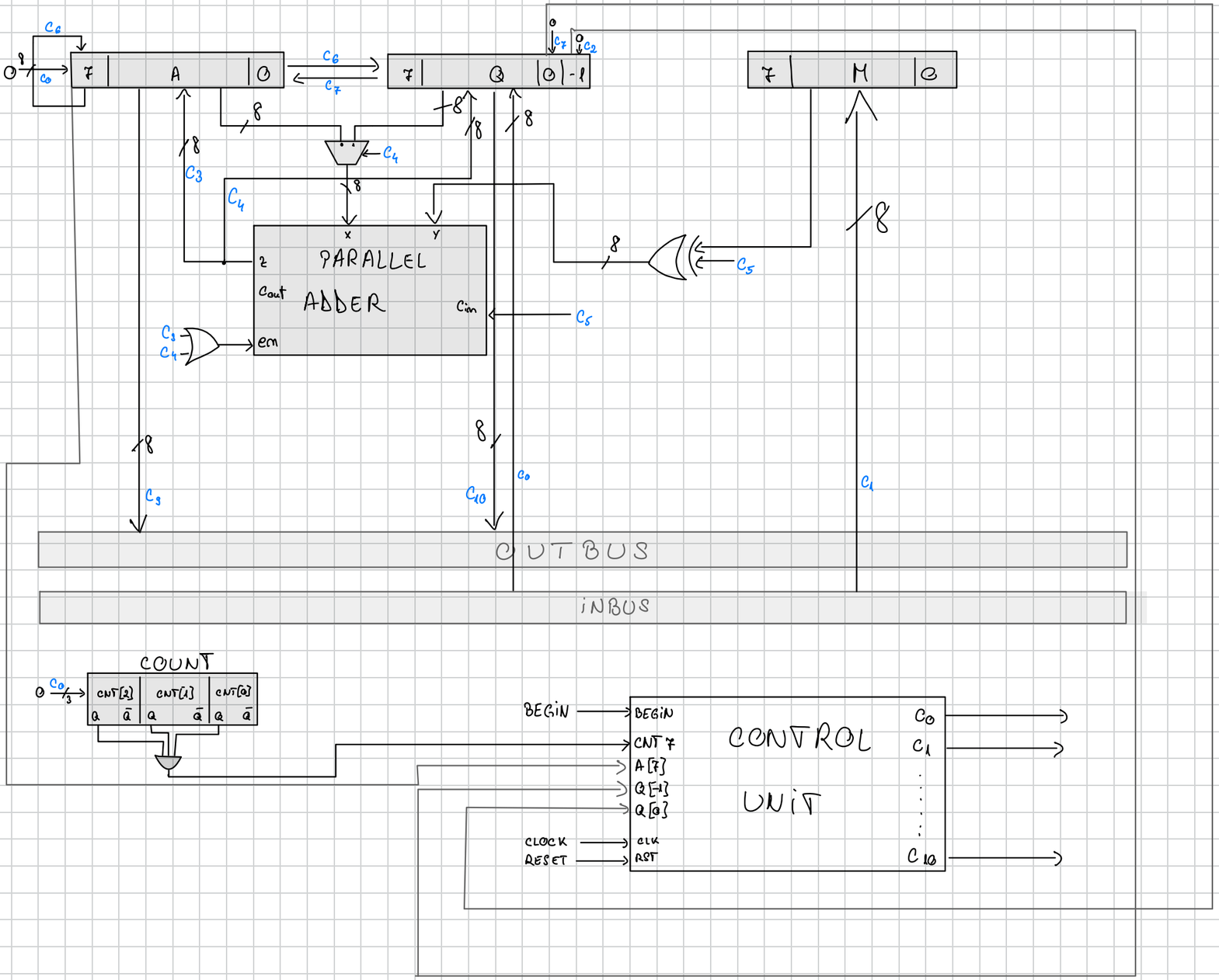


C_0 : A := 0 , Q := iNBUS , COUNT := 0

C_1 : M := iNBUS

C_2 : Q[-1] := 0

C_3 : A := A + M

C_4 : Q := Q + M

C_5 : M := ~ M + 1 <— COMPLEMENT2

