 23498

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cm152a\_212.qasm (requires 16 qubits)

Before mapping: 1221 684

After mapping: 4352 2513

The mapping required 0.091 seconds

after optimize: 222 137

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4mod5-v0\_19.qasm (requires 16 qubits)

Before mapping: 35 21

After mapping: 119 72

The mapping required 0 seconds

after optimize: 104 66

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4mod5-v0\_20.qasm (requires 16 qubits)

Before mapping: 20 12

After mapping: 60 38

The mapping required 0 seconds

after optimize: 74 38

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4mod7-v0\_94.qasm (requires 16 qubits)

Before mapping: 162 92

After mapping: 510 306

The mapping required 0.002 seconds

after optimize: 522 303

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\4mod7-v1\_96.qasm (requires 16 qubits)

Before mapping: 164 94

After mapping: 523 317

The mapping required 0.002 seconds

after optimize: 482 292

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\9symml\_195.qasm (requires 16 qubits)

Before mapping: 34881 19235

after optimize: 4082 2321

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cnt3-5\_179.qasm (requires 16 qubits)

Before mapping: 175 61

After mapping: 665 258

The mapping required 0.038 seconds

after optimize: 677 235

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cnt3-5\_180.qasm (requires 16 qubits)

Before mapping: 485 209

After mapping: 1617 735

The mapping required 0.507 seconds

after optimize: 1579 742

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\co14\_215.qasm (requires 16 qubits)

Before mapping: 17936 8570

After mapping: 131271 71568

The mapping required 35.522 seconds

after optimize: 130177 71100

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\0410184\_169.qasm (requires 16 qubits)

Before mapping: 211 104

After mapping: 951 477

The mapping required 0.026 seconds

after optimize: 882 425

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\adr4\_197.qasm (requires 16 qubits)

Before mapping: 3439 1839

After mapping: 12667 6650

The mapping required 0.573 seconds

after optimize: 12626 6804

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\aj-e11\_165.qasm (requires 16 qubits)

Before mapping: 151 86

After mapping: 474 275

The mapping required 0.002 seconds

after optimize: 469 272

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\alu-bdd\_288.qasm (requires 16 qubits)

Before mapping: 84 48

After mapping: 298 162

The mapping required 0.002 seconds

after optimize: 269 151

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\alu-v0\_26.qasm (requires 16 qubits)

Before mapping: 84 49

After mapping: 279 170

The mapping required 0.001 seconds

after optimize: 312 165

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\alu-v0\_27.qasm (requires 16 qubits)

Before mapping: 36 21

After mapping: 133 73

The mapping required 0.001 seconds

after optimize: 113 62

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\alu-v1\_28.qasm (requires 16 qubits)

Before mapping: 37 22

After mapping: 134 75

The mapping required 0.001 seconds

after optimize: 102 63

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\alu-v1\_29.qasm (requires 16 qubits)

Before mapping: 37 22

After mapping: 134 74

The mapping required 0.001 seconds

after optimize: 114 62

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\C17\_204.qasm (requires 16 qubits)

Before mapping: 467 253

After mapping: 1623 919

The mapping required 0.01 seconds

after optimize: 1593 874

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\clip\_206.qasm (requires 16 qubits)

Before mapping: 33827 17879

After mapping: 130216 67545

The mapping required 157.256 seconds

Circuit name: E:\github\quantum\_compiler\_optim\examples\cm42a\_207.qasm (requires 16 qubits)

Before mapping: 1776 940

After mapping: 6274 3385

The mapping required 0.092 seconds

after optimize: 6072 3294

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cm82a\_208.qasm (requires 16 qubits)

Before mapping: 650 337

After mapping: 2235 1216

The mapping required 0.062 seconds

after optimize: 2061 1122

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cm85a\_209.qasm (requires 16 qubits)

Before mapping: 11414 6374

After mapping: 43248 23962

The mapping required 5.84 seconds

after optimize: 43086 23498

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cm152a\_212.qasm (requires 16 qubits)

Before mapping: 1221 684

After mapping: 4352 2513

The mapping required 0.091 seconds

after optimize: 4011 2284

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cnt3-5\_179.qasm (requires 16 qubits)

Before mapping: 175 61

After mapping: 665 258

The mapping required 0.037 seconds

after optimize: 677 235

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\cnt3-5\_180.qasm (requires 16 qubits)

Before mapping: 485 209

After mapping: 1617 735

The mapping required 0.488 seconds

after optimize: 1579 742

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Circuit name: E:\github\quantum\_compiler\_optim\examples\co14\_215.qasm (requires 16 qubits)

Before mapping: 17936 8570

after optimize: 70737 33141

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*end\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*