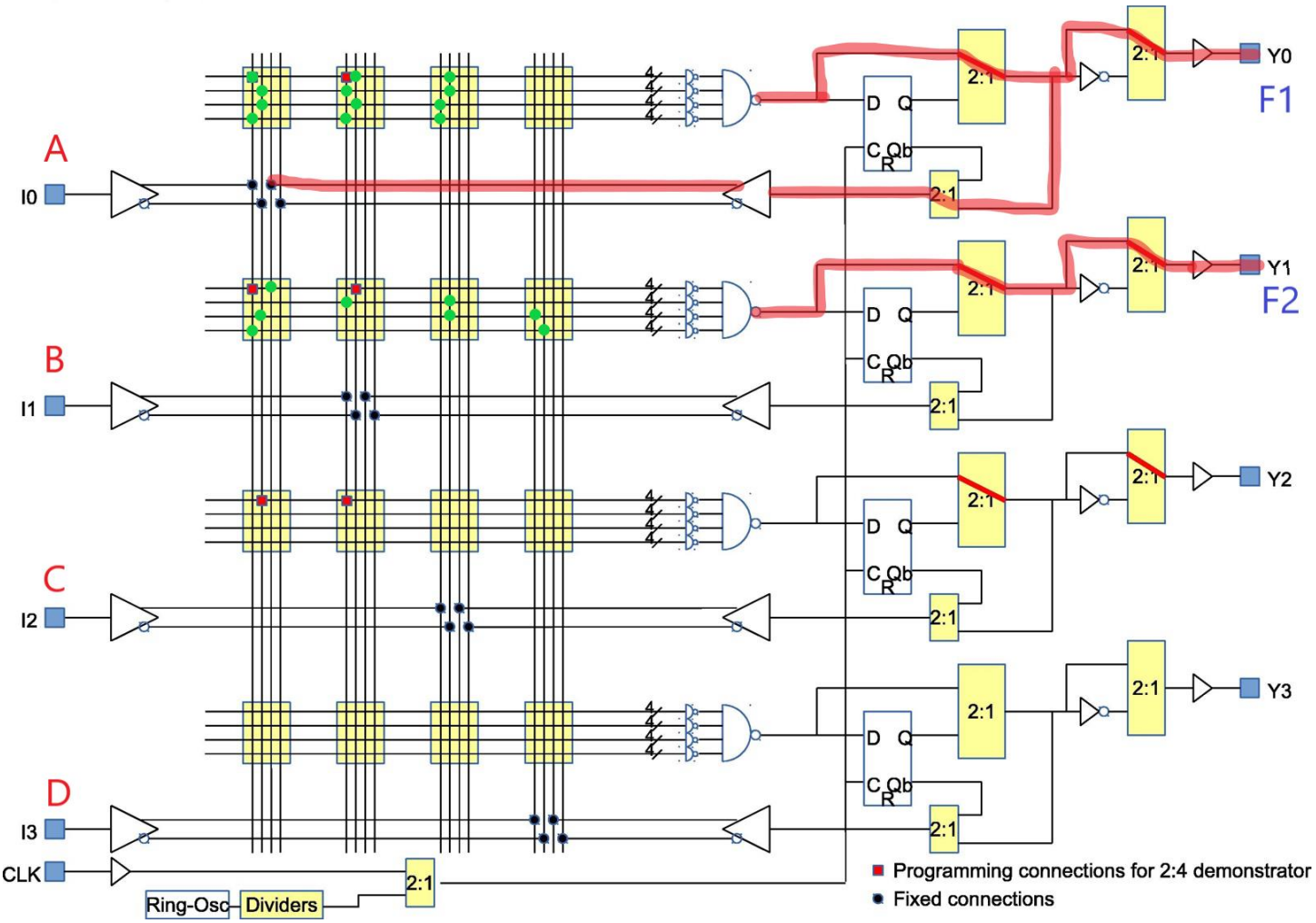
1) $(A \oplus B) \oplus C \Rightarrow (A \oplus B)'C + (A \oplus B)C'$

