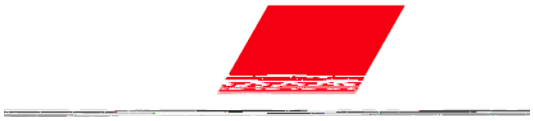

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Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

February 1994
Revised October 2003

74LVXC4245
8-Bit Dual Supply Configurable Voltage Interface Transceiver with 3-STATE Outputs

General Description

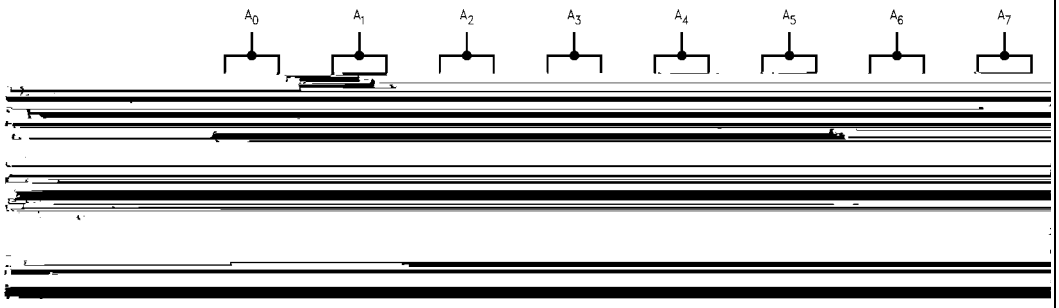
The LVXC4245 is a 24-pin dual-supply, 8-bit configurable voltage interface transceiver suited for PCMCIA and other

Truth Table

Inputs		Outputs
$\overline{OE}$	T/$\overline{R}$	
L	L	Bus B Data to Bus A
L	H	Bus A Data to Bus B
H	X	HIGH-Z State

H = HIGH Voltage Level
L = LOW Voltage Level
X = Immaterial

Logic Diagram



Absolute Maximum Ratings(Note 1)

Recommended Operating Conditions (Note 2)

Note 1: The "Absolute Maximum Ratings" are those values beyond which

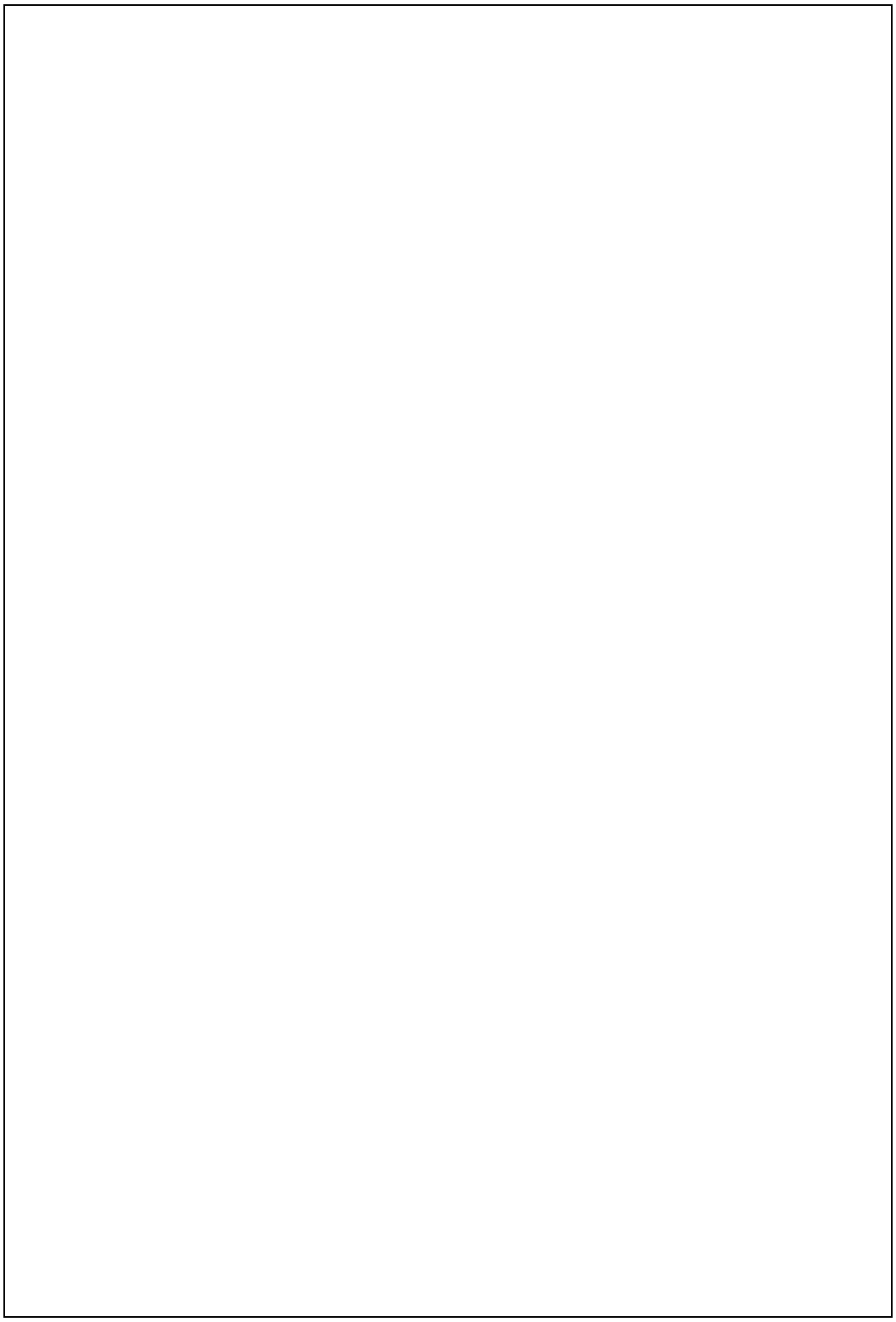
DC Electrical Characteristics (Continued)

