

June, 1998 Preliminary

**AMI 0.6 micron CMOS
C60 Double Poly**

Strobed Comparator

Features

- Switching Speed 20 ns @ 2mV overdrive
- Less then 150 μ A supply current
- Power down current less than 1 μ a.

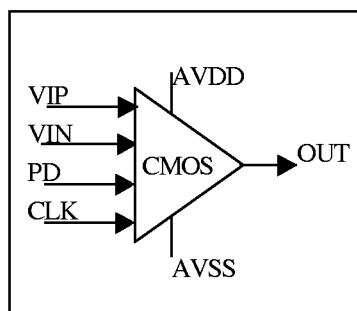
TRUTH TABLE

PD	CLK	VIP	VIN	OUT
1	X	X	X	1
0	0	X	X	latched
0	1	0	0	X
0	1	0	1	0
0	1	1	0	1
0	1	1	1	X

Description

Fast, low overdrive strobed comparator with bias and power down circuits.

Schematic Symbol



PIN DESCRIPTION

NAME	TYPE	DESCRIPTION
VIP	Analog input	Positive comparator input
VIN	Analog input	Negative comparator input
PD	Digital input	Power down input (active high)
OUT	Analog output	Comparator output
AVDD	Analog supply	$\pm 5V$ Supply
AVSS	Analog supply	Comparator gnd

AC ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIO N	MIN	TYP	MAX	UNIT
T	Temperature		-40	25	80	$^{\circ}C$
Vcc	Power Supply		4.5	5.0	5.5	V
Idc	DC current				150	μA
Ipd	Power Down Current				1	μA
Vos	Input Offset				10	mV
tplh	Propagation time				20	ns
tphl	Propagation time				20	ns
Vol	Output low				100	mV
Voh	Output high		4.5			V



CM050IS01

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ICMR	Input Common Mode Range		$(VCC/2)-1$		$(VCC/2)+1$	V
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