

Fault-Tolerant Circuits - Syndrome Measurement

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System code

```
{
  "circuit" : {
    "0" : ["PrepZ 18", "PrepZ 11", "PrepZ 23", "PrepZ 9", "PrepZ 26", "PrepZ 2",
          "PrepZ 16", "PrepZ 17", "SWAP 20,13", "SWAP 6,5", "SWAP 22,21","SWAP 33,34"],
    "1" : ["H 18", "H 26", "H 2", "H 16", "SWAP 27,20", "SWAP 5,4", "SWAP 32,33"],
    "2" : ["CNOT 18,11", "CNOT 2,9", "CNOT 16,23", "SWAP 19,26"],
    "3" : ["CNOT 16,9", "SWAP 24,23", "SWAP 12,11", "SWAP 25,18"],
    "4" : ["CNOT 19,12", "CNOT 25,24", "SWAP 8,9", "SWAP 23,16"],
    "5" : ["SWAP 18,25", "SWAP 11,12", "SWAP 26,19", "SWAP 31,24", "SWAP 9,2", "SWAP 7,8"],
    "6" : ["CNOT 17,18", "SWAP 25,26", "SWAP 10,11"],
    "7" : ["CNOT 9,10", "SWAP 16,17", "SWAP 24,25"],
    "8" : ["CNOT 16,9", "CNOT 24,23"],
    "9" : ["CNOT 16,23"],
    "10" : ["H 16"],
    "11" : ["MeasZ 16", "Barrier"],
    "12" : ["CNOT 22,23", "SWAP 13,6", "SWAP 8,1", "SWAP 4,5", "SWAP 25,32", "SWAP 34,27", "SWAP 19,18"],
    "13" : ["MeasZ 23", "CNOT 8,7", "SWAP 12,13", "SWAP 1,0", "CNOT 25,24", "SWAP 3,4", "SWAP 32,31"],
    "14" : ["MeasZ 7", "SWAP 2,1", "MeasZ 24", "CNOT 3,10", "CNOT 12,19", "SWAP 33,32"],
    "15" : ["CNOT 2,9", "MeasZ 10", "MeasZ 19", "CNOT 34,33"],
    "16" : ["MeasZ 9", "MeasZ 33", "Barrier"],
    "17" : ["PrepZ 19", "PrepZ 10", "PrepZ 33", "PrepZ 7", "PrepZ 24", "PrepZ 9", "PrepZ 23", "PrepZ 16",
          "SWAP 15,8", "SWAP 27,34", "SWAP 1,2", "SWAP 26,25", "SWAP 21,22"],
    "18" : ["H 10", "H 33", "H 7", "SWAP 18,19", "SWAP 8,9", "SWAP 30,23", "SWAP 28,21"],
    "19" : ["SWAP 17,10", "CNOT 7,8", "SWAP 32,33", "SWAP 31,30"],
    "20" : ["CNOT 17,18", "SWAP 9,8", "CNOT 32,31", "SWAP 14,7", "SWAP 33,26"],
    "21" : ["CNOT 17,24", "SWAP 25,18", "SWAP 30,31", "SWAP 21,14"],
    "22" : ["SWAP 10,17", "CNOT 32,25", "SWAP 23,24", "SWAP 29,30", "SWAP 22,21"],
    "23" : ["CNOT 10,9", "SWAP 18,25", "SWAP 17,16", "CNOT 22,29", "SWAP 30,23"],
    "24" : ["CNOT 18,17", "CNOT 29,30"],
    "25" : ["SWAP 16,17", "SWAP 31,30"],
    "26" : ["CNOT 9,16", "SWAP 30,29"],
    "27" : ["SWAP 23,16"],
    "28" : ["CNOT 30,23"],
    "29" : ["MeasZ 23", "Barrier"],
    "30" : ["CNOT 10,3", "CNOT 22,15", "SWAP 11,12", "SWAP 2,9", "SWAP 25,32", "SWAP 29,30",
          "SWAP 20,13"],
    "31" : ["H 10", "H 22", "CNOT 18,11", "CNOT 2,1", "CNOT 29,28", "SWAP 26,25",
          "SWAP 32,31", "SWAP 4,3", "SWAP 6,13", "SWAP 8,15"],
    "32" : ["MeasZ 10", "MeasZ 22", "H 18", "H 2", "H 29", "CNOT 26,27", "CNOT 32,33",
          "SWAP 12,11", "SWAP 0,1", "SWAP 21,28"],
    "33" : ["MeasZ 18", "MeasZ 2", "H 26", "H 32", "MeasZ 29",
          "SWAP 5,12", "SWAP 34,33", "SWAP 20,27", "SWAP 1,8"],
    "34" : ["MeasZ 26", "MeasZ 32", "SWAP 13,20"],
  },
  "final_mapping" : {"data0" : 5, "data1" : 4, "data2" : 13, "data3" : 1, "data4" : 34,
                     "data5" : 0, "data6" : 21},
  "initial_mapping" : {"data0" : 5, "data1" : 4, "data2" : 13, "data3" : 1, "data4" : 34,
                       "data5" : 0, "data6" : 21,
                       "syndrome0" : 18, "syndrome1" : 11, "syndrome2" : 23, "syndrome3" : 9,
                       "syndrome4" : 26, "syndrome5" : 2, "syndrome6" : 16}
}
```

data[5]	data[3]	syndrome[5]	dummy[5]	data[1]	data[0]	dummy[18]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	syndrome[1]	dummy[14]	data[2]
dummy[3]	dummy[2]	syndrome[6]	checkup[0]	syndrome[0]	dummy[17]	dummy[15]
data[6]	dummy[0]	syndrome[2]	dummy[7]	dummy[1]	syndrome[4]	dummy[19]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	dummy[9]	dummy[12]	data[4]

<Initial Qubit Mapping>

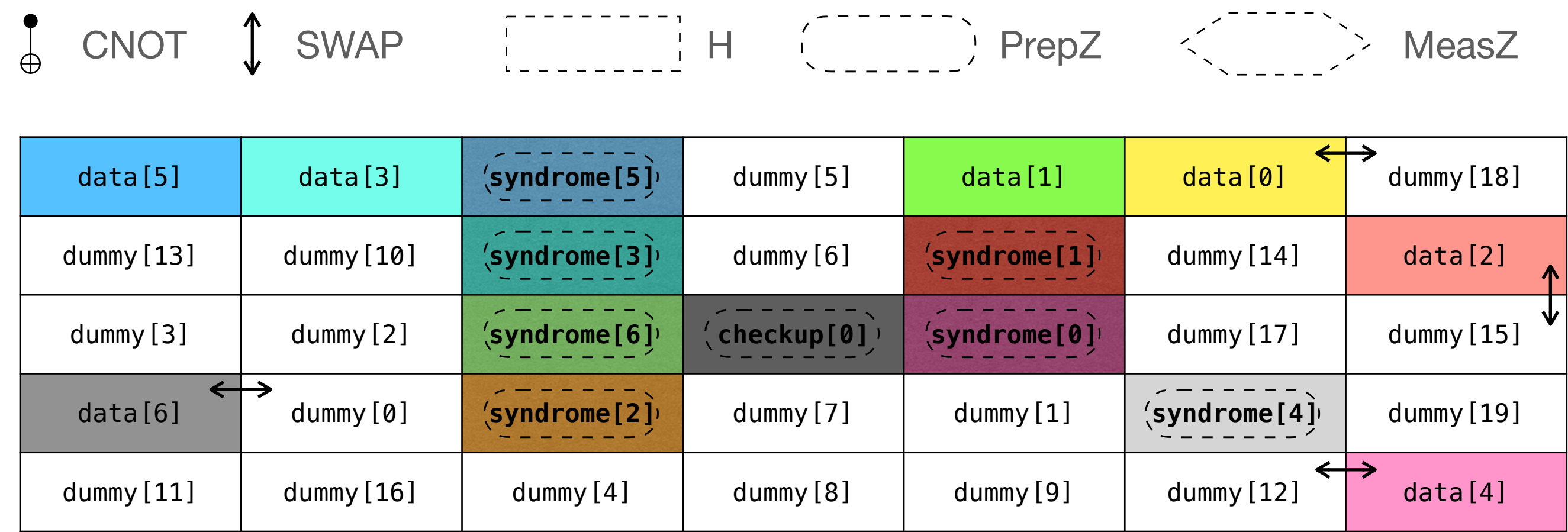
data[5]	data[3]	syndrome[5]	dummy[5]	data[1]	data[0]	dummy[15]
dummy[3]	dummy[13]	dummy[10]	syndrome[1]	dummy[6]	dummy[18]	data[2]
dummy[11]	dummy[2]	dummy[16]	dummy[7]	syndrome[0]	dummy[17]	dummy[14]
data[6]	syndrome[3]	checkup[0]	dummy[4]	dummy[9]	syndrome[2]	dummy[19]
dummy[0]	syndrome[6]	dummy[8]	dummy[1]	syndrome[4]	dummy[12]	data[4]

<Final Qubit Mapping>

Initial



data[5]	data[3]	syndrome[5]	dummy[5]	data[1]	data[0]	dummy[18]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	syndrome[1]	dummy[14]	data[2]
dummy[3]	dummy[2]	syndrome[6]	checksum[0]	syndrome[0]	dummy[17]	dummy[15]
data[6]	dummy[0]	syndrome[2]	dummy[7]	dummy[1]	syndrome[4]	dummy[19]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	dummy[9]	dummy[12]	data[4]