Symbol	Parameter		V_{CCA} (V)	V_{CCB} (V)	$T_A = +25°C$ Typ	$T_A = -40°C$ to $+85°C$ Guaranteed Limits		Units	Conditions
I_{OZA}	Maximum 3-STATE		5.5	3.6		±0.5	±5.0	µA	$V_I = V_{IL}$, V_{IH}, $\overline{OE} = V_{CCA}$
	Output Leakage @ A_n		5.5	5.5		±0.5	±5.0		$V_O = V_{CCA}$, GND
I_{OZB}	Maximum 3-STATE		5.5	3.6		±0.5	±5.0	µA	$V_I = V_{IL}$, V_{IH}, $\overline{OE} = V_{CCA}$
	Output Leakage @ B_n		5.5	5.5		±0.5	±5.0		$V_O = V_{CCB}$, GND
ΔI_{CC}	Maximum	All Inputs	5.5	5.5	1.0	1.35	1.5	mA	$V_I = V_{CC} - 2.1V$
	I_{CC}/Input	B_n	5.5	3.6		0.35	0.5	mA	$V_I = V_{CCB} - 0.6V$
I_{CCA1}	Quiescent V_{CCA}								$A_n = V_{CCA}$ or GND
	Supply Current as B		5.5	Open		8	80	µA	B_n = Open, $\overline{OE} = V_{CCA}$
	Port Floats								$T/\overline{R} = V_{CCA}$, V_{CCB} = Open
I_{CCA2}	Quiescent V_{CCA}								$A_n = V_{CCA}$ or GND
	Supply Current		5.5	3.6		8	80	µA	$B_n = V_{CCB}$ or GND
			5.5	5.5		8	80		$\overline{OE}$ = GND, $T/\overline{R}$ = GND
I_{CCB}	Quiescent V_{CCB}								$A_n = V_{CCA}$ or GND
	Supply Current		5.5	3.6		5	50	µA	$B_n = V_{CCB}$ or GND
			5.5	5.5		8	80		$\overline{OE}$ = GND, $T/\overline{R} = V_{CCA}$
V_{OLPA}	Quiet Output		5.0	3.3		1.5		V	(Note 3) (Note 4)
	Maximum Dynamic		5.0	5.0		1.5			
V_{OLPB}	V_{OL}		5.0	3.3		0.8		V	(Note 3) (Note 4)
			5.0	5.0		1.5			
V_{OLVA}	Quiet Output Minimum		5.0	3.3		–1.2		V	(Note 3) (Note 4)
	Dynamic V_{OL}		5.0	5.0		–1.2			
V_{OLVB}			5.0	3.3		–0.8		V	(Note 3) (Note 4)
			5.0	5.0		–1.2			
V_{IHDA}									

Note 3: Worst case package.

