

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

Package

OAE = 14 Pin Dip / $\pm 5.2\text{Vdc}$ / ECL
OAP = 14 Pin Dip / $+5.0\text{Vdc}$ / PECL
OAP3 = 14 Pin Dip / $+3.3\text{Vdc}$ / PECL

Inclusive Stability

100 = $\pm 100\text{ppm}$, 50 = $\pm 50\text{ppm}$, 25 = $\pm 25\text{ppm}$,
10 = $\pm 10\text{ppm}$ @ 25°C / $\pm 20\text{ppm}$ @ $0-70^\circ\text{C}$

Operating Temperature Range

Blank = 0°C to 70°C
27 = -20°C to 70°C (50ppm and 100ppm Only)
48 = -40°C to 85°C (50ppm and 100ppm Only)

OAE 100 27 AA C - 30.000MHz

Pin One Connection

Blank = No Connect
C = Complimentary Output

Pin Configuration

See Table Below
ECL = AA, AB, AC, AB
PECL = A, B, C, E

ELECTRICAL SPECIFICATIONS

Revision: 1994-B

Frequency Range	20.000MHz to 250.000MHz
Operating Temperature Range	0°C to 70°C / -20°C to 70°C / -40°C to 85°C
Storage Temperature Range	-55°C to 125°C
Supply Voltage	ECL = $\pm 5.2\text{Vdc} \pm 5\%$ PECL = $+5.0\text{Vdc} \pm 5\%$ / $+3.3\text{Vdc} \pm 5\%$
Input Current	140mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load $\pm 100\text{ppm}$, $\pm 50\text{ppm}$, $\pm 25\text{ppm}$, $\pm 10\text{ppm}/\pm 20\text{ppm}$ (0°C to 70°C)
Output Voltage Logic High (Voh)	ECL Output -1.0Vdc Minimum / -0.7Vdc Maximum PECL Output 4.0Vdc Minimum / 4.5Vdc Maximum
Output Voltage Logic Low (Vol)	ECL Output -1.95Vdc Minimum / -1.6Vdc Maximum PECL Output 3.0Vdc Minimum / 3.42Vdc Maximum
Rise Time / Fall Time	20% to 80% of Waveform 2nSeconds Maximum
Duty Cycle	@1.4Vdc w/TTL Load 50 $\pm 10\%$ (Standard), 50 $\pm 5\%$ (Optional)
Load Drive Capability	ECL Output / AA, AB, AM / AC PECL Output 50 Ohms into -2.0Vdc / 50 Ohms into +3.0Vdc 50 Ohms into +3.0Vdc
Aging (@ 25°C)	$\pm 5\text{ppm}$ / year Maximum
Start Up Time	20mSeconds Maximum

ECL

PIN CONFIGURATIONS

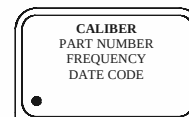
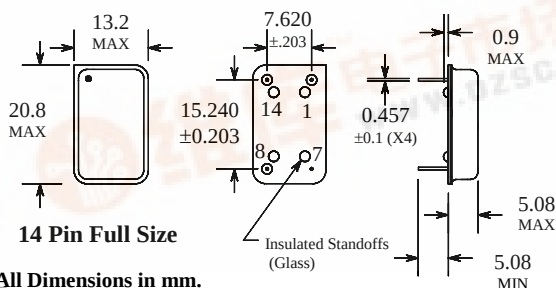
PECL

	AA	AB	AM
Pin 1	Ground/ Case	No Connect or Comp. Output	No Connect or Comp. Output
Pin 7	-5.2V	-5.2V	Case Ground
Pin 8	ECL Output	ECL Output	ECL Output
Pin 14	Ground	Case Ground	-5.2Vdc

	A	C	D	E
Pin 1	No Connect	No Connect	PECL Comp. Out	PECL Comp. Out
Pin 7	Vee (Case Ground)	Vee	Vee	Vee (Case Ground)
Pin 8	PECL Output	PECL Output	PECL Output	PECL Output
Pin 14	Vcc	Vcc (Case Ground)	Vcc	Vcc

MECHANICAL DIMENSIONS

Marking Guide



Marking Guide

Line 1: Caliber
Line 2: Complete Part Number
Line 3: Frequency in MHz
Line 4: Date Code (Year/Week)

All Dimensions in mm.



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CPO - D P 5 A E T - 125.000MHz

Package Style:

A = Full Size, 14 Pin Dip
 B = Half Size, 8 Pin Dip
 C1 = Ceramic SMD, 5X7X1.6mm (4 pad)
 C2 = Ceramic SMD, 5X7X1.6mm (6 pad/PECL)
 P = Plastic SMD, 10X13X5mm

Output Type:

C = HCMOS
 P = PECL
 S = HCMOS (with Tristate)

Pin One Connection:

5 = +5.0V
 3 = +3.3V

Pin 1 Connection:

T = Tristate Enable High
 P = Power Down

Operating Temperature Range:

Blank = -20°C to 70°C
 E = -40°C to 85°C (50ppm / 100ppm)

Inclusive Stability:

A = +/-100ppm
 B = +/-50ppm
 C = +/-30ppm (0°C-70°C)
 D = +/-25ppm (0°C-70°C)

ELECTRICAL SPECIFICATIONS

Revision: 2000-B

Frequency Range		340.000kHz to 250.000MHz
Operating Temperature Range		-20°C to 70°C / -40°C to 85°C
Storage Temperature Range		-55°C to 125°C
Supply Voltage		5.0Vdc ±10%, 3.3Vdc ±10%
Input Current		70mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load	±100ppm, ±50ppm, ±30ppm (-20°C to 70°C), ±25ppm (-20° to 70°C)
Output Voltage Logic High (Voh) / PECL Output Voltage Logic High (Voh) / HCMOS		-1.0V Min. Vdd: -0.8V Max. -.04Vdc Min.
Output Voltage Logic Low (Vol) / PECL Output Voltage Logic Low (Vol) / HCMOS		-2.0V Min. Vdd: -1.6V Max. 0.4Vdc Max.
Rise Time / Fall Time		2nS Max. 20% to 80% / 80% to 20% (PECL) 5nS Max. 10% to 90% / 90% to 10% (HCMOS)
Duty Cycle	PECL HCMOS	50 ±10% 50 ±5%
Load Drive Capability	5.0V: up to 100.000MHz = 25pF / 100 to 250.000MHz = 10pF 3.3V: up to 100.000MHz = 15pF / 100 to 250.000MHz = 10pF	
Pin 1 Tristate Input Voltage	No Connection V _{IH} V _{IL}	Enables Output +2.2Vdc Minimum to Enable Output +0.8Vdc Maximum to Disable Output
Disable Current (TS Option)		30mA Max. (pin 1 ground)
Standby Current (PD Option)		50uA Max. (pin 1 ground)
Aging (@ 25°C)		±5ppm / year Maximum
Start Up Time		10mSeconds Maximum
Absolute Clock Jitter		±175pSeconds Maximum
One Sigma Clock Jitter		±50pSeconds Maximum