

June, 1998 Preliminary

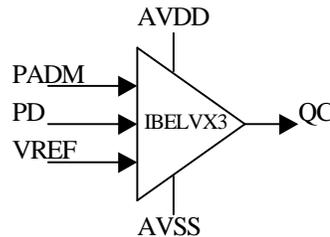
**AMI 0.6 micron CMOS
Single Poly**

Comparator

Schematic Symbol

Description

PECL input comparator cell. Receives 3v PECL input levels. Digital model is designed for a differential input.



TRUTH TABLE

PD	PADM	VREF	QC
1	X	X	0
0	0	0	X
0	0	1	0
0	1	0	1
0	1	1	X

PIN DESCRIPTION

NAME	TYPE	DESCRIPTION
PADM	Analog input	Positive Comparator Input
VREF	Analog input	Negative Comparator Input
PD	Digital input	Power Down Input
QC	Digital output	Comparator Output
AVDD	Analog supply	VDD
AVSS	Analog supply	VSS

AC ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITION	MIN	TYP	MAX	UNITS
delay	Propagation delay	1.95pf load		1.2		ns
T	Temperature		-40	25	85	°C
Vdd	Supply Voltage		4.5		5.5	V
Ivdd	Supply Current		5.6	10.8	19.5	mA
GBW	Gain Bandwidth		933	1720	2804	MHz
Gain	DC Gain		55	69	79	dB
Vos	Input Offset		-19.9	2.3	20.5	mV
CMR	Input Common Mode Range		1.75	2.0	2.25	V
Voh	Output high		VDD			V
Vol	Output low				VSS	V



IBELVX3

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Clload	Capacitive load		0.046	1.17	2.34	pf
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