All syndrome qubits, syndrome[l], are activated



data[5]	data[3]	syndrome[5]	dummy[5]	data[1]	dummy[18]	data[0]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	syndrome[1]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	syndrome[6]	checksum[0]	syndrome[0]	dummy[17]	data[2]
dummy[0]	data[6]	syndrome[2]	dummy[7]	dummy[1]	syndrome[4]	dummy[19]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	dummy[9]	data[4]	dummy[12]



data[5]	data[3]	syndrome[5]	dummy[5]	dummy[18]	data[1]	data[0]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	syndrome[1]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	syndrome[6]	checkup[0]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[2]	dummy[7]	dummy[1]	syndrome[4]	data[2]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	data[4]	dummy[9]	dummy[12]



data[5]	data[3]	syndrome[5]	dummy[5]	dummy[18]	data[1]	data[0]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	syndrome[1]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	syndrome[6]	checkup[0]	syndrome[0]	syndrome[4]	dummy[19]
dummy[0]	data[6]	syndrome[2]	dummy[7]	dummy[1]	dummy[17]	data[2]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	data[4]	dummy[9]	dummy[12]



data[5]	data[3]	syndrome[5]	dummy[5]	dummy[18]	data[1]	data[0]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	dummy[14]	syndrome[1]	dummy[15]
dummy[3]	dummy[2]	syndrome[6]	checksum[0]	dummy[1]	syndrome[4]	dummy[19]
dummy[0]	data[6]	dummy[7]	syndrome[2]	syndrome[0]	dummy[17]	data[2]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	data[4]	dummy[9]	dummy[12]



data[5]	data[3]	syndrome[5]	dummy[5]	dummy[18]	data[1]	data[0]
dummy[13]	syndrome[3]	dummy[10]	dummy[6]	dummy[14]	syndrome[1]	dummy[15]
dummy[3]	dummy[2]	dummy[7]	checkup[0]	dummy[1]	syndrome[4]	dummy[19]
dummy[0]	data[6]	syndrome[6]	syndrome[2]	syndrome[0]	dummy[17]	data[2]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	data[4]	dummy[9]	dummy[12]



data[5]	data[3]	dummy[10]	dummy[5]	dummy[18]	data[1]	data[0]
syndrome[3]	dummy[13]	syndrome[5]	dummy[6]	syndrome[1]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	dummy[7]	checkup[0]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[6]	dummy[8]	dummy[1]	syndrome[4]	data[2]
dummy[11]	dummy[16]	dummy[4]	syndrome[2]	data[4]	dummy[9]	dummy[12]



data[5]	data[3]	dummy[10]	dummy[5]	dummy[18]	data[1]	data[0]
syndrome[3]	dummy[13]	syndrome[5]	⊕ syndrome[1]	dummy[6]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	dummy[7]	↔ checkup[0]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[6]	dummy[8]	↔ syndrome[4]	dummy[1]	data[2]
dummy[11]	dummy[16]	dummy[4]	syndrome[2]	data[4]	dummy[9]	dummy[12]



data[5]	data[3]	dummy[10]	dummy[5]	dummy[18]	data[1]	data[0]
syndrome[3]	dummy[13]	syndrome[5]	syndrome[1]	dummy[6]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	checksum[0]	dummy[7]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[6]	syndrome[4]	dummy[8]	dummy[1]	data[2]
dummy[11]	dummy[16]	dummy[4]	syndrome[2]	data[4]	dummy[9]	dummy[12]



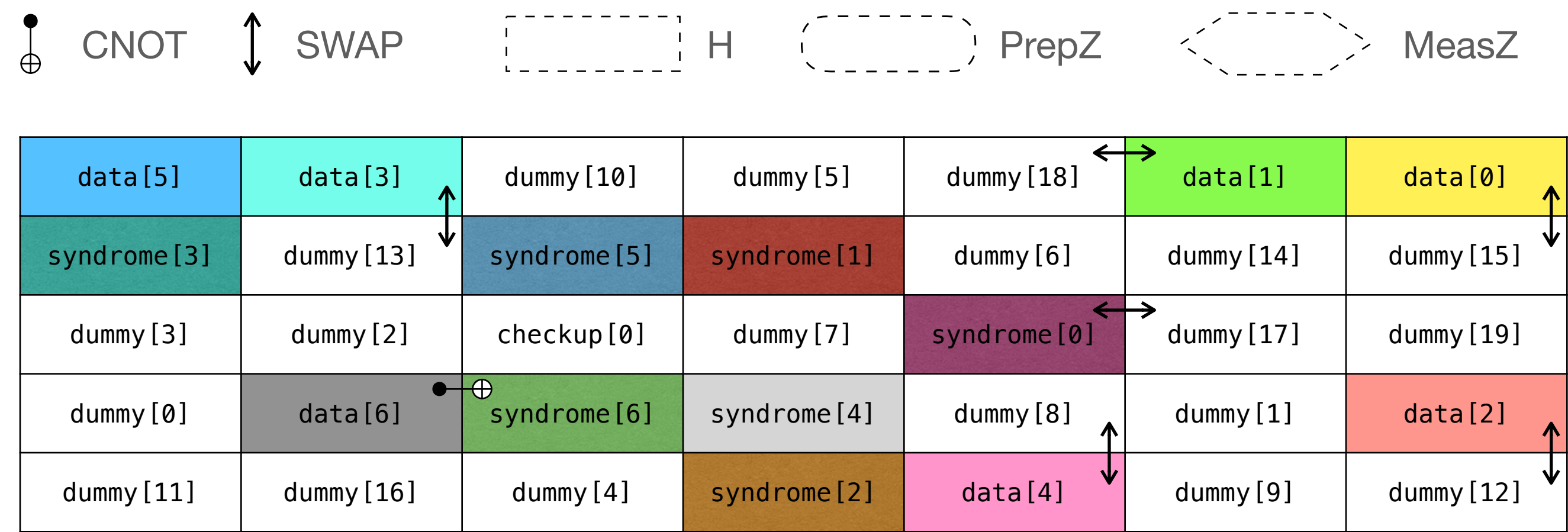
data[5]	data[3]	dummy[10]	dummy[5]	dummy[18]	data[1]	data[0]
syndrome[3]	dummy[13]	syndrome[5]	syndrome[1]	dummy[6]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	checkup[0]	dummy[7]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[6]	syndrome[4]	dummy[8]	dummy[1]	data[2]
dummy[11]	dummy[16]	dummy[4]	syndrome[2]	data[4]	dummy[9]	dummy[12]



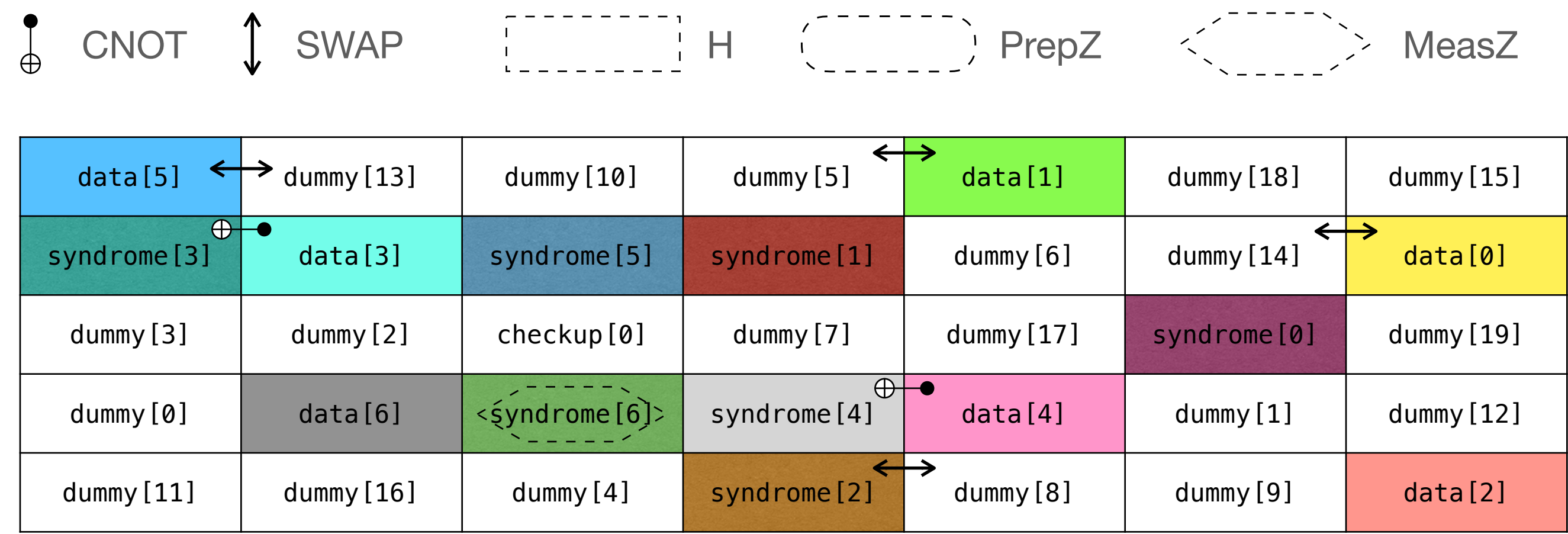
data[5]	data[3]	dummy[10]	dummy[5]	dummy[18]	data[1]	data[0]
syndrome[3]	dummy[13]	syndrome[5]	syndrome[1]	dummy[6]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	checksum[0]	dummy[7]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[6]	syndrome[4]	dummy[8]	dummy[1]	data[2]
dummy[11]	dummy[16]	dummy[4]	syndrome[2]	data[4]	dummy[9]	dummy[12]

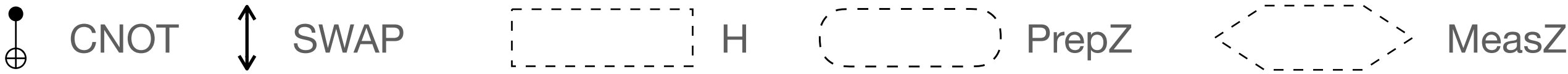


data[5]	data[3]	dummy[10]	dummy[5]	dummy[18]	data[1]	data[0]
syndrome[3]	dummy[13]	syndrome[5]	syndrome[1]	dummy[6]	dummy[14]	dummy[15]
dummy[3]	dummy[2]	<checksum[0]>	dummy[7]	syndrome[0]	dummy[17]	dummy[19]
dummy[0]	data[6]	syndrome[6]	syndrome[4]	dummy[8]	dummy[1]	data[2]
dummy[11]	dummy[16]	dummy[4]	syndrome[2]	data[4]	dummy[9]	dummy[12]



