

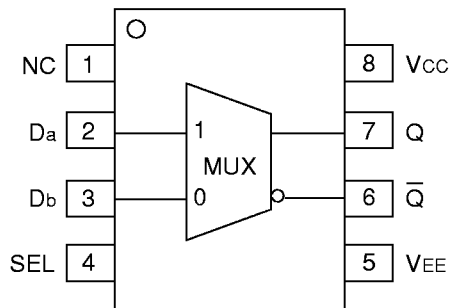
FEATURES

- 230ps propagation delay
- High bandwidth output transitions
- Internal 75K Ω input pull-down resistors
- ESD protection of 2000V
- Available in 8-pin SOIC package

DESCRIPTION

The SY10/100EL58 are 2:1 multiplexers. These devices are functionally equivalent to the E158 devices, with higher performance capabilities. With propagation delays and output transition times significantly faster than the E158, the EL58 is ideally suited for those applications which require the ultimate in AC performance.

PIN CONFIGURATION/BLOCK DIAGRAM



**SOIC
TOP VIEW**

TRUTH TABLE

SEL	Data
H	a
L	b

PIN NAMES

Pin	Function
Da, Db	Data Inputs
Q	Data Outputs
SEL	Select Input

DC ELECTRICAL CHARACTERISTICS

VEE = VEE (Min.) to VEE (Max.); VCC = GND

Symbol	Parameter	TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
IEE	Power Supply Current													mA
	10EL	—	14	17	11	14	17	11	14	17	11	14	17	
	100EL	—	14	17	11	14	17	11	14	17	13	16	19	
VEE	Power Supply Voltage													V
	10EL	-4.75	-5.2	-5.5	-4.75	-5.2	-5.5	-4.75	-5.2	-5.5	-4.75	-5.2	-5.5	
	100EL	-4.20	-4.5	-5.5	-4.20	-4.5	-5.5	-4.20	-4.5	-5.5	-4.20	-4.5	-5.5	
I _{IH}	Input HIGH Current	—	—	150	—	—	150	—	—	150	—	—	150	μA

AC ELECTRICAL CHARACTERISTICS

VEE = VEE (Min.) to VEE (Max.); VCC = GND

Symbol	Parameter	TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
t _{PLH}	Propagation Delay to	60	220	380	110	220	330	120	230	340	140	250	360	ps
t _{PHL}	Output D	90	250	410	140	250	360	150	260	370	170	280	390	
t _r t _f	Output Rise/Fall Times Q (20% to 80%)	100	225	350	100	225	350	100	225	350	100	225	350	ps

PRODUCT ORDERING CODE

Ordering Code	Package Type	Operating Range
SY10EL58ZC	Z8-1	Commercial
SY10EL58ZCTR	Z8-1	Commercial
SY100EL58ZC	Z8-1	Commercial
SY100EL58ZCTR	Z8-1	Commercial

