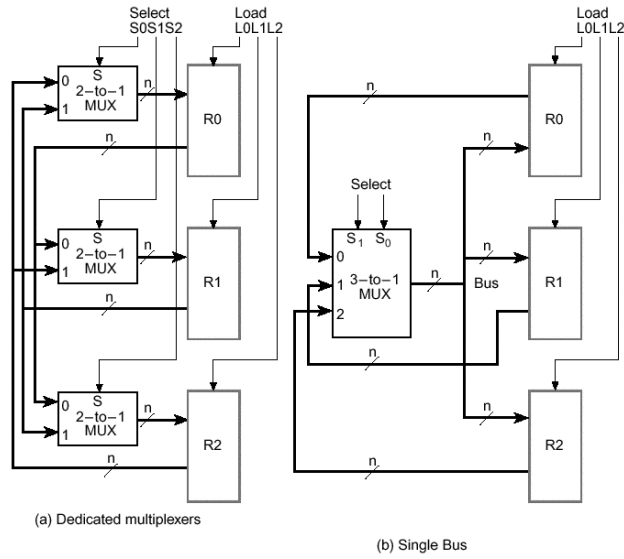


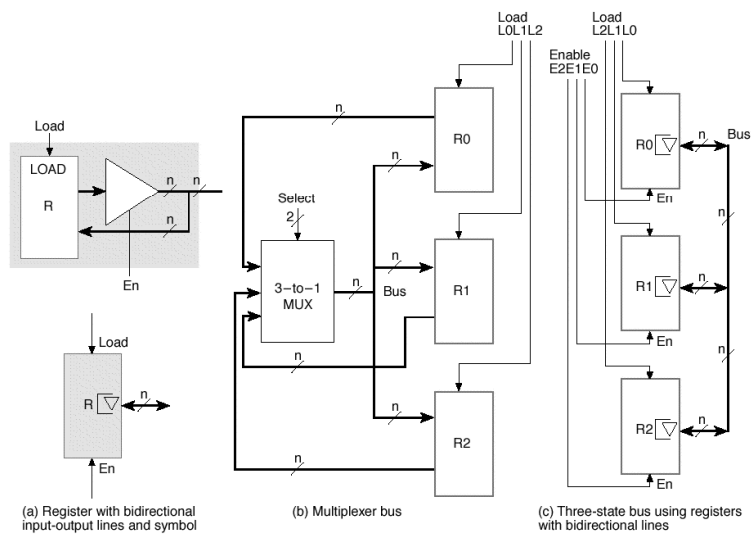
# Bus versus Dedicated Multiplexer

- Multiplexer

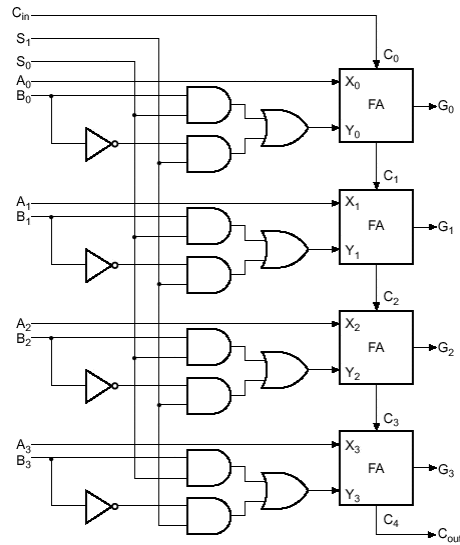


# Three State Bus

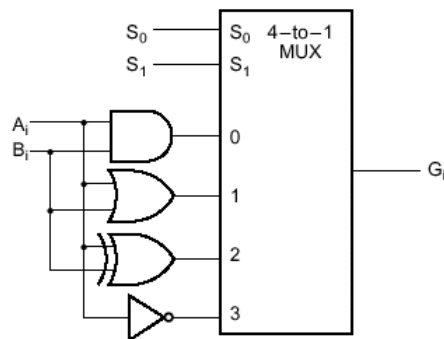
- Three State



## Arithmetic Microoperation



## Logic Microoperation



(a) Logic Diagram

$S_1$	$S_0$	Output	Operation
0	0	$G = A \wedge B$	AND
0	1	$G = A \vee B$	OR
1	0	$G = A \oplus B$	XOR
1	1	$G = \bar{A}$	NOT

(b) Function Table