

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

Package _____ **OAE 100 27 AA C - 30.000MHz**

OAE = 14 Pin Dip / ±5.2Vdc / ECL
 OAP = 14 Pin Dip / +5.0Vdc / PECL
 OAP3 = 14 Pin Dip / +3.3Vdc / PECL

Inclusive Stability _____
 100= +/-100ppm, 50= +/-50ppm, 25= +/-25ppm,
 10= +/-10ppm @ 25°C / +/-20ppm @ 0-70°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)

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 = ±5.2Vdc ±5% PECL = +5.0Vdc ±5% / +3.3Vdc ±5%
Input Current	140mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load ±100ppm, ±50ppm, ±25ppm, ±10ppm/±20ppm (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 ±10% (Standard), 50±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)	±5ppm / year Maximum
Start Up Time	20mSeconds Maximum

ECL PIN CONFIGURATIONS PECL

	AA	AB	AM	A	C	D	E
Pin 1	Ground/ Case	No Connect or Comp. Output	No Connect or Comp. Output	No Connect	No Connect	PECL Comp. Out	PECL Comp. Out
Pin 7	-5.2V	-5.2V	Case Ground	Vee (Case Ground)	Vee	Vee	Vee (Case Ground)
Pin 8	ECL Output	ECL Output	ECL Output	PECL Output	PECL Output	PECL Output	PECL Output
Pin 14	Ground	Case Ground	-5.2Vdc	Vcc (Case Ground)	Vcc (Case Ground)	Vcc	Vcc

MECHANICAL DIMENSIONS

Marking Guide

14 Pin Full Size
All Dimensions in mm.

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

PART NUMBERING GUIDE

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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