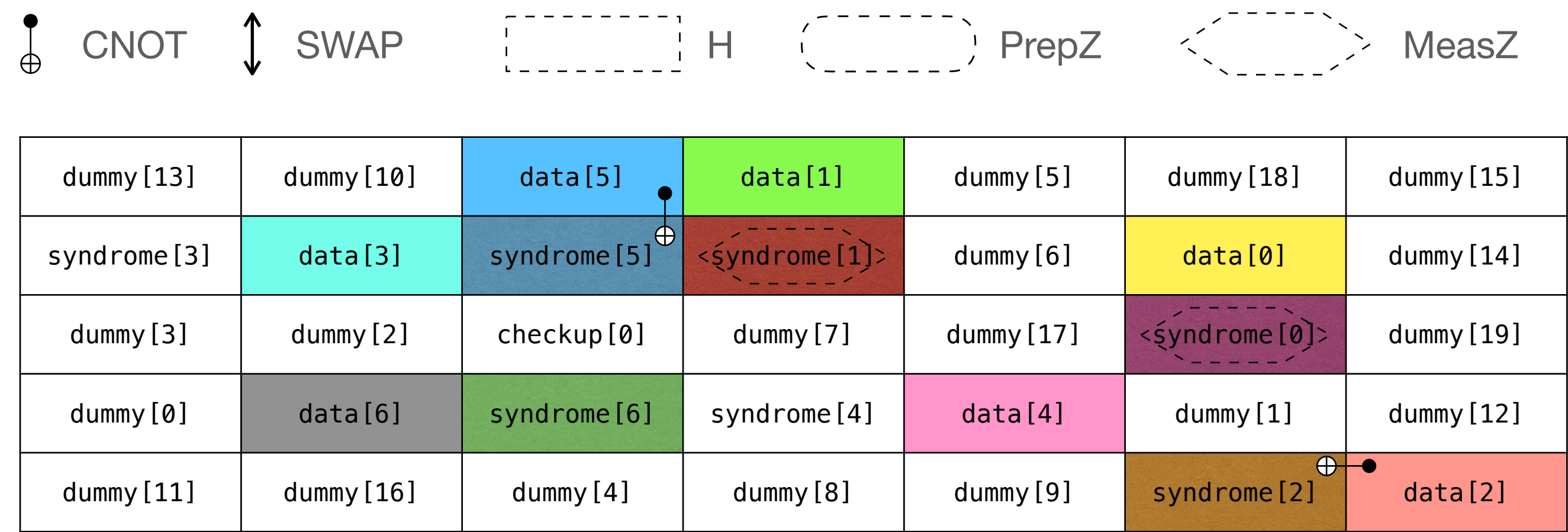
checkup[0] is deactivated by measure





dummy[13]	data[5]	dummy[10]	data[1]	dummy[5]	dummy[18]	dummy[15]
<syndrome[3]>	data[3]	syndrome[5]	syndrome[1]	dummy[6]	data[0]	dummy[14]
dummy[3]	dummy[2]	checkup[0]	dummy[7]	dummy[17]	syndrome[0]	dummy[19]
dummy[0]	data[6]	syndrome[6]	<syndrome[4]>	data[4]	dummy[1]	dummy[12]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	syndrome[2]	dummy[9]	data[2]

syndrome[6] is deactivated by measure

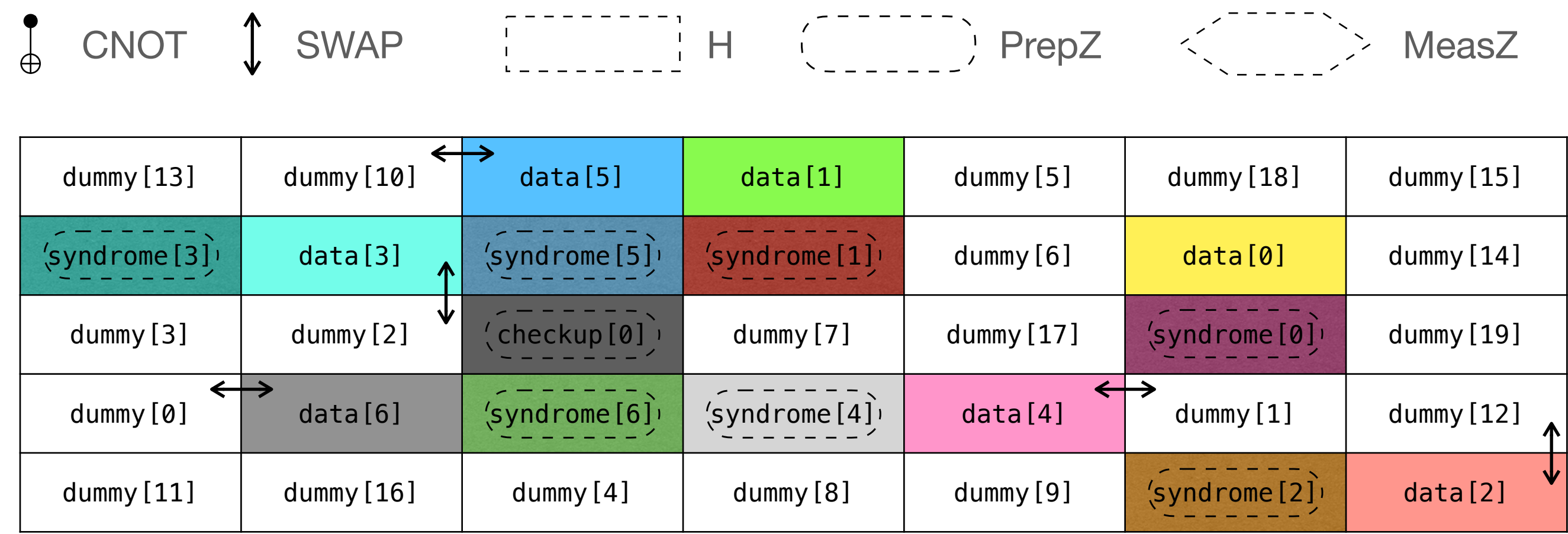


syndrome[3] and syndrome[4] are deactivated by measure



dummy [13]	dummy [10]	data [5]	data [1]	dummy [5]	dummy [18]	dummy [15]
syndrome [3]	data [3]	<syndrome [5]>	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [3]	dummy [2]	checksum [0]	dummy [7]	dummy [17]	syndrome [0]	dummy [19]
dummy [0]	data [6]	syndrome [6]	syndrome [4]	data [4]	dummy [1]	dummy [12]
dummy [11]	dummy [16]	dummy [4]	dummy [8]	dummy [9]	<syndrome [2]>	data [2]

syndrome[0] and syndrome[1] are deactivated by measure



syndrome[2] and syndrome[5] are deactivated by measure, but activated



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
syndrome [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [3]	data [3]	checkup [0]	dummy [7]	dummy [17]	syndrome [0]	dummy [19]
data [6]	dummy [0]	syndrome [6]	syndrome [4]	dummy [1]	data [4]	data [2]
dummy [11]	dummy [16]	dummy [4]	dummy [8]	dummy [9]	syndrome [2]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
syndrome [3]	syndrome [5]	dummy [2]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [3]	data [3]	checkup [0]	dummy [7]	syndrome [0]	dummy [17]	dummy [19]
dummy [11]	dummy [0]	dummy [4]	syndrome [4]	dummy [1]	data [4]	data [2]
data [6]	dummy [16]	syndrome [6]	dummy [8]	dummy [9]	syndrome [2]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
syndrome [3]	syndrome [5]	dummy [2]	dummy [7]	dummy [6]	data [0]	dummy [14]
dummy [3]	data [3]	checksum [0]	syndrome [1]	syndrome [0]	dummy [17]	dummy [19]
dummy [11]	dummy [0]	dummy [4]	syndrome [4]	dummy [1]	data [4]	data [2]
data [6]	dummy [16]	dummy [8]	syndrome [6]	syndrome [2]	dummy [9]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	dummy [7]	dummy [6]	data [0]	dummy [14]
syndrome [3]	data [3]	checkup [0]	syndrome [1]	syndrome [0]	dummy [17]	dummy [19]
dummy [11]	dummy [0]	dummy [4]	syndrome [4]	dummy [1]	dummy [9]	data [2]
data [6]	dummy [16]	dummy [8]	syndrome [6]	syndrome [2]	data [4]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	dummy [7]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	checkup [0]	syndrome [1]	dummy [1]	dummy [17]	dummy [19]
syndrome [3]	dummy [0]	dummy [4]	syndrome [4]	syndrome [0]	dummy [9]	data [2]
data [6]	dummy [16]	syndrome [6]	dummy [8]	syndrome [2]	data [4]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	checkup [0]	dummy [7]	dummy [1]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	syndrome [4]	dummy [4]	syndrome [0]	dummy [9]	data [2]
data [6]	syndrome [6]	dummy [16]	dummy [8]	syndrome [2]	data [4]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	dummy [7]	checkup [0]	syndrome [0]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	dummy [16]	dummy [4]	dummy [1]	dummy [9]	data [2]
data [6]	syndrome [6]	syndrome [4]	dummy [8]	syndrome [2]	data [4]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	dummy [7]	checkup [0]	syndrome [0]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	dummy [16]	dummy [4]	dummy [1]	dummy [9]	data [2]
data [6]	syndrome [6]	syndrome [4]	dummy [8]	syndrome [2]	data [4]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	checkup [0]	dummy [7]	syndrome [0]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	dummy [16]	dummy [4]	dummy [1]	dummy [9]	data [2]
data [6]	syndrome [6]	dummy [8]	syndrome [4]	syndrome [2]	data [4]	dummy [12]