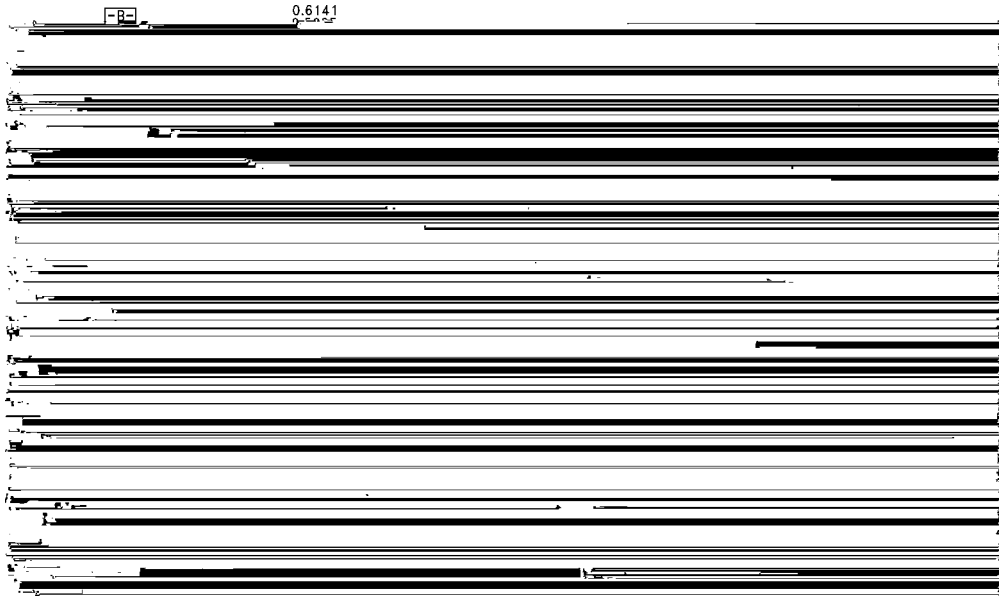
Note 4: Max number of outputs defined as (n). Data inputs are driven 0V to V_{CC} level; one output at GND.

Note 5: Max number of Data Inputs (n) switching. (n–1) inputs switching 0V to V_{CC} level. Input-under-test switching: V_{CC} level to threshold (V_{IHD}), 0V to threshold (V_{ILD}), f = 1 MHz.

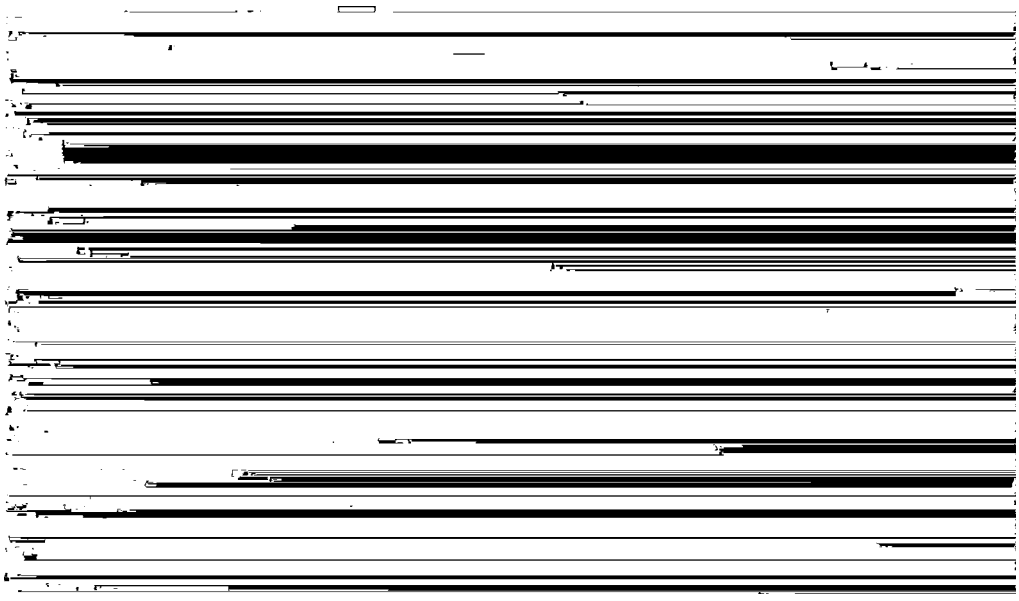


Configurable I/O Application for PCMCIA Cards

Physical Dimensions inches (millimeters) unless otherwise noted



24-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide
Package Number M24B



24-Lead Quarter Size Outline Package (QSOP), JEDEC MO-137, 0.150" Wide
Package Number MQA24

Physical Dimensions inches (millimeters) unless otherwise noted (Continued)

24-Lead Thin Shrink Small Outline Package (TSSOP), JEDEC MO-153, 4.4mm Wide
Package Number MTC24

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