C_6 : A[6:0].Q[7:-1] := A[7:0].Q[7:0], A[7] := A[7] <— RSHIFT

C_7 : A[7:0].Q[7:0] := A[6:0].Q[7:0], Q[0] := 0 <— LSHIFT

C_8 : COUNT := COUNT + 1

C_9 : OUTBUS := A

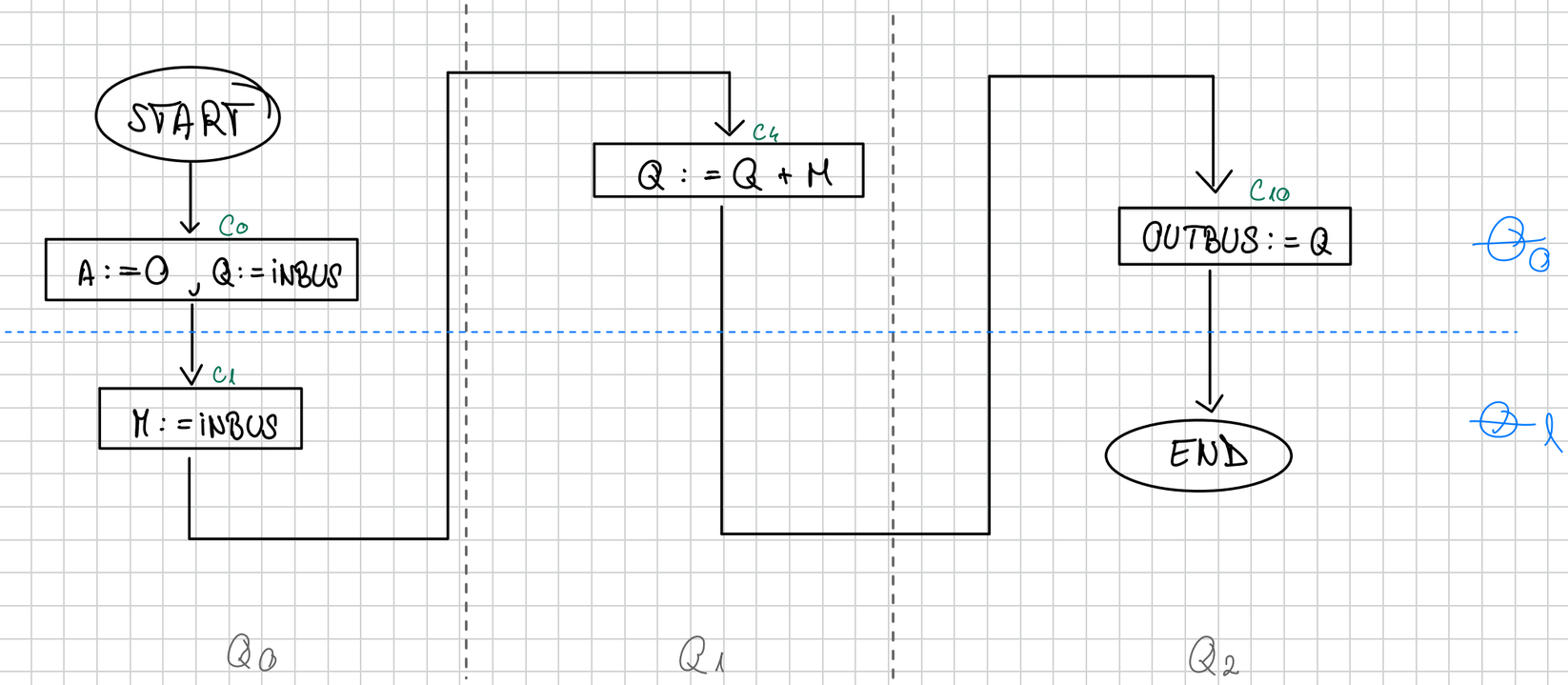
C_{10} : OUTBUS := Q

TEST 1 : Q[0]Q[-1]