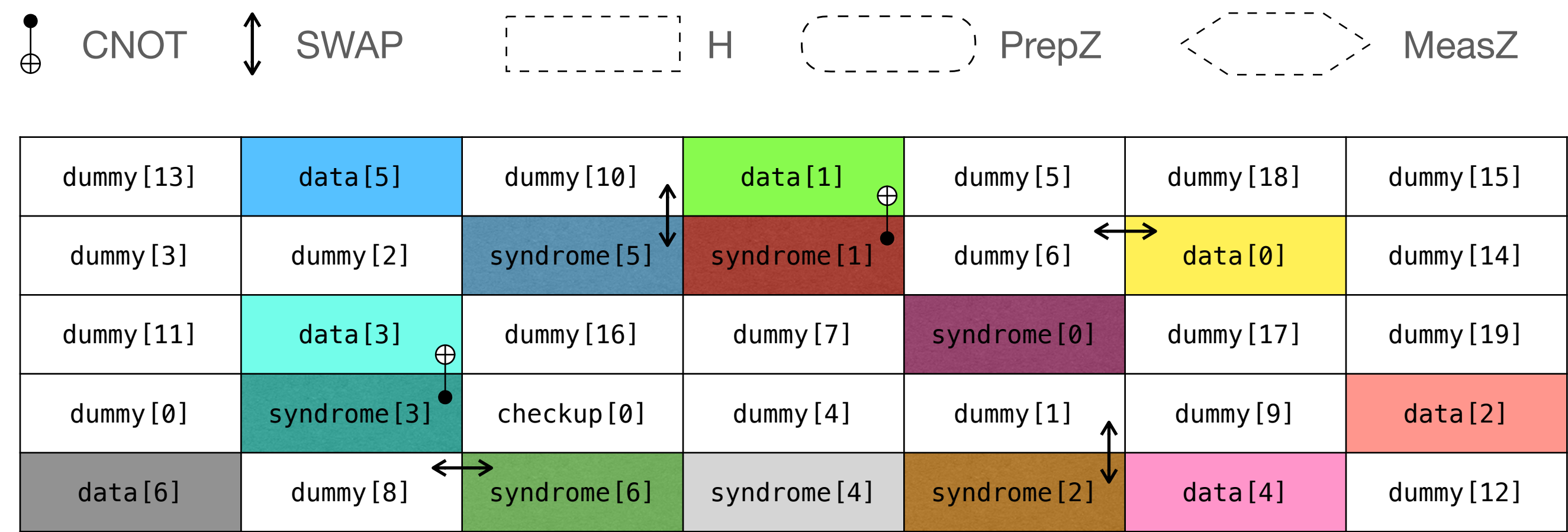
dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	checkup [0]	dummy [7]	syndrome [0]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	dummy [16]	dummy [4]	dummy [1]	dummy [9]	data [2]
data [6]	dummy [8]	syndrome [6]	syndrome [4]	syndrome [2]	data [4]	dummy [12]



dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	dummy [16]	dummy [7]	syndrome [0]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	checkup [0]	dummy [4]	dummy [1]	dummy [9]	data [2]
data [6]	dummy [8]	syndrome [6]	syndrome [4]	syndrome [2]	data [4]	dummy [12]



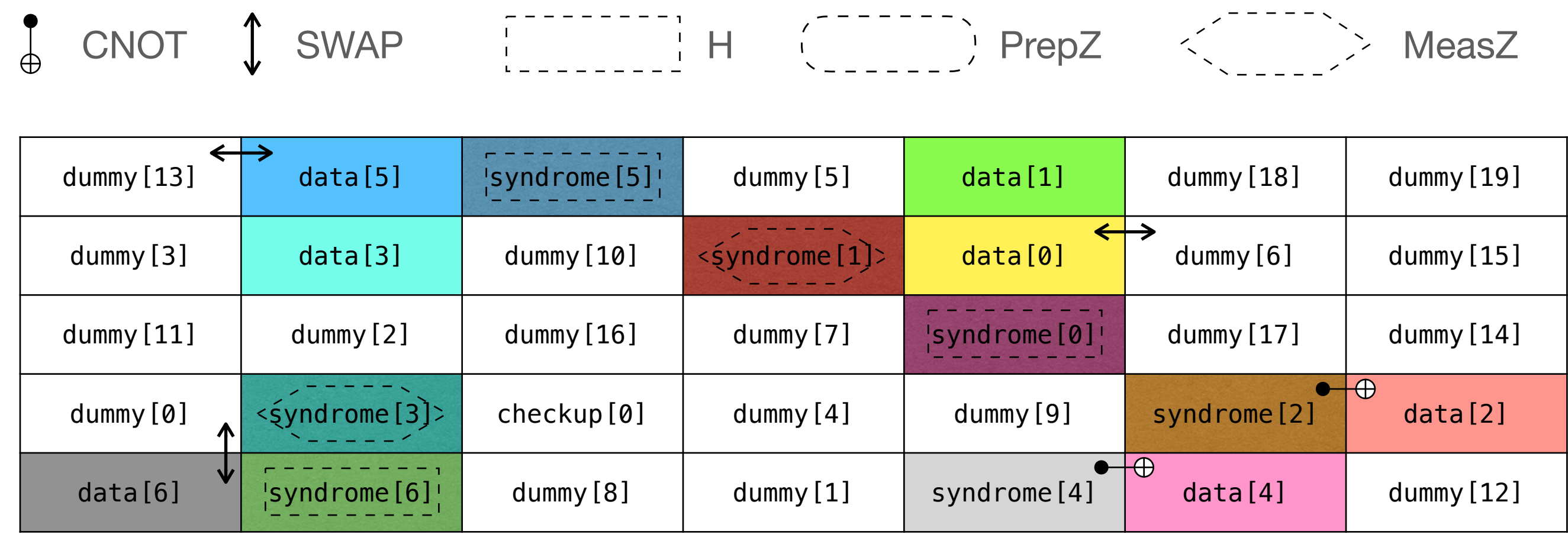
dummy [13]	data [5]	dummy [10]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	syndrome [5]	syndrome [1]	dummy [6]	data [0]	dummy [14]
dummy [11]	data [3]	dummy [16]	dummy [7]	syndrome [0]	dummy [17]	dummy [19]
dummy [0]	syndrome [3]	< <checkup [0]> >	dummy [4]	dummy [1]	dummy [9]	data [2]
data [6]	dummy [8]	syndrome [6]	syndrome [4]	syndrome [2]	data [4]	dummy [12]

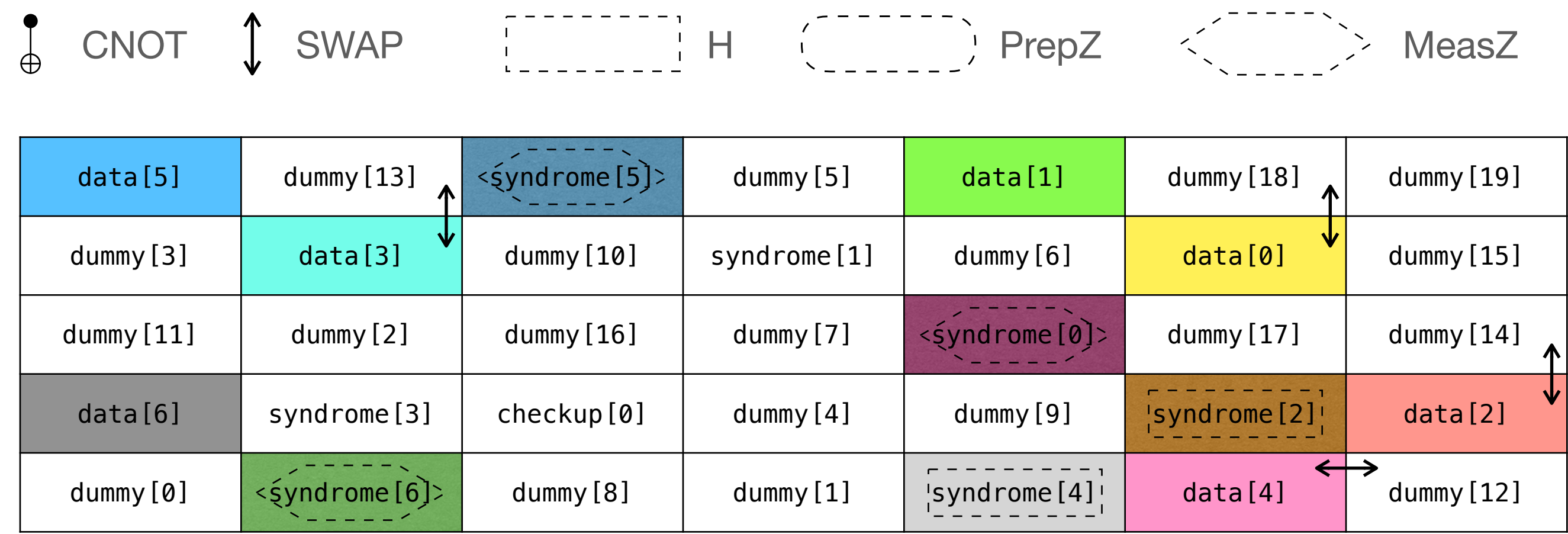


checksum[0] is deactivated by measure

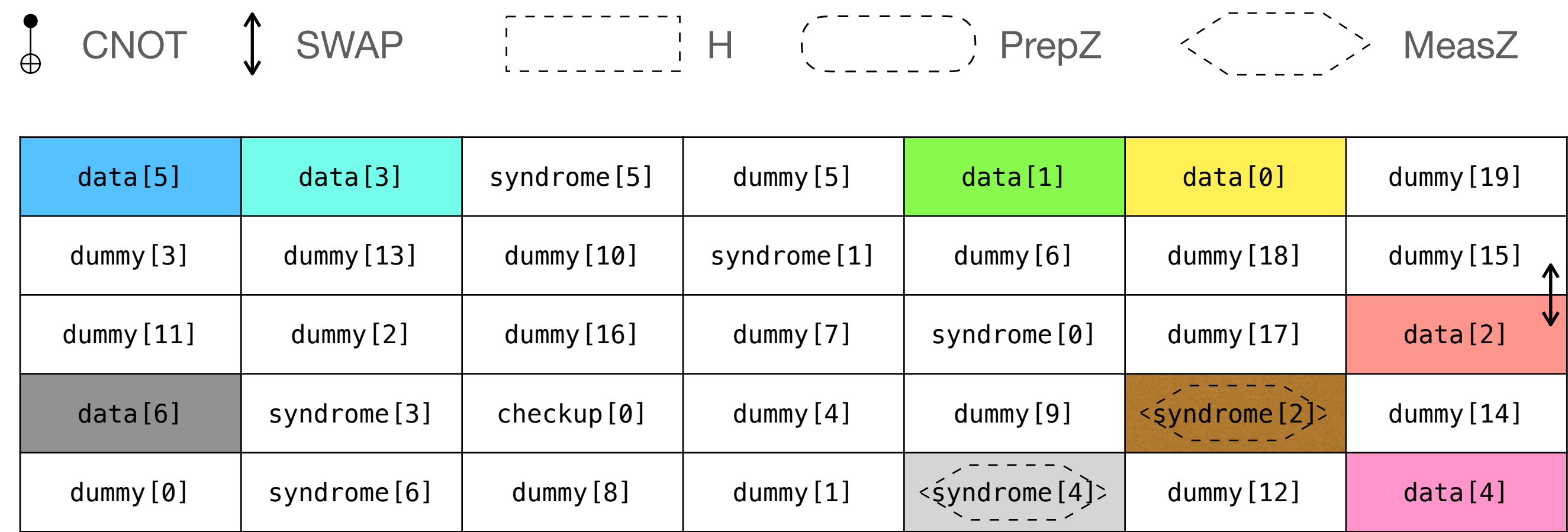


dummy [13]	data [5]	syndrome [5]	data [1]	dummy [5]	dummy [18]	dummy [15]
dummy [3]	dummy [2]	dummy [10]	syndrome [1]	data [0]	dummy [6]	dummy [19]
dummy [11]	data [3]	dummy [16]	dummy [7]	syndrome [0]	dummy [17]	dummy [14]
dummy [0]	syndrome [3]	checksum [0]	dummy [4]	syndrome [2]	dummy [9]	data [2]
data [6]	syndrome [6]	dummy [8]	syndrome [4]	dummy [1]	data [4]	dummy [12]





