

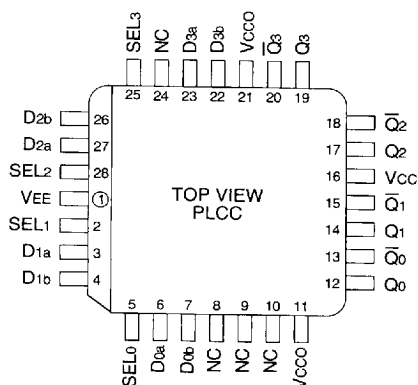
FEATURES

- Individual select controls
- Extended 100E VEE range of -4.2V to -5.5V
- 550ps max. D to Output
- 800ps max. SEL to Output
- Internal 75K Ω input pull-down resistors
- ESD protection of 2000V
- Fully compatible with industry standard 10KH, 100K ECL levels

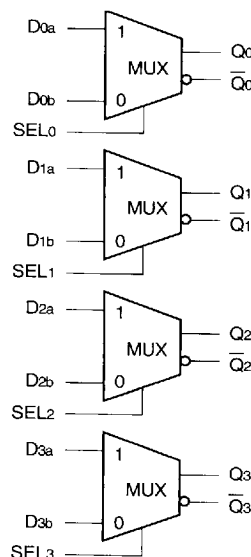
DESCRIPTION

The SY10/100E157 contain four 2:1 multiplexers with differential outputs. The output data are controlled by the individual Select (SEL) inputs. The individual select control makes the devices well suited for random logic designs.

PIN CONFIGURATION



BLOCK DIAGRAM



PIN NAMES

Pin	Function
D0a - D3a	Input Data a
D0b - D3b	Input Data b
SEL0 - SEL3	Select Inputs
Q0 - Q3	True Outputs
Q0 - Q3	Inverted Outputs
VCC0	Vcc to Output

TRUTH TABLE

SEL	Data
H	a
L	b

DC ELECTRICAL CHARACTERISTICS

V_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = V_{CCO} = GND

Symbol	Parameter	T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
I _{IH}	Input HIGH Current D SEL	—	—	200	—	—	200	—	—	200	μA	—
I _{EE}	Power Supply Current 10E 100E	—	32	38	—	32	38	—	32	38	mA	—
		—	32	38	—	32	38	—	37	44		

AC ELECTRICAL CHARACTERISTICS

V_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = V_{CCO} = GND

Symbol	Parameter	T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
t _{PLH} t _{PHL}	Propagation Delay to Output D SEL	220 425	380 600	550 800	220 425	380 600	550 800	220 425	380 600	550 800	ps	—
t _{skew}	Within-Device Skew	—	70	—	—	70	—	—	70	—	ps	1
t _r t _f	Rise/Fall Times 20–80%	275	400	650	275	400	650	275	400	650	ps	—

NOTE:

1. Within-device skew is defined as identical transitions on similar paths through a device.

PRODUCT ORDERING CODE

Ordering Code	Package Type	Operating Range
SY10E157JC	J28-1	Commercial
SY10E157JCTR	J28-1	Commercial
SY100E157JC	J28-1	Commercial
SY100E157JCTR	J28-1	Commercial