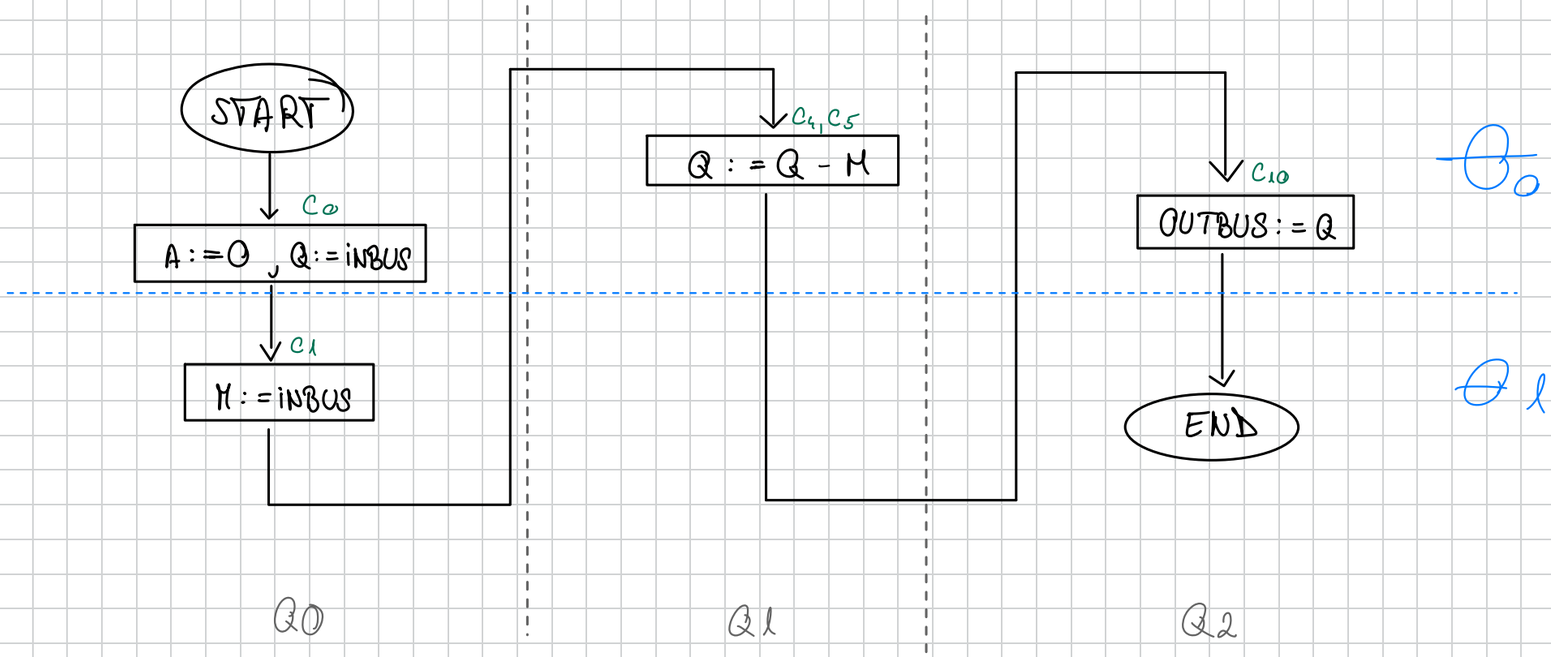
TEST 2 : COUNT

TEST 3 : A[7]