syndrome[1] and syndrome[3] are deactivated by measure



syndrome[0], syndrome[5] and syndrome[6] are deactivated by measure

final

data[5]	data[3]	syndrome[5]	dummy[5]	data[1]	data[0]	dummy[19]
dummy[3]	dummy[13]	dummy[10]	syndrome[1]	dummy[6]	dummy[18]	data[2]
dummy[11]	dummy[2]	dummy[16]	dummy[7]	syndrome[0]	dummy[17]	dummy[15]
data[6]	syndrome[3]	checkup[0]	dummy[4]	dummy[9]	syndrome[2]	dummy[14]
dummy[0]	syndrome[6]	dummy[8]	dummy[1]	syndrome[4]	dummy[12]	data[4]

data[5]	data[3]	syndrome[5]	dummy[5]	data[1]	data[0]	dummy[18]
dummy[13]	dummy[10]	syndrome[3]	dummy[6]	syndrome[1]	dummy[14]	data[2]
dummy[3]	dummy[2]	syndrome[6]	checkup[0]	syndrome[0]	dummy[17]	dummy[15]
data[6]	dummy[0]	syndrome[2]	dummy[7]	dummy[1]	syndrome[4]	dummy[19]
dummy[11]	dummy[16]	dummy[4]	dummy[8]	dummy[9]	dummy[12]	data[4]

Initial Mapping

Fault-Tolerant Circuits

- CNOT Gate (v-CNOT)

Initial



LQ1-data[5]	LQ1-data[3]	LQ1-syndrome[5]	LQ1-dummy[5]	LQ1-data[1]	LQ1-data[0]	LQ1-dummy[18]
LQ1-dummy[13]	LQ1-dummy[10]	LQ1-syndrome[3]	LQ1-dummy[6]	LQ1-syndrome[1]	LQ1-dummy[14]	LQ1-data[2]
LQ1-dummy[3]	LQ1-dummy[2]	LQ1-syndrome[6]	LQ1-checkup[0]	LQ1-syndrome[0]	LQ1-dummy[17]	LQ1-dummy[15]
LQ1-data[6]	LQ1-dummy[0]	LQ1-syndrome[2]	LQ1-dummy[7]	LQ1-dummy[1]	LQ1-syndrome[4]	LQ1-dummy[19]
LQ1-dummy[11]	LQ1-dummy[16]	LQ1-dummy[4]	LQ1-dummy[8]	LQ1-dummy[9]	LQ1-dummy[12]	LQ1-data[4]
LQ2-data[5]	LQ2-data[3]	LQ2-syndrome[5]	LQ2-dummy[5]	LQ2-data[1]	LQ2-data[0]	LQ2-dummy[18]
LQ2-dummy[13]	LQ2-dummy[10]	LQ2-syndrome[3]	LQ2-dummy[6]	LQ2-syndrome[1]	LQ2-dummy[14]	LQ2-data[2]
LQ2-dummy[3]	LQ2-dummy[2]	LQ2-syndrome[6]	LQ2-checkup[0]	LQ2-syndrome[0]	LQ2-dummy[17]	LQ2-dummy[15]
LQ2-data[6]	LQ2-dummy[0]	LQ2-syndrome[2]	LQ2-dummy[7]	LQ2-dummy[1]	LQ2-syndrome[4]	LQ2-dummy[19]
LQ2-dummy[11]	LQ2-dummy[16]	LQ2-dummy[4]	LQ2-dummy[8]	LQ2-dummy[9]	LQ2-dummy[12]	LQ2-data[4]



LQ1-dummy [13]	LQ1-dummy [10]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-dummy [18]
LQ1-data [5]	LQ1-data [3]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-dummy [3]	LQ1-dummy [2]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-data [2]
LQ1-data [6]	LQ1-dummy [0]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ1-syndrome [4]	LQ1-dummy [19]
LQ2-data [5]	LQ2-data [3]	LQ1-dummy [4]	LQ1-dummy [8]	LQ2-data [1]	LQ2-data [0]	LQ2-dummy [18]
LQ1-dummy [11]	LQ1-dummy [16]	LQ2-syndrome [5]	LQ2-dummy [5]	LQ1-dummy [9]	LQ1-dummy [12]	LQ1-data [4]
LQ2-dummy [13]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ2-dummy [14]	LQ2-data [2]
LQ2-data [6]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-dummy [15]
LQ2-dummy [3]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-data [4]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [19]



LQ1-dummy [13]	LQ1-dummy [10]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-dummy [15]
LQ1-dummy [3]	LQ1-dummy [2]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [18]
LQ1-data [5]	LQ1-data [3]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [19]
LQ1-data [6]	LQ2-data [3]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ2-data [1]	LQ2-data [0]	LQ1-data [2]
LQ2-data [5]	LQ1-dummy [0]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [1]	LQ1-syndrome [4]	LQ2-dummy [18]
LQ1-dummy [11]	LQ2-syndrome [5]	LQ1-dummy [16]	LQ2-dummy [5]	LQ1-dummy [9]	LQ1-data [4]	LQ1-dummy [12]
LQ2-data [6]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ2-dummy [14]	LQ2-data [2]
LQ2-dummy [13]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-data [4]
LQ2-dummy [3]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [15]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [19]



LQ1-dummy [3]	LQ1-dummy [10]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-dummy [15]
LQ1-dummy [13]	LQ1-dummy [2]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [19]
LQ1-data [5]	LQ1-data [3]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [18]
LQ1-data [6]	LQ2-data [3]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ2-data [1]	LQ2-data [0]	LQ2-dummy [18]
LQ1-dummy [0]	LQ2-data [5]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [1]	LQ1-syndrome [4]	LQ1-data [2]
LQ2-data [6]	LQ2-syndrome [5]	LQ1-dummy [16]	LQ2-dummy [5]	LQ1-dummy [9]	LQ2-dummy [14]	LQ2-data [2]
LQ1-dummy [11]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ1-dummy [12]
LQ2-dummy [3]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-data [4]
LQ2-dummy [13]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [19]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [15]



LQ1-dummy [3]	LQ1-dummy [10]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-dummy [15]
LQ1-dummy [13]	LQ1-data [3]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [19]
LQ1-data [5]	LQ1-dummy [2]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [18]
LQ1-dummy [0]	LQ2-data [3]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-data [0]	LQ2-dummy [18]
LQ1-data [6]	LQ2-data [5]	LQ1-dummy [4]	LQ1-dummy [8]	LQ2-data [1]	LQ2-dummy [14]	LQ1-data [2]
LQ2-data [6]	LQ2-syndrome [5]	LQ1-dummy [16]	LQ2-dummy [5]	LQ1-dummy [9]	LQ1-syndrome [4]	LQ2-data [2]
LQ1-dummy [11]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ2-data [4]
LQ2-dummy [3]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ1-dummy [12]
LQ2-dummy [13]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [19]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [15]



LQ1-dummy [3]	LQ1-data [3]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-dummy [13]	LQ1-dummy [10]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-dummy [19]
LQ1-dummy [0]	LQ2-data [3]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [18]
LQ1-data [5]	LQ1-dummy [2]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-dummy [14]	LQ1-data [2]
LQ1-data [6]	LQ2-data [5]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [9]	LQ2-data [0]	LQ2-dummy [18]
LQ2-data [6]	LQ2-syndrome [5]	LQ1-dummy [16]	LQ2-dummy [5]	LQ2-data [1]	LQ1-syndrome [4]	LQ2-data [2]
LQ1-dummy [11]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ2-data [4]
LQ2-dummy [3]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ1-dummy [12]
LQ2-dummy [13]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [19]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [15]



LQ1-dummy [3]	LQ1-data [3]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-dummy [13]	LQ1-dummy [10]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-dummy [19]
LQ1-dummy [0]	LQ2-data [3]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-data [2]
LQ1-data [5]	LQ2-data [5]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-dummy [14]	LQ1-dummy [18]
LQ1-data [6]	LQ1-dummy [2]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [9]	LQ1-syndrome [4]	LQ2-dummy [18]
LQ1-dummy [11]	LQ2-syndrome [5]	LQ1-dummy [16]	LQ2-dummy [5]	LQ2-data [1]	LQ2-data [0]	LQ2-data [2]
LQ2-data [6]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ1-dummy [12]
LQ2-dummy [3]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-data [4]
LQ2-dummy [13]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [19]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [15]



LQ1-dummy [3]	LQ1-data [3]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-dummy [13]	LQ1-dummy [10]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-data [2]
LQ1-dummy [0]	LQ2-data [3]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [19]
LQ1-data [5]	LQ2-data [5]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-dummy [14]	LQ1-dummy [18]
LQ1-data [6]	LQ2-syndrome [5]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [9]	LQ1-syndrome [4]	LQ2-dummy [18]
LQ1-dummy [11]	LQ1-dummy [2]	LQ1-dummy [16]	LQ2-dummy [5]	LQ2-data [1]	LQ2-data [0]	LQ1-dummy [12]
LQ2-dummy [3]	LQ2-dummy [10]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ2-data [2]
LQ2-data [6]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-dummy [19]
LQ2-dummy [13]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-data [4]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-dummy [15]



