

2:1 MULTIPLEXER

SY10EL58 SY100EL58

FEATURES

- 230ps propagation delay
- High bandwidth output transitions
- Internal 75K Ω input pull-down resistors
- 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.

TRUTH TABLE

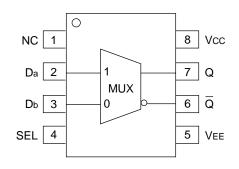
SEL	Data
Н	a
L	b

PIN NAMES

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

Rev.: G Amendment: /0 Issue Date: December 2005

PACKAGE/ORDERING INFORMATION



8-Pin SOIC (Z8-1)

Ordering Information⁽¹⁾

Part Number	Package Type	Operating Range	Package Marking	Lead Finish	
SY10EL58ZC	Z8-1	Commercial	HEL58	Sn-Pb	
SY10EL58ZCTR ⁽²⁾	Z8-1	Commercial	HEL58	Sn-Pb	
SY100EL58ZC	Z8-1	Commercial	XEL58	Sn-Pb	
SY100EL58ZCTR ⁽²⁾	Z8-1	Commercial	XEL58	Sn-Pb	
SY10EL58ZI	Z8-1	Industrial	HEL58	Sn-Pb	
SY10EL58ZITR ⁽²⁾	Z8-1	Industrial	HEL58	Sn-Pb	
SY100EL58ZI	Z8-1	Industrial	XEL58	Sn-Pb	
SY100EL58ZITR ⁽²⁾	Z8-1	Industrial	XEL58	Sn-Pb	
SY10EL58ZG ⁽³⁾	Z8-1	Industrial	HEL58 with Pb-Free bar-line indicator	Pb-Free NiPdAu	
SY10EL58ZGTR ^(2, 3)	Z8-1	Industrial	HEL58 with Pb-Free bar-line indicator	Pb-Free NiPdAu	
SY100EL58ZG ⁽³⁾	Z8-1	Industrial	XEL58 with Pb-Free bar-line indicator	Pb-Free NiPdAu	
SY100EL58ZGTR ^(2, 3)	Z8-1	Industrial	XEL58 with Pb-Free bar-line indicator	Pb-Free NiPdAu	

Notes:

- 1. Contact factory for die availability. Dice are guaranteed at $T_A = 25$ °C, DC Electricals only.
- 2. Tape and Reel.
- 3. Pb-Free package is recommended for new designs.

DC ELECTRICAL CHARACTERISTICS

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

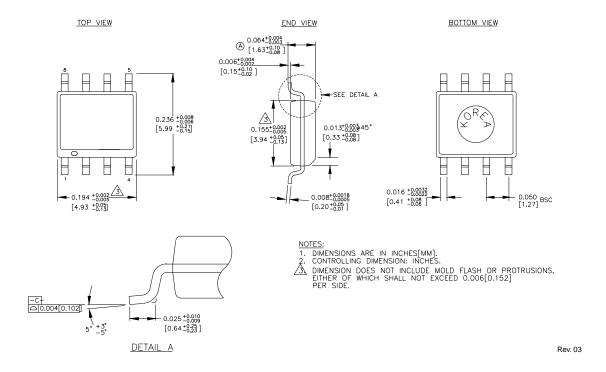
		TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			
Symbol	Parameter	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit
IEE	Power Supply Current													mA
	10EL	_	14	17	11	14	17	11	14	17	11	14	17	
	100EL	_	14	17	11	14	17	11	14	17	13	16	19	
VEE	Power Supply Voltage													V
	10EL	-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	
Iн	Input HIGH Current	_		150	_		150	_		150	_	_	150	μΑ

AC ELECTRICAL CHARACTERISTICS

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

		TA = -40°C			TA = 0°C			TA = +25°C			T.			
Symbol	Parameter	Min.	Тур.	Max.	Unit									
tPD	Propagation Delay to Output D	60 90	220 250	380 410	110 140	220 250	330 360	120 150	230 260	340 370	140 170	250 280	360 390	ps
tr tf	Output Rise/Fall Times Q (20% to 80%)	100	225	350	100	225	350	100	225	350	100	225	350	ps

8-PIN SOIC .150" WIDE (Z8-1)



MICREL, INC. 2180 FORTUNE DRIVE SAN JOSE, CA 95131 USA

TEL + 1 (408) 944-0800 FAX + 1 (408) 474-1000 WEB http://www.micrel.com

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