

**PART NUMBERING GUIDE**

**Environmental/Mechanical Specifications on page F5**

<b>Package</b>	<b>OAE 100 27 AA C - 30.000MHz</b>	
OAE = 14 Pin Dip / ±5.2Vdc / ECL		<b>Pin One Connection</b> Blank = No Connect C = Complimentary Output
OAP = 14 Pin Dip / +5.0Vdc / PECL		
OAP3 = 14 Pin Dip / +3.3Vdc / PECL		
<b>Inclusive Stability</b>		<b>Pin Configuration</b> See Table Below ECL = AA, AB, AC, AB PECL = A, B, C, E
100= +/-100ppm, 50= +/-50ppm, 25= +/-25ppm, 10= +/-10ppm @ 25°C / +/-20ppm @ 0-70°C		
<b>Operating Temperature Range</b>		
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)		

**ELECTRICAL SPECIFICATIONS**

**Revision: 1994-B**

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

**ECL PIN CONFIGURATIONS PECL**

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

Environmental/Mechanical Specifications on page F5

**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

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