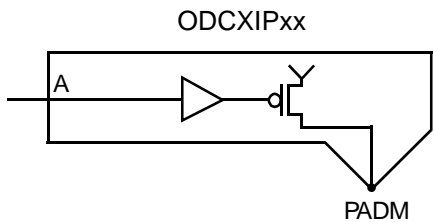


AMI5HG 0.5 micron CMOS Gate Array

Description

ODCXIPxx is a family of 1 to 8 mA, inverting, CMOS-level, output buffer pieces with P-channel, open-drains (pull-up).

Logic Symbol	Truth Table						
	<table border="1"> <thead> <tr> <th>A</th> <th>PADM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>H</td> </tr> <tr> <td>H</td> <td>Z</td> </tr> </tbody> </table> <p>Z = High Impedance</p>	A	PADM	L	H	H	Z
A	PADM						
L	H						
H	Z						

HDL Syntax

Verilog ODCXIPxx *inst_name* (PADM, A);

VHDL *inst_name*: ODCXIPxx port map (PADM, A);

Pin Loading

Pin Name	Load			
	ODCXIP01	ODCXIP02	ODCXIP04	ODCXIP08
A (eq-load)	2.8	2.8	2.8	3.9
PADM (pF)	4.92	4.92	4.92	4.93

Power Characteristics

Cell	Output Drive (mA)	Power Characteristics ^a	
		Static IDD (TJ = 85°C) (nA)	EQLpd (Eq-load)
ODCXIP01	1	TBD	148.8
ODCXIP02	2	TBD	153.6
ODCXIP04	4	TBD	162.0
ODCXIP08	8	TBD	178.9

a. See page 2-15 for power equation.

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Propagation Delays (ns)

Conditions: $T_J = 25^\circ\text{C}$, $V_{DD} = 5.0\text{V}$, Typical Process

ODCXIP01	Capacitive Load (pF)		15	25	35	50	75 (max)
	From: A To: PADM	t_{ZH}	4.73	6.87	8.98	12.13	17.31
ODCXIP02	Capacitive Load (pF)		15	50	75	100	150 (max)
	From: A To: PADM	t_{ZH}	2.54	6.19	8.78	11.38	16.61
ODCXIP04	Capacitive Load (pF)		15	50	100	200	300 (max)
	From: A To: PADM	t_{ZH}	1.75	3.62	6.26	11.57	16.92
ODCXIP08	Capacitive Load (pF)		15	50	100	200	300 (max)
	From: A To: PADM	t_{ZH}	1.33	2.26	3.59	6.24	8.91

Delay will vary with input conditions. See page 2-17 for interconnect estimates.

Tristate Timing

Conditions: $T_J = 25^\circ\text{C}$, $V_{DD} = 5.0\text{V}$, Typical Process

From	Delay (ns) To	Parameter	Cell			
			ODCXIP01	ODCXIP02	ODCXIP04	ODCXIP08
APADM		t_{HZ}	1.04	0.89	1.05	1.38