8 LEAD PLASTIC SOIC (Z8-1)

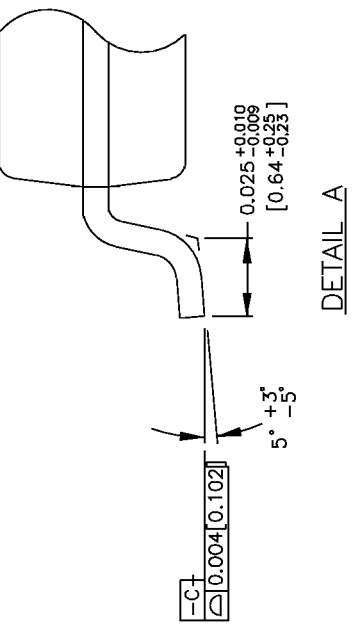
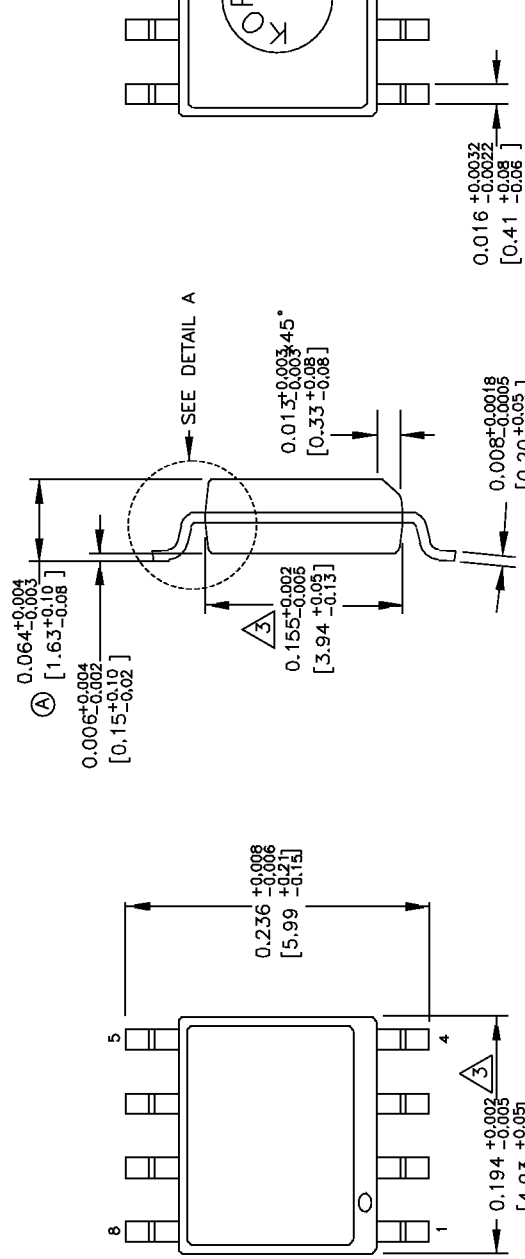
FILE/REV #: PD0032A03
PD/0032/ASCORP
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REV.	REVISION DESCRIPTION	DATE
00	NEW OUTLINE DRAWING.	01/20/94
01	CONVERT TO AUTOCAD. REFERENCE AMKOR DWG. NO. 00019 REVOS. MAKE @ SAME AS JEDEC.	12/14/96
02	ADDED LEAD WIDTH AND PITCH DIMENSIONS. CORRECTED TYPOS.	03/12/97
03	CONVERT DWG TO REL.13 AND ONE PAGE DOCUMENT.	02/20/98

TOP VIEW

END VIEW

BOTTOM VIEW



NOTES:
 1. DIMENSIONS ARE IN INCHES[MM].
 2. CONTROLLING DIMENSION: INCHES.
 3. DIMENSION DOES NOT INCLUDE MOLD FLASH OR PROTRUSIONS, EITHER OF WHICH SHALL NOT EXCEED 0.006[0.152] PER SIDE.

SYNERGY SEMICONDUCTOR		2250 SCOTT BOULEVARD SANTA CLARA, CA 95054 TEL: 408-867-1010 FAX: 408-867-7878	
APPROVALS	DATE	APPROVALS	DATE
ORIGINATOR: ERMIN G. URRUTIA	02/23/98	QUALITY: MARSHALL WILDER	
CHK'D: WON CHANG		DOCUMENT CONTROL: BRIAN SANFILIPPO	
RELEASE DATE:			
SIZE	A	8 LEAD PLASTIC SOIC (.150" WIDE)	PACKAGE OUTLINE
THESE SPECIFICATIONS ARE THE PROPERTY OF SYNERGY SEMICONDUCTOR. ARE ISSUED IN STRICT CONFIDENCE AND SHALL BE KEPT UNDER LOCK AND KEY. NO REPRODUCTION FOR THE MANUFACTURE OR SALE OF APPARATUS WITHOUT WRITTEN PERMISSION.		SCALE	N/A
		REVISION	03