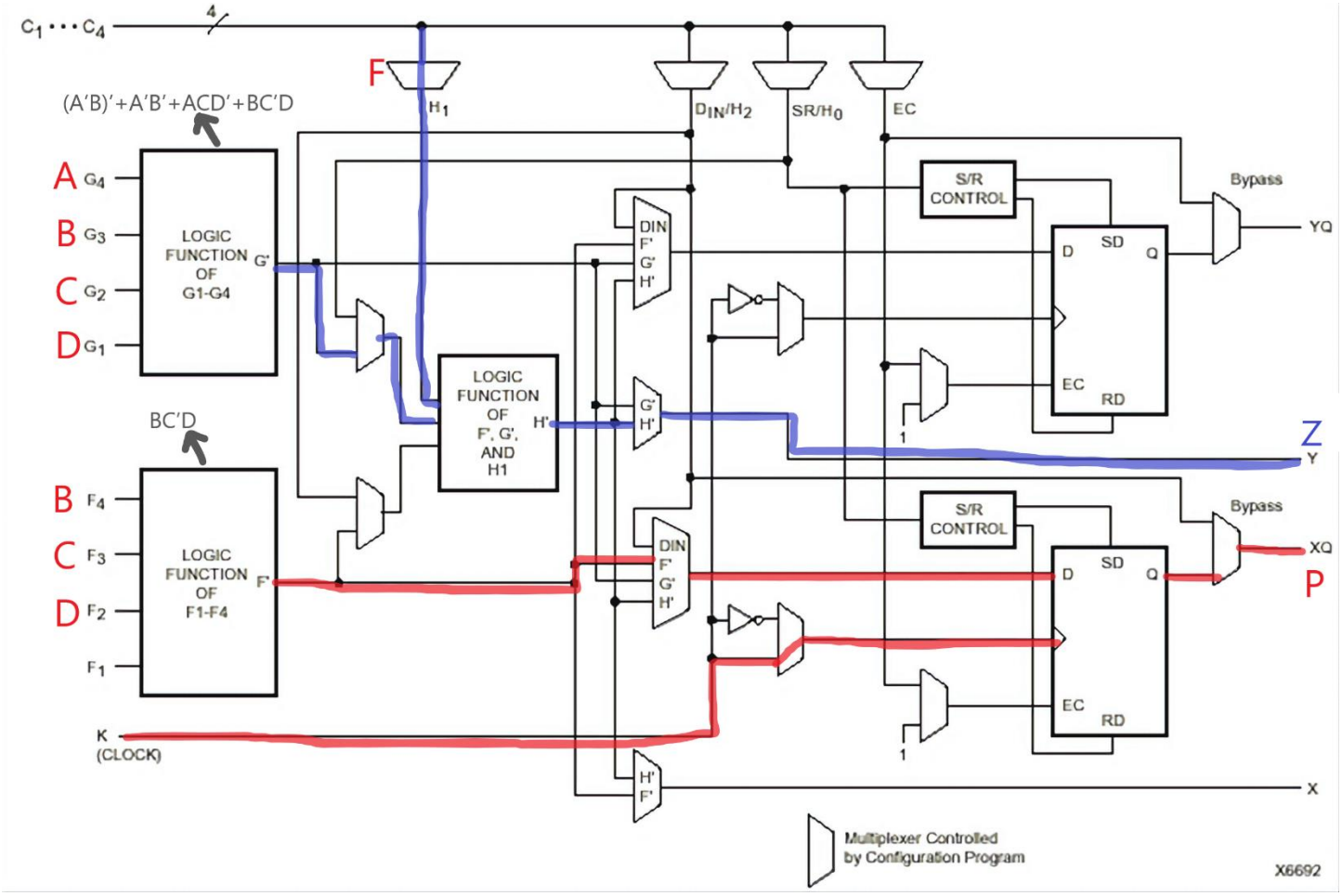
$A'B' + AB \qquad A'B + AB'$

$\Rightarrow AB\acute{C}' + A'BC' + A'B'C + ABC$

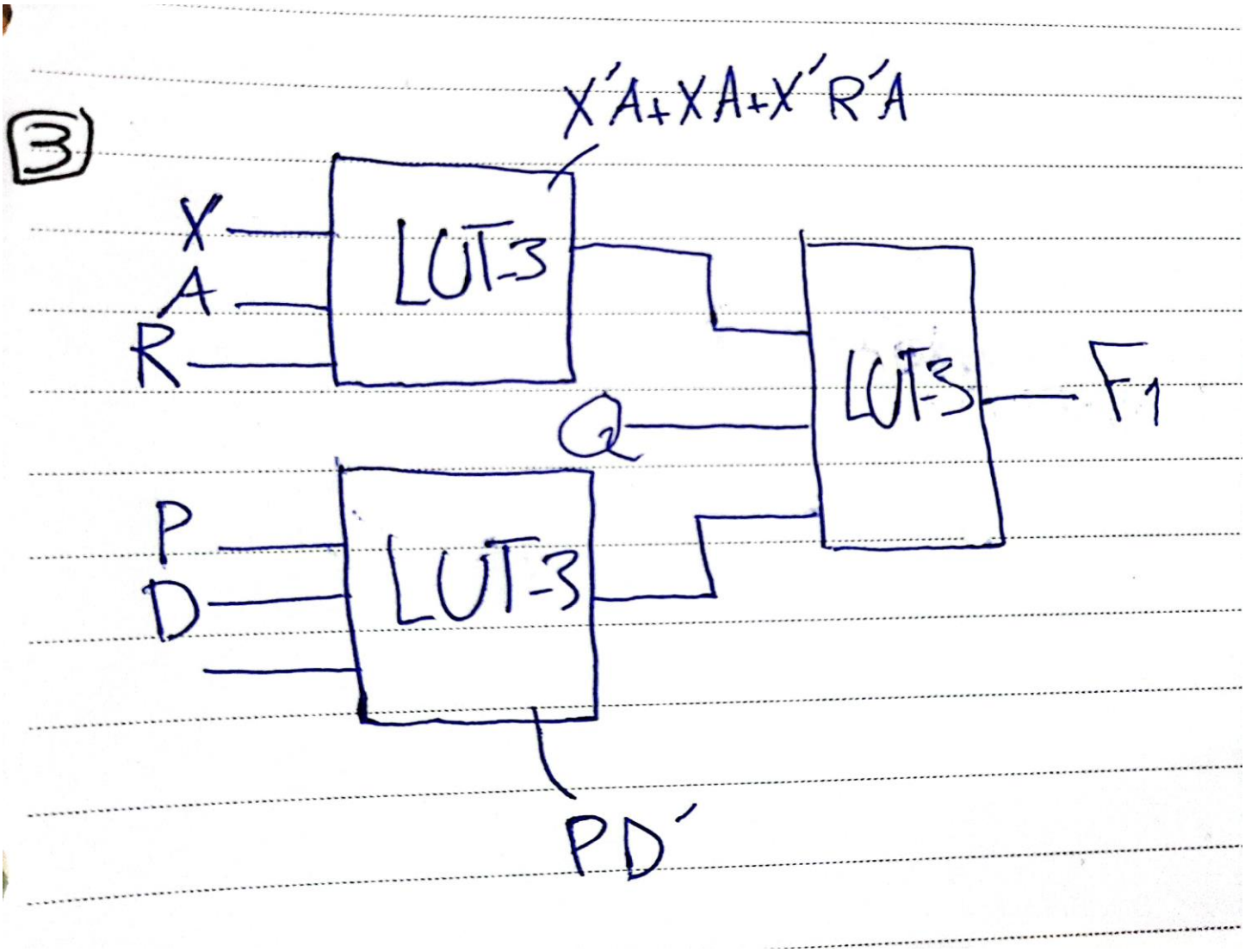
$Y_0 = AB\acute{C}' + A'BC' + A'B'C + ABC = F_1$

