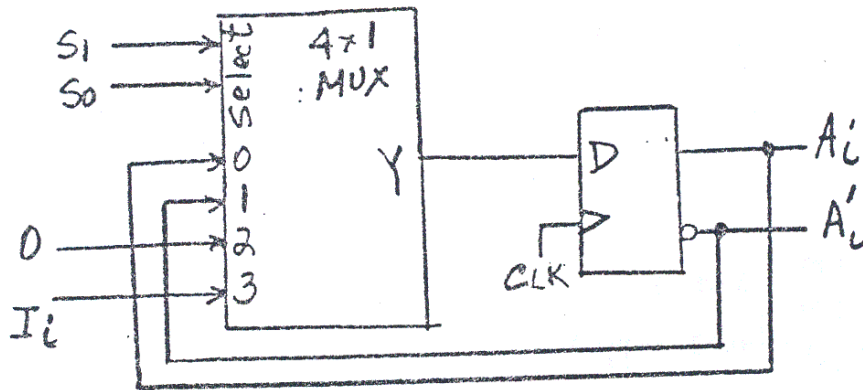


6-5 (a) See Fig. 11-19: IC type 74194

(b) See Fig. 11-20: Two 74194 ICs connected to form an 8-bit register.

6-7 One stage of register:



6-8  $A = 0010, 0001, 1000, 1100$ . Carry = 1, 1, 1, 0 ...

6-12 Similar to diagram of Fig 6-8  
(a) with the bubbles in c removed (positive-edge)  
(b) with complemented flip-flop outputs connected to c.

6-21 (a)  $J_{A0} = LI_0 + L'C$        $K_{A0} = LI_0' + L'C$

(b)  $J = [L(LI)']'(L+c) = (L'+LI)(L+c)$   
 $= LI + L'C + LIC = LI + L'C$  (use a map)

$K = (LI)'(L+c) = (L'+I')(L+c) = LI' + L'C$