



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



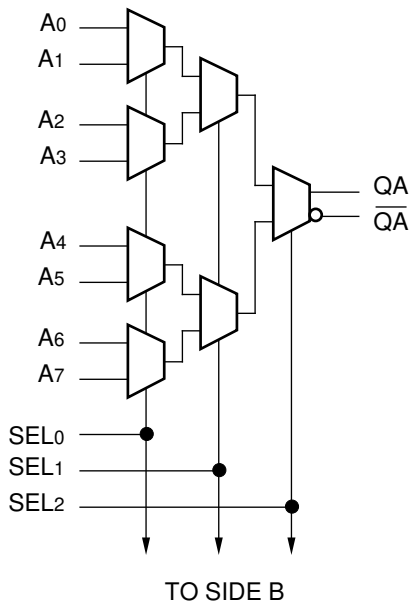
FEATURES

- 850ps max. propagation delay
- Extended 100E VEE range of -4.2V to -5.5V
- Differential outputs
- Internal 75KΩ input pulldown resistors
- Fully compatible with industry standard 10KH, 100K ECL levels
- Fully compatible with Motorola MC10E/100E163
- Available in 28-pin PLCC package

DESCRIPTION

The SY10/100E163 offer two 8:1 multiplexers designed for use in new, high-performance ECL systems. The E163 has differential outputs and common select inputs. The select inputs (SEL0, SEL1, SEL2) determine which one of the eight data inputs (A0-A7, B0-B7) is propagated to the output.

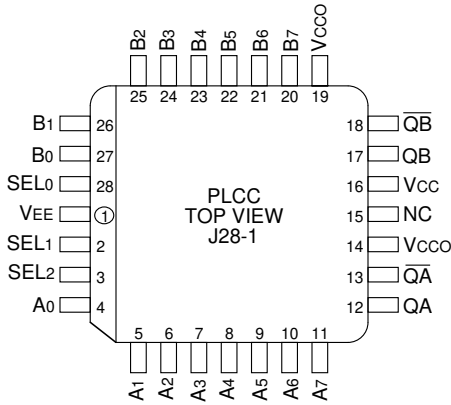
BLOCK DIAGRAM



PIN NAMES

Pin	Function
A0-A7	A Data Inputs (D)
B0-B7	B Data Inputs (D)
SEL0, 1, 2	Select Inputs
QA, QB	True Outputs
\overline{QA} , \overline{QB}	Inverting Outputs
Vcco	Vcc to Output

PACKAGE/ORDERING INFORMATION



28-Pin PLCC (J28-1)

Ordering Information⁽¹⁾

Part Number	Package Type	Operating Range	Package Marking	Lead Finish
SY10E163JC	J28-1	Commercial	SY10E163JC	Sn-Pb
SY10E163JCTR ⁽²⁾	J28-1	Commercial	SY10E163JC	Sn-Pb
SY100E163JC	J28-1	Commercial	SY100E163JC	Sn-Pb
SY100E163JCTR ⁽²⁾	J28-1	Commercial	SY100E163JC	Sn-Pb
SY10E163JZ ⁽³⁾	J28-1	Commercial	SY10E163JZ with Pb-Free bar-line indicator	Matte-Sn
SY10E163JZTR ^(2, 3)	J28-1	Commercial	SY10E163JZ with Pb-Free bar-line indicator	Matte-Sn
SY100E163JZ ⁽³⁾	J28-1	Commercial	SY100E163JZ with Pb-Free bar-line indicator	Matte-Sn
SY100E163JZTR ^(2, 3)	J28-1	Commercial	SY100E163JZ with Pb-Free bar-line indicator	Matte-Sn

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.

TRUTH TABLE

SEL ₂	SEL ₁	SEL ₀	A/B Data
L	L	L	0
L	L	H	1
L	H	L	2
L	H	H	3
H	L	L	4
H	L	H	5
H	H	L	6
H	H	H	7

DC ELECTRICAL CHARACTERISTICSV_{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	—	—	150	—	—	150	—	—	150	μA	—
I _{EE}	Power Supply Current	—	73	88	—	73	88	—	73	88	mA	—
		10E	73	88	—	73	88	—	73	88		
	100E	—	73	88	—	73	88	—	83	100		