$Y_1 = Y_0 + BC' + A\acute{C}'D + A\acute{D}' = F_2$

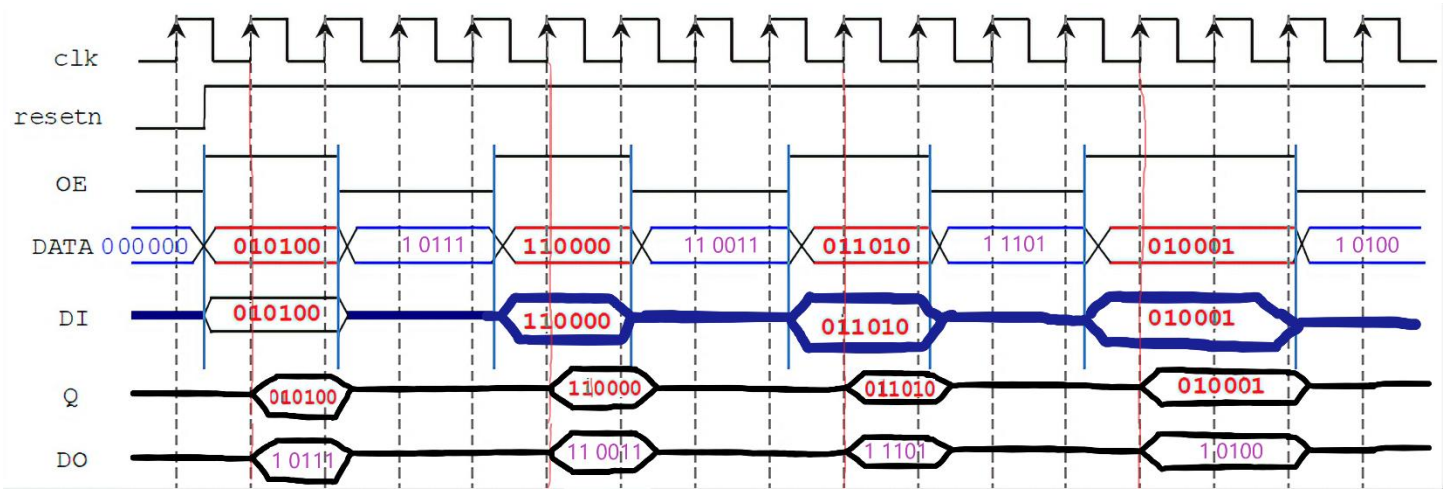



C1 • • • C4
4
F
H1
DIN/H2
SR/H0
EC
(A'B)'+A'B'+ACD'+BC'D
A G4
B G3
C G2
D G1
LOGIC FUNCTION OF G1-G4
G'
BC'D
B F4
C F3
D F2
F1
LOGIC FUNCTION OF F1-F4
F'
LOGIC FUNCTION OF F', G', AND H1
H'
DIN
F'
G'
H'
S/R CONTROL
Bypass
YQ
SD
D
Q
EC
RD
1
Z
Y
XQ
P
K
(CLOCK)
X
Multiplexer Controlled by Configuration Program
X6692

3


3
X'A+XA+X'R'A
X
A
R
LUT-3
Q
LUT-3
F1
P
D
LUT-3
PD'

4


clk
resetn
OE
DATA
DI
Q
DO
000000
010100
10111
110000
110011
011010
11101
010001
10100