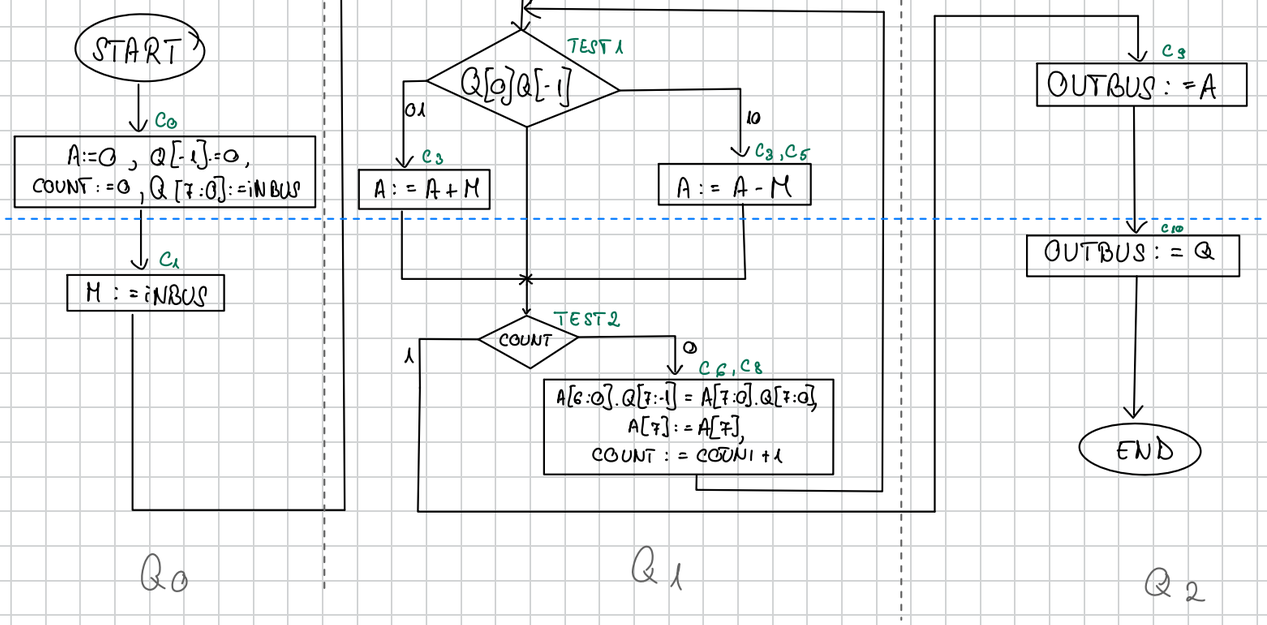
ADDITION



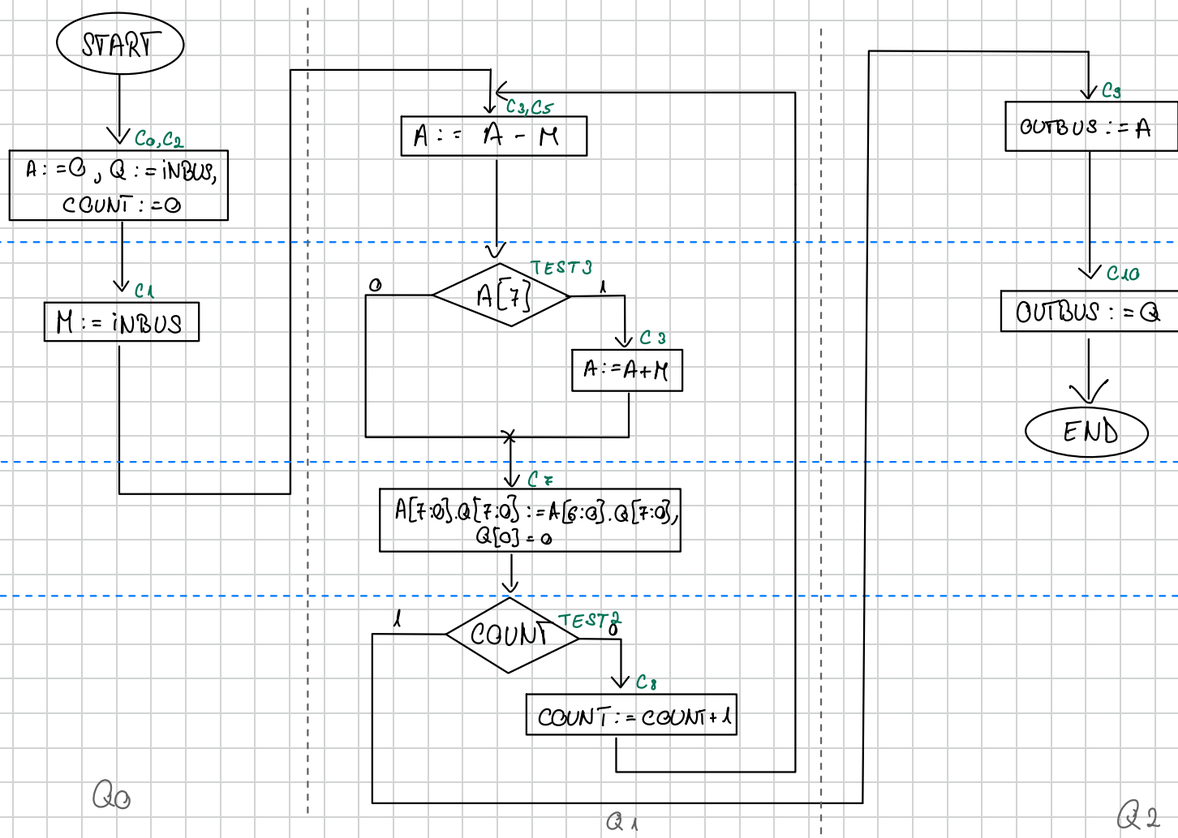
SUBSTRACTION