LQ1-dummy [3]	LQ1-data [3]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-dummy [13]	LQ1-dummy [10]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-data [2]
LQ1-data [5]	LQ2-data [3]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [19]
LQ1-dummy [0]	LQ2-syndrome [5]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-dummy [14]	LQ1-dummy [18]
LQ1-data [6]	LQ2-data [5]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [9]	LQ1-syndrome [4]	LQ1-dummy [12]
LQ1-dummy [11]	LQ2-dummy [10]	LQ1-dummy [16]	LQ2-dummy [5]	LQ2-data [1]	LQ2-data [0]	LQ2-dummy [18]
LQ2-dummy [3]	LQ1-dummy [2]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ2-data [2]
LQ2-dummy [13]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-dummy [19]
LQ2-data [6]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [15]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-data [4]



LQ1-dummy [3]	LQ1-data [3]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-data [5]	LQ1-dummy [10]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-data [2]
LQ1-dummy [13]	LQ2-syndrome [5]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [19]
LQ1-data [6]	LQ2-data [3]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-dummy [14]	LQ1-dummy [18]
LQ1-dummy [0]	LQ2-data [5]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [9]	LQ1-dummy [12]	LQ1-syndrome [4]
LQ2-dummy [10]	LQ1-dummy [11]	LQ1-dummy [16]	LQ2-dummy [5]	LQ2-data [1]	LQ2-data [0]	LQ2-dummy [18]
LQ2-dummy [3]	LQ1-dummy [2]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ2-data [2]
LQ2-dummy [13]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-dummy [19]
LQ2-data [6]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [15]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-data [4]



LQ1-data [5]	LQ1-data [3]	LQ1-syndrome [5]	LQ1-dummy [5]	LQ1-data [1]	LQ1-data [0]	LQ1-dummy [15]
LQ1-dummy [3]	LQ1-dummy [10]	LQ1-syndrome [3]	LQ1-dummy [6]	LQ1-syndrome [1]	LQ1-dummy [14]	LQ1-data [2]
LQ1-dummy [13]	LQ2-syndrome [5]	LQ1-syndrome [6]	LQ1-checkup [0]	LQ1-syndrome [0]	LQ1-dummy [17]	LQ1-dummy [19]
LQ1-data [6]	LQ2-data [3]	LQ1-syndrome [2]	LQ1-dummy [7]	LQ1-dummy [1]	LQ2-dummy [14]	LQ1-dummy [18]
LQ1-dummy [0]	LQ1-dummy [11]	LQ1-dummy [4]	LQ1-dummy [8]	LQ1-dummy [9]	LQ2-data [0]	LQ1-syndrome [4]
LQ2-dummy [10]	LQ2-data [5]	LQ1-dummy [16]	LQ2-dummy [5]	LQ2-data [1]	LQ1-dummy [12]	LQ2-dummy [18]
LQ2-dummy [3]	LQ1-dummy [2]	LQ2-syndrome [3]	LQ2-dummy [6]	LQ2-syndrome [1]	LQ1-data [4]	LQ2-data [2]
LQ2-dummy [13]	LQ2-dummy [2]	LQ2-syndrome [6]	LQ2-checkup [0]	LQ2-syndrome [0]	LQ2-dummy [17]	LQ2-dummy [19]
LQ2-data [6]	LQ2-dummy [0]	LQ2-syndrome [2]	LQ2-dummy [7]	LQ2-dummy [1]	LQ2-syndrome [4]	LQ2-dummy [15]
LQ2-dummy [11]	LQ2-dummy [16]	LQ2-dummy [4]	LQ2-dummy [8]	LQ2-dummy [9]	LQ2-dummy [12]	LQ2-data [4]



LQ1-data[5]	LQ1-data[3]	LQ1-syndrome[5]	LQ1-dummy[5]	LQ1-data[1]	LQ1-data[0]	LQ1-dummy[15]
LQ1-dummy[3]	LQ1-dummy[10]	LQ1-syndrome[3]	LQ1-dummy[6]	LQ1-syndrome[1]	LQ1-dummy[14]	LQ1-data[2]
LQ1-dummy[13]	LQ2-syndrome[5]	LQ1-syndrome[6]	LQ1-checkup[0]	LQ1-syndrome[0]	LQ1-dummy[17]	LQ1-dummy[19]
LQ1-data[6]	LQ1-dummy[11]	LQ1-syndrome[2]	LQ1-dummy[7]	LQ1-dummy[1]	LQ2-dummy[14]	LQ1-dummy[18]
LQ1-dummy[0]	LQ2-data[3]	LQ1-dummy[4]	LQ1-dummy[8]	LQ1-dummy[9]	LQ2-data[0]	LQ1-syndrome[4]
LQ2-data[5]	LQ2-dummy[10]	LQ1-dummy[16]	LQ2-dummy[5]	LQ2-data[1]	LQ1-data[4]	LQ2-dummy[18]
LQ2-dummy[3]	LQ1-dummy[2]	LQ2-syndrome[3]	LQ2-dummy[6]	LQ2-syndrome[1]	LQ1-dummy[12]	LQ2-data[2]
LQ2-dummy[13]	LQ2-dummy[2]	LQ2-syndrome[6]	LQ2-checkup[0]	LQ2-syndrome[0]	LQ2-dummy[17]	LQ2-dummy[19]
LQ2-data[6]	LQ2-dummy[0]	LQ2-syndrome[2]	LQ2-dummy[7]	LQ2-dummy[1]	LQ2-syndrome[4]	LQ2-dummy[15]
LQ2-dummy[11]	LQ2-dummy[16]	LQ2-dummy[4]	LQ2-dummy[8]	LQ2-dummy[9]	LQ2-dummy[12]	LQ2-data[4]



LQ1-data[5]	LQ1-data[3]	LQ1-syndrome[5]	LQ1-dummy[5]	LQ1-data[1]	LQ1-data[0]	LQ1-dummy[15]
LQ1-dummy[3]	LQ1-dummy[10]	LQ1-syndrome[3]	LQ1-dummy[6]	LQ1-syndrome[1]	LQ1-dummy[14]	LQ1-data[2]
LQ1-dummy[13]	LQ2-syndrome[5]	LQ1-syndrome[6]	LQ1-checkup[0]	LQ1-syndrome[0]	LQ1-dummy[17]	LQ1-dummy[19]
LQ1-data[6]	LQ1-dummy[11]	LQ1-syndrome[2]	LQ1-dummy[7]	LQ1-dummy[1]	LQ2-dummy[14]	LQ1-dummy[18]
LQ1-dummy[0]	LQ2-dummy[10]	LQ1-dummy[4]	LQ1-dummy[8]	LQ1-dummy[9]	LQ2-data[0]	LQ1-syndrome[4]
LQ2-data[5]	LQ2-data[3]	LQ1-dummy[16]	LQ2-dummy[5]	LQ2-data[1]	LQ2-dummy[18]	LQ1-data[4]
LQ2-dummy[3]	LQ1-dummy[2]	LQ2-syndrome[3]	LQ2-dummy[6]	LQ2-syndrome[1]	LQ1-dummy[12]	LQ2-data[2]
LQ2-dummy[13]	LQ2-dummy[2]	LQ2-syndrome[6]	LQ2-checkup[0]	LQ2-syndrome[0]	LQ2-dummy[17]	LQ2-dummy[19]
LQ2-data[6]	LQ2-dummy[0]	LQ2-syndrome[2]	LQ2-dummy[7]	LQ2-dummy[1]	LQ2-syndrome[4]	LQ2-dummy[15]
LQ2-dummy[11]	LQ2-dummy[16]	LQ2-dummy[4]	LQ2-dummy[8]	LQ2-dummy[9]	LQ2-dummy[12]	LQ2-data[4]



LQ1-data[5]	LQ1-data[3]	LQ1-syndrome[5]	LQ1-dummy[5]	LQ1-data[1]	LQ1-data[0]	LQ1-dummy[15]
LQ1-dummy[3]	LQ1-dummy[10]	LQ1-syndrome[3]	LQ1-dummy[6]	LQ1-syndrome[1]	LQ1-dummy[14]	LQ1-data[2]
LQ1-dummy[13]	LQ2-syndrome[5]	LQ1-syndrome[6]	LQ1-checkup[0]	LQ1-syndrome[0]	LQ1-dummy[17]	LQ1-dummy[19]
LQ1-data[6]	LQ1-dummy[11]	LQ1-syndrome[2]	LQ1-dummy[7]	LQ1-dummy[1]	LQ2-dummy[14]	LQ1-dummy[18]
LQ1-dummy[0]	LQ2-dummy[10]	LQ1-dummy[4]	LQ1-dummy[8]	LQ1-dummy[9]	LQ2-dummy[18]	LQ1-data[4]
LQ2-data[5]	LQ2-data[3]	LQ1-dummy[16]	LQ2-dummy[5]	LQ2-data[1]	LQ2-data[0]	LQ1-syndrome[4]
LQ2-dummy[3]	LQ1-dummy[2]	LQ2-syndrome[3]	LQ2-dummy[6]	LQ2-syndrome[1]	LQ1-dummy[12]	LQ2-data[2]
LQ2-dummy[13]	LQ2-dummy[2]	LQ2-syndrome[6]	LQ2-checkup[0]	LQ2-syndrome[0]	LQ2-dummy[17]	LQ2-dummy[19]
LQ2-data[6]	LQ2-dummy[0]	LQ2-syndrome[2]	LQ2-dummy[7]	LQ2-dummy[1]	LQ2-syndrome[4]	LQ2-dummy[15]
LQ2-dummy[11]	LQ2-dummy[16]	LQ2-dummy[4]	LQ2-dummy[8]	LQ2-dummy[9]	LQ2-dummy[12]	LQ2-data[4]

