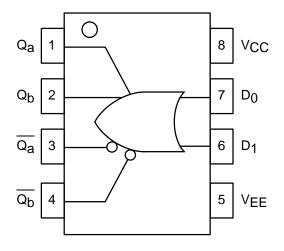
Low Impedance Driver

The MC10EL/100EL12 is a low impedance drive buffer. With two pairs of OR/NOR outputs the device is ideally suited for high drive applications such as memory addressing. The device is a function equivalent to the E112 device with higher performance capabilities. With propagation delays significantly faster than the E112 the EL12 is ideally suited for those applications which require the ultimate in AC performance.

- 290ps Propagation Delay
- Dual Outputs for 25Ω Drive Applications
- 75kΩ Internal Input Pulldown Resistors
- >1000V ESD Protection

LOGIC DIAGRAM AND PINOUT ASSIGNMENT



MC10EL12 MC100EL12



DC CHARACTERISTICS (VEE = VEE(min) to VEE(max); VCC = GND)

		-40°C		0°C			25°C			85°C				
Symbol	Characteristic	Min	Тур	Max	Unit									
IEE	Power Supply Current 10EL 100EL		14 14	17 17		14 14	17 17		14 14	17 17		14 16	17 20	mA
VEE	Power Supply Voltage 10EL 100EL	-4.94 -4.20	-5.2 -4.5	-5.5 -5.5	V									
lіН	Input HIGH Current			150			150			150			150	μΑ

AC CHARACTERISTICS ($V_{EE} = V_{EE}(min)$ to $V_{EE}(max)$; $V_{CC} = GND$)

		−40°C			0°C			25°C			85°C			
Symbol	Characteristic	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	Unit
^t PLH ^t PHL	Propagation Delay to Output	120	280	500	170	280	450	180	290	450	210	320	480	ps
t _r t _f	Output Rise/Fall Times Q (20% – 80%)	150	350	550	150	350	550	150	350	550	150	350	550	ps

© Motorola, Inc. 1996

OUTLINE DIMENSIONS

D SUFFIX PLASTIC SOIC PACKAGE CASE 751–05 ISSUE P Seating PLANE D SUFFIX PLASTIC SOIC PACKAGE CASE 751–05 ISSUE P

NOTES:

- DIMENSIONS A AND B ARE DATUMS AND T IS A DATUM SURFACE.
- DIMENSIONING AND TOLERANCING PER ANSI Y14 5M 1982
- 3. DIMENSIONS ARE IN MILLIMETER.
- 4. DIMENSION A AND B DO NOT INCLUDE MOLD PROTRUSION.
- 5. MAXIMUM MOLD PROTRUSION 0.15 PER SIDE. 6. DIMENSION D DOES NOT INCLUDE MOLD
- DIMENSION D DOES NOT INCLUDE MOLD PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.127 TOTAL IN EXCESS OF THE D DIMENSION AT MAXIMUM MATERIAL CONDITION.

	MILLIMETERS							
DIM	MIN	MAX						
Α	4.80	5.00						
В	3.80	4.00						
С	1.35	1.75						
D	0.35	0.49						
F	0.40	1.25						
G	1.27	BSC						
J	0.18	0.25						
K	0.10	0.25						
М	0 °	7 °						
Р	5.80	6.20						
R	0.25	0.50						

Motorola reserves the right to make changes without further notice to any products herein. Motorola makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Motorola assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters which may be provided in Motorola data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Motorola does not convey any license under its patent rights nor the rights or others. Motorola products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Motorola product could create a situation where personal injury or death may occur. Should Buyer purchase or use Motorola products for any such unintended or unauthorized application, Buyer shall indemnify and hold Motorola and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Motorola was negligent regarding the design or manufacture of the part. Motorola and was negligent regarding the design or manufacture of the part. Motorola and are registered trademarks of Motorola, Inc. is an Equal Opportunity/Affirmative Action Employer.

How to reach us:

USA/EUROPE/Locations Not Listed: Motorola Literature Distribution; P.O. Box 20912; Phoenix, Arizona 85036. 1–800–441–2447 or 602–303–5454

MFAX: RMFAX0@email.sps.mot.com - TOUCHTONE 602-244-6609 INTERNET: http://Design-NET.com

JAPAN: Nippon Motorola Ltd.; Tatsumi–SPD–JLDC, 6F Seibu–Butsuryu–Center, 3–14–2 Tatsumi Koto–Ku, Tokyo 135, Japan. 03–81–3521–8315

ASIA/PACIFIC: Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park, 51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852–26629298



MC10EL12/D