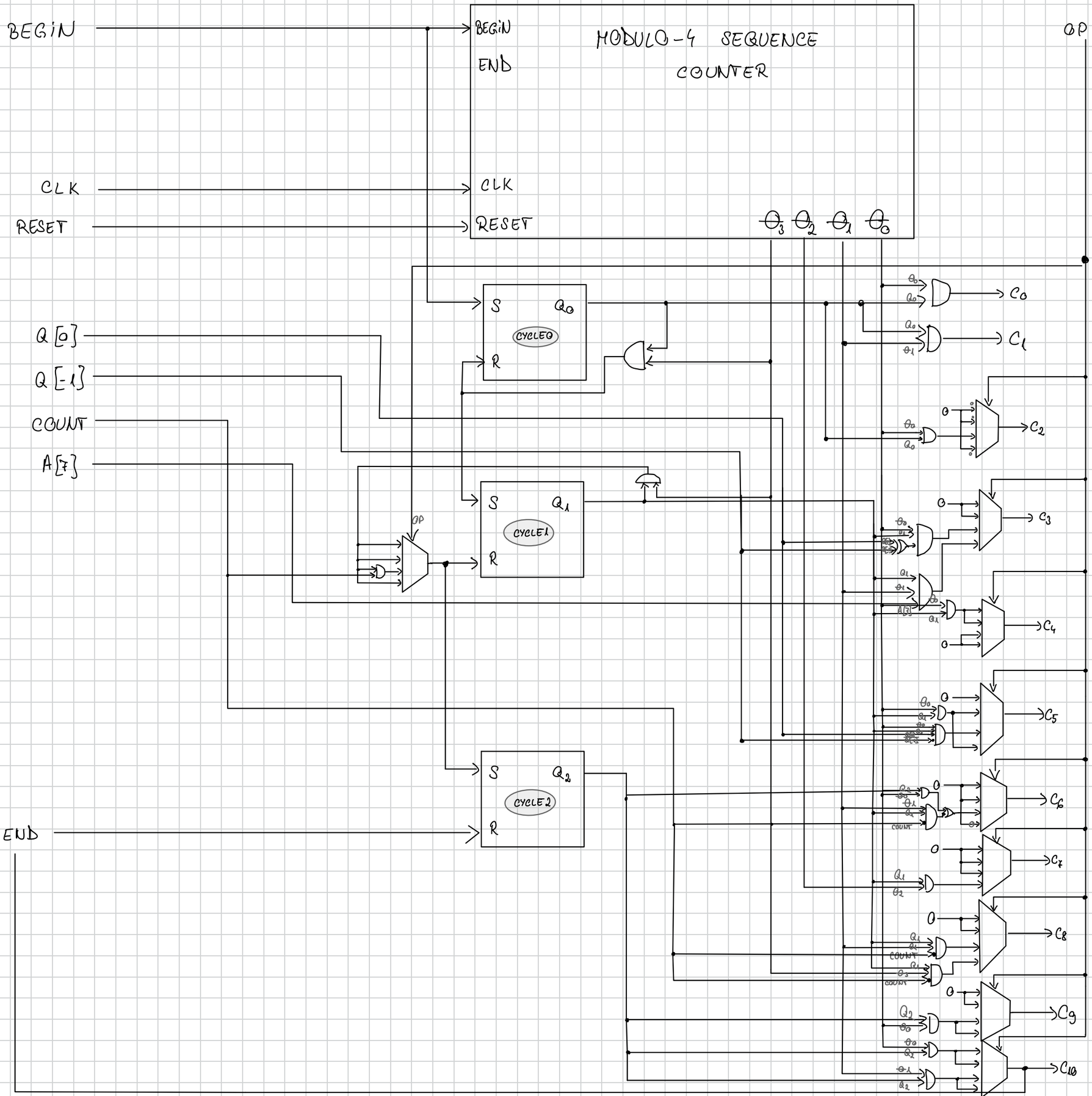


MULTIPLICATION → Booth Radix-2



DIVISION → Restoring Division





OP	CODE
ADD	00
SUB	01
MUL	10
DIV	11