Final

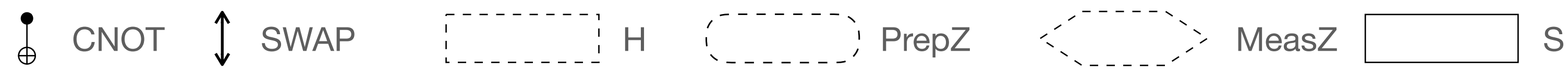


LQ1-data[5]	LQ1-data[3]	LQ1-syndrome[5]	LQ1-dummy[5]	LQ1-data[1]	LQ1-data[0]	LQ1-dummy[15]
LQ1-dummy[3]	LQ1-dummy[10]	LQ1-syndrome[3]	LQ1-dummy[6]	LQ1-syndrome[1]	LQ1-dummy[14]	LQ1-data[2]
LQ1-dummy[13]	LQ2-syndrome[5]	LQ1-syndrome[6]	LQ1-checkup[0]	LQ1-syndrome[0]	LQ1-dummy[17]	LQ1-dummy[19]
LQ1-data[6]	LQ1-dummy[11]	LQ1-syndrome[2]	LQ1-dummy[7]	LQ1-dummy[1]	LQ2-dummy[14]	LQ1-dummy[18]
LQ1-dummy[0]	LQ2-dummy[10]	LQ1-dummy[4]	LQ1-dummy[8]	LQ1-dummy[9]	LQ2-dummy[18]	LQ1-data[4]
LQ2-data[5]	LQ2-data[3]	LQ1-dummy[16]	LQ2-dummy[5]	LQ2-data[1]	LQ2-data[0]	LQ1-syndrome[4]
LQ2-dummy[3]	LQ1-dummy[2]	LQ2-syndrome[3]	LQ2-dummy[6]	LQ2-syndrome[1]	LQ1-dummy[12]	LQ2-data[2]
LQ2-dummy[13]	LQ2-dummy[2]	LQ2-syndrome[6]	LQ2-checkup[0]	LQ2-syndrome[0]	LQ2-dummy[17]	LQ2-dummy[19]
LQ2-data[6]	LQ2-dummy[0]	LQ2-syndrome[2]	LQ2-dummy[7]	LQ2-dummy[1]	LQ2-syndrome[4]	LQ2-dummy[15]
LQ2-dummy[11]	LQ2-dummy[16]	LQ2-dummy[4]	LQ2-dummy[8]	LQ2-dummy[9]	LQ2-dummy[12]	LQ2-data[4]

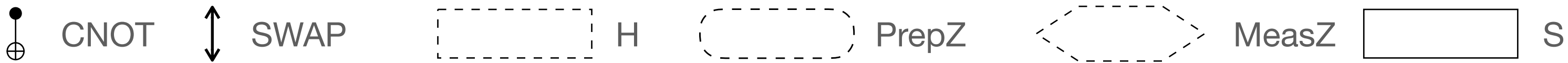
Fault-Tolerant Circuits

- T Gate (v-T)

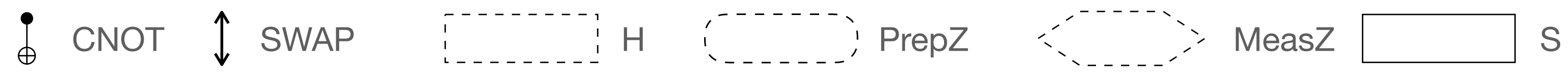
Initial



LQ1-data[5]	LQ1-data[3]	dummy [16]	dummy [50]	LQ1-data[1]	LQ1-data[0]	dummy [39]
dummy [22]	dummy [37]	dummy [21]	dummy [45]	dummy [11]	dummy [35]	LQ1-data[2]
dummy [10]	dummy [25]	dummy [43]	dummy [49]	dummy [19]	dummy [28]	dummy [32]
LQ1-data[6]	dummy [51]	dummy [33]	dummy [18]	dummy [41]	dummy [53]	dummy [26]
dummy [0]	dummy [42]	dummy [29]	dummy [15]	dummy [38]	dummy [34]	LQ1-data[4]
dummy [31]	LQ2-magic[4]	dummy [9]	dummy [14]	dummy [5]	dummy [47]	dummy [13]
LQ2-magic[3]	dummy [20]	dummy [24]	dummy [55]	LQ2-magic[6]	dummy [46]	LQ2-magic[2]
dummy [30]	LQ2-magic[1]	dummy [40]	dummy [17]	dummy [52]	dummy [1]	dummy [48]
dummy [3]	dummy [36]	dummy [2]	dummy [6]	dummy [8]	dummy [27]	LQ2-magic[0]
dummy [4]	dummy [23]	LQ2-magic[5]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

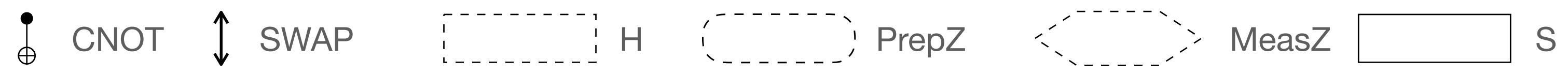


LQ1-data[5]	LQ1-data[3]	dummy [16]	dummy [50]	LQ1-data[1]	LQ1-data[0]	dummy [39]
dummy [22]	dummy [37]	dummy [21]	dummy [45]	dummy [11]	dummy [35]	LQ1-data[2]
dummy [10]	dummy [25]	dummy [43]	dummy [49]	dummy [19]	dummy [28]	dummy [32]
LQ1-data[6]	dummy [51]	dummy [33]	dummy [18]	dummy [41]	dummy [53]	dummy [26]
dummy [0]	dummy [42]	dummy [29]	dummy [15]	dummy [38]	dummy [34]	LQ1-data[4]
dummy [31]	LQ2-magic[4]	dummy [9]	dummy [14]	dummy [5]	dummy [47]	dummy [13]
LQ2-magic[3]	dummy [20]	dummy [24]	dummy [55]	LQ2-magic[6]	dummy [46]	LQ2-magic[2]
dummy [30]	LQ2-magic[1]	dummy [40]	dummy [17]	dummy [52]	dummy [1]	dummy [48]
dummy [3]	dummy [36]	dummy [2]	dummy [6]	dummy [8]	dummy [27]	LQ2-magic[0]
dummy [4]	dummy [23]	LQ2-magic[5]	dummy [7]	dummy [54]	dummy [12]	dummy [44]



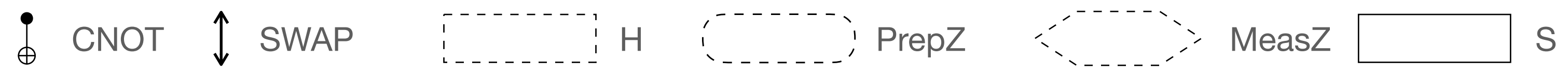
dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
LQ1-data[5]	LQ1-data[3]	dummy [21]	dummy [45]	LQ1-data[1]	LQ1-data[0]	dummy [32]
dummy [10]	dummy [25]	dummy [43]	dummy [49]	dummy [19]	dummy [28]	LQ1-data[2]
LQ1-data[6]	dummy [51]	dummy [33]	dummy [18]	dummy [41]	dummy [53]	dummy [26]
dummy [0]	LQ2-magic[4]	dummy [29]	dummy [15]	dummy [38]	LQ1-data[4]	dummy [34]
LQ2-magic[3]	dummy [42]	dummy [9]	dummy [14]	LQ2-magic[6]	dummy [47]	LQ2-magic[2]
dummy [31]	LQ2-magic[1]	dummy [24]	dummy [55]	dummy [5]	dummy [46]	dummy [13]
dummy [30]	dummy [20]	dummy [40]	dummy [17]	dummy [52]	dummy [1]	LQ2-magic[0]
dummy [3]	dummy [36]	LQ2-magic[5]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

2



dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
LQ1-data[5]	LQ1-data[3]	dummy [43]	dummy [49]	LQ1-data[1]	LQ1-data[0]	dummy [26]
LQ1-data[6]	dummy [51]	dummy [33]	dummy [18]	dummy [41]	dummy [53]	LQ1-data[2]
LQ2-magic[3]	dummy [29]	LQ2-magic[4]	dummy [15]	LQ2-magic[6]	LQ1-data[4]	LQ2-magic[2]
dummy [0]	LQ2-magic[1]	dummy [9]	dummy [14]	dummy [38]	dummy [47]	dummy [34]
dummy [31]	dummy [42]	dummy [24]	dummy [55]	dummy [5]	dummy [46]	LQ2-magic[0]
dummy [30]	dummy [20]	LQ2-magic[5]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

3



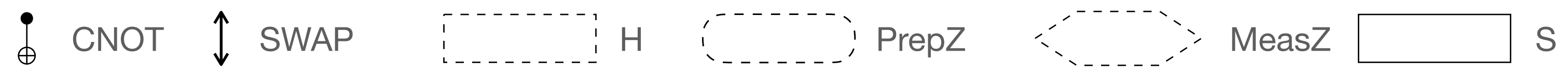
dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
LQ1-data[5]	dummy [51]	dummy [43]	dummy [49]	LQ1-data[1]	dummy [53]	dummy [26]
LQ1-data[6]	LQ1-data[3]	dummy [33]	dummy [18]	LQ2-magic[6]	LQ1-data[0]	LQ1-data[2]
LQ2-magic[3]	LQ2-magic[1]	dummy [15]	LQ2-magic[4]	dummy [41]	LQ1-data[4]	LQ2-magic[2]
dummy [0]	dummy [29]	dummy [9]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[0]
dummy [31]	dummy [42]	LQ2-magic[5]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

S

dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	LQ1-data[5]	dummy [43]	dummy [49]	LQ1-data[1]	dummy [53]	LQ1-data[2]
LQ1-data[6]	LQ1-data[3]	dummy [33]	LQ2-magic[6]	dummy [18]	LQ1-data[0]	dummy [26]
LQ2-magic[3]	dummy [15]	LQ2-magic[1]	dummy [41]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[2]
dummy [0]	dummy [29]	LQ2-magic[5]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[0]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