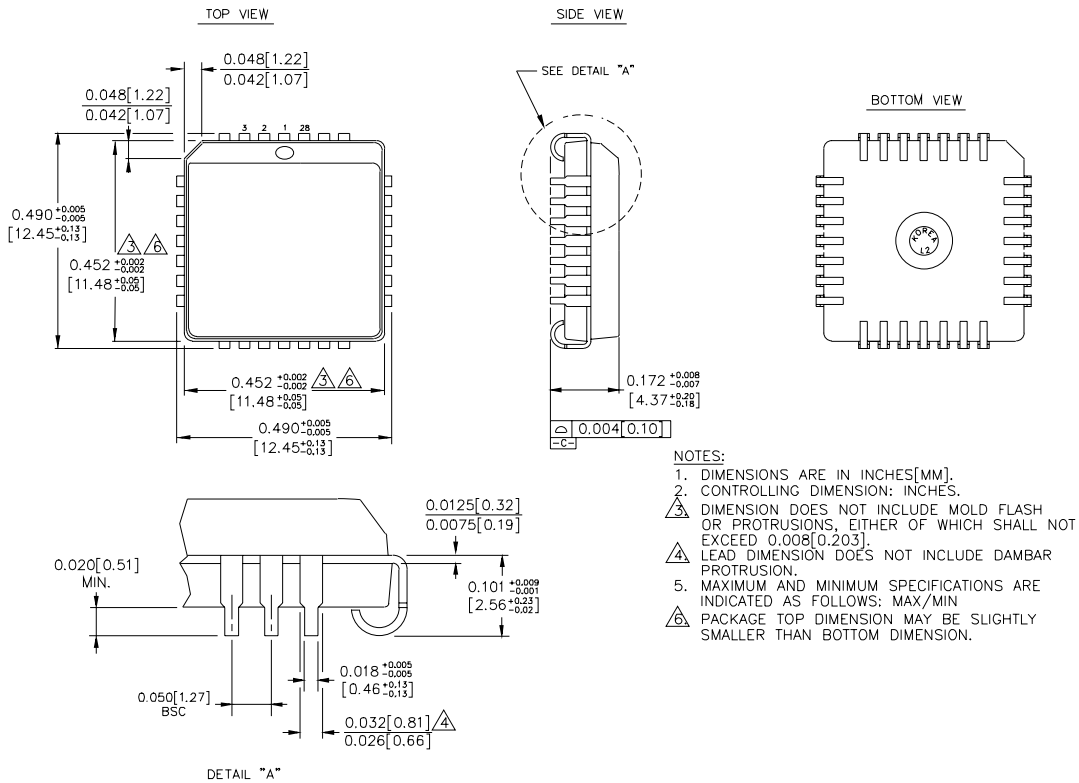
AC ELECTRICAL CHARACTERISTICSV_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = V_{CCO} = GND

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 _{PD}	Propagation Delay to Output D	400	550	800	400	550	800	400	550	800	ps	—
	SEL ₀	525	725	950	525	725	950	525	725	950		
	SEL ₁	425	625	850	425	625	850	425	625	850		
	SEL ₂	350	525	725	350	525	725	350	525	725		
t _{skew}	Within-Device Skew	—	40	—	—	40	—	—	40	—	ps	1
	An, Bn to Q	—	30	—	—	30	—	—	30	—		
	An, Am to QA Bn, Bm to QB	—	30	—	—	30	—	—	30	—		
t _r t _f	Rise/Fall Time 20% to 80%	275	375	575	275	375	575	275	375	575	ps	—

Note:

1. Within-device skew is defined as identical transition on similar paths through a device; n = 0-7, m ≠ n, m = 0-7.

28-PIN PLCC (J28-1)



Rev. 03

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>

The information furnished by Micrel in this data sheet is believed to be accurate and reliable. However, no responsibility is assumed by Micrel for its use. Micrel reserves the right to change circuitry and specifications at any time without notification to the customer.

Micrel Products are not designed or authorized for use as components in life support appliances, devices or systems where malfunction of a product can reasonably be expected to result in personal injury. Life support devices or systems are devices or systems that (a) are intended for surgical implant into the body or (b) support or sustain life, and whose failure to perform can be reasonably expected to result in a significant injury to the user. A Purchaser's use or sale of Micrel Products for use in life support appliances, devices or systems is at Purchaser's own risk and Purchaser agrees to fully indemnify Micrel for any damages resulting from such use or sale.

© 2006 Micrel, Incorporated.