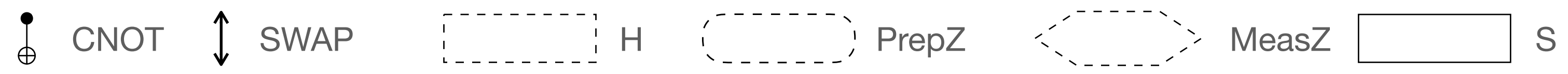
magic[2] is deactivated by measure

5



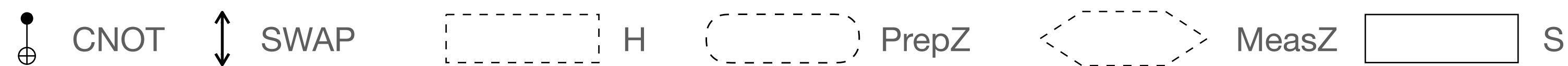
dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
LQ1-data[6]	dummy [15]	LQ2-magic[6]	dummy [33]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic[3]	LQ1-data[3]	dummy [41]	LQ2-magic[1]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[0]
dummy [0]	dummy [29]	LQ2-magic[5]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

6



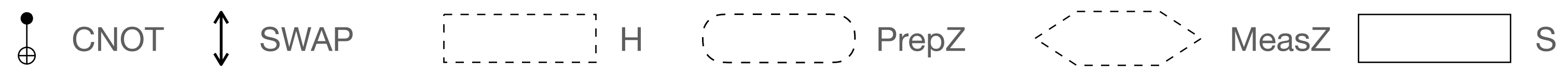
dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic[6]	LQ2-magic[1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic[3]	LQ1-data[3]	LQ2-magic[5]	dummy [33]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

magic[4] is deactivated by measure



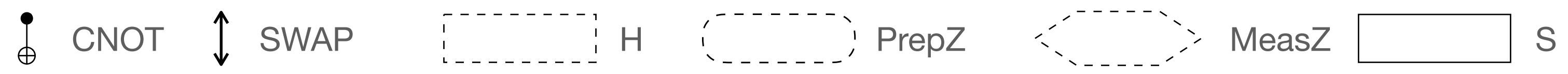
dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic[6]	LQ2-magic[1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic[3]	LQ1-data[3]	LQ2-magic[5]	dummy [33]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

magic[0] and magic[3] are deactivated by measure

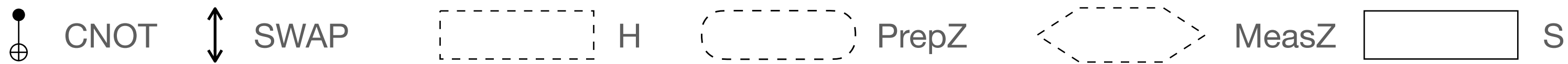


dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic[6]	LQ2-magic[1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic[3]	LQ1-data[3]	LQ2-magic[5]	dummy [33]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

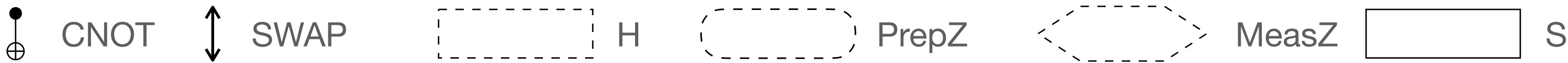
magic[1] and magic[6] are deactivated by measure



dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic[5]	LQ2-magic[1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic[3]	LQ1-data[3]	LQ2-magic[6]	dummy [33]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]



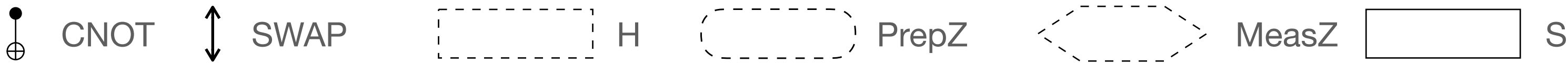
dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic[5]	LQ2-magic[1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic[3]	LQ1-data[3]	LQ2-magic[6]	dummy [33]	LQ2-magic[4]	LQ1-data[4]	LQ2-magic[0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic[2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]



dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic [5]	LQ2-magic [1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic [3]	LQ1-data[3]	LQ2-magic [6]	dummy [33]	LQ2-magic [4]	LQ1-data[4]	LQ2-magic [0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic [2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

magic[5] is deactivated by measure

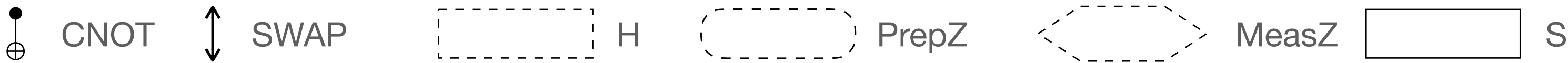
12



dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	dummy [21]	dummy [45]	dummy [19]	dummy [28]	dummy [32]
dummy [51]	dummy [43]	LQ1-data[5]	dummy [49]	dummy [18]	dummy [53]	LQ1-data[2]
dummy [15]	LQ1-data[6]	LQ2-magic [5]	LQ2-magic [1]	LQ1-data[1]	dummy [26]	LQ1-data[0]
LQ2-magic [3]	LQ1-data[3]	LQ2-magic [6]	dummy [33]	LQ2-magic [4]	LQ1-data[4]	LQ2-magic [0]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic [2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]



dummy [22]	dummy [37]	dummy [16]	dummy [50]	dummy [11]	dummy [35]	dummy [39]
dummy [10]	dummy [25]	LQ1-data [5]	dummy [45]	dummy [19]	dummy [28]	LQ1-data [2]
dummy [51]	dummy [43]	dummy [21]	dummy [49]	LQ1-data [1]	dummy [53]	dummy [32]
LQ1-data [6]	dummy [15]	LQ2-magic [5]	LQ2-magic [1]	dummy [18]	dummy [26]	LQ1-data [0]
LQ2-magic [3]	LQ1-data [3]	LQ2-magic [6]	dummy [33]	LQ2-magic [4]	LQ2-magic [0]	LQ1-data [4]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic [2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

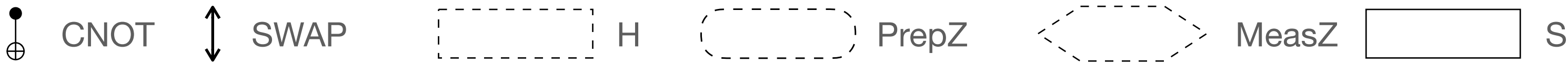


dummy [22]	dummy [37]	LQ1-data[5]	dummy [50]	dummy [11]	dummy [35]	LQ1-data[2]
dummy [10]	dummy [25]	dummy [16]	dummy [45]	LQ1-data[1]	dummy [28]	dummy [39]
dummy [51]	dummy [43]	dummy [21]	dummy [49]	dummy [19]	dummy [53]	LQ1-data[0]
LQ1-data[6]	LQ1-data[3]	LQ2-magic [5]	LQ2-magic [1]	dummy [18]	dummy [26]	dummy [32]
LQ2-magic [3]	dummy [15]	LQ2-magic [6]	dummy [33]	LQ2-magic [4]	LQ2-magic [0]	LQ1-data[4]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic [2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]



dummy [22]	LQ1-data[5]	dummy [37]	dummy [50]	LQ1-data[1]	LQ1-data[2]	dummy [35]
dummy [10]	dummy [25]	dummy [16]	dummy [45]	dummy [11]	dummy [28]	LQ1-data[0]
dummy [51]	LQ1-data[3]	dummy [21]	dummy [49]	dummy [19]	dummy [53]	dummy [39]
LQ1-data[6]	dummy [43]	LQ2-magic [5]	LQ2-magic [1]	dummy [18]	dummy [26]	dummy [32]
LQ2-magic [3]	dummy [15]	LQ2-magic [6]	dummy [33]	LQ2-magic [4]	LQ2-magic [0]	LQ1-data[4]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic [2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]

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LQ1-data[5]	dummy[22]	dummy[37]	dummy[50]	LQ1-data[1]	dummy[28]	LQ1-data[0]
dummy[10]	LQ1-data[3]	dummy[16]	dummy[45]	dummy[11]	LQ1-data[2]	dummy[35]
dummy[51]	dummy[25]	dummy[21]	dummy[49]	dummy[19]	dummy[53]	dummy[39]
LQ1-data[6]	dummy[43]	LQ2-magic[5]	LQ2-magic[1]	dummy[18]	dummy[26]	dummy[32]
LQ2-magic[3]	dummy[15]	LQ2-magic[6]	dummy[33]	LQ2-magic[4]	LQ2-magic[0]	LQ1-data[4]
dummy[0]	dummy[29]	dummy[41]	dummy[14]	dummy[38]	dummy[47]	LQ2-magic[2]
dummy[31]	dummy[42]	dummy[9]	dummy[55]	dummy[5]	dummy[46]	dummy[34]
dummy[30]	dummy[20]	dummy[24]	dummy[17]	dummy[52]	dummy[1]	dummy[13]
dummy[3]	dummy[36]	dummy[40]	dummy[6]	dummy[8]	dummy[27]	dummy[48]
dummy[4]	dummy[23]	dummy[2]	dummy[7]	dummy[54]	dummy[12]	dummy[44]

Final



LQ1-data[5]	LQ1-data[3]	dummy [37]	dummy [50]	LQ1-data[1]	LQ1-data[0]	dummy [28]
dummy [10]	dummy [22]	dummy [16]	dummy [45]	dummy [11]	dummy [35]	LQ1-data[2]
dummy [51]	dummy [25]	dummy [21]	dummy [49]	dummy [19]	dummy [53]	dummy [39]
LQ1-data[6]	dummy [43]	LQ2-magic [5]	LQ2-magic [1]	dummy [18]	dummy [26]	dummy [32]
LQ2-magic [3]	dummy [15]	LQ2-magic [6]	dummy [33]	LQ2-magic [4]	LQ2-magic [0]	LQ1-data[4]
dummy [0]	dummy [29]	dummy [41]	dummy [14]	dummy [38]	dummy [47]	LQ2-magic [2]
dummy [31]	dummy [42]	dummy [9]	dummy [55]	dummy [5]	dummy [46]	dummy [34]
dummy [30]	dummy [20]	dummy [24]	dummy [17]	dummy [52]	dummy [1]	dummy [13]
dummy [3]	dummy [36]	dummy [40]	dummy [6]	dummy [8]	dummy [27]	dummy [48]
dummy [4]	dummy [23]	dummy [2]	dummy [7]	dummy [54]	dummy [12]	dummy [44]