

February 1996

Features

- Resolution 6-Bit $\pm 1/2$ LSB
- Maximum Sampling Frequency 20 MSPS
- Low Power Consumption40mW
at 20 MSPS (Typ)
(Reference Current Excluded)
- Built-In Sampling and Hold Circuit
- Three-State TTL Compatible Output
- Power Supply 5V Single
- Low Input Capacitance 4pF
- Reference Impedance 250 Ω (Typ)

Applications

- TV, VCR Digital Systems and a Wide Range of Fields
Where High Speed A/D Conversion is Required

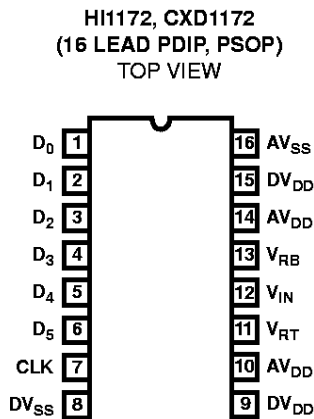
Description

HI1172, CXD1172 is a 6-bit CMOS A/D converter for video use. The adoption of a 2-step parallel conversion speed of 20 MSPS minimum, 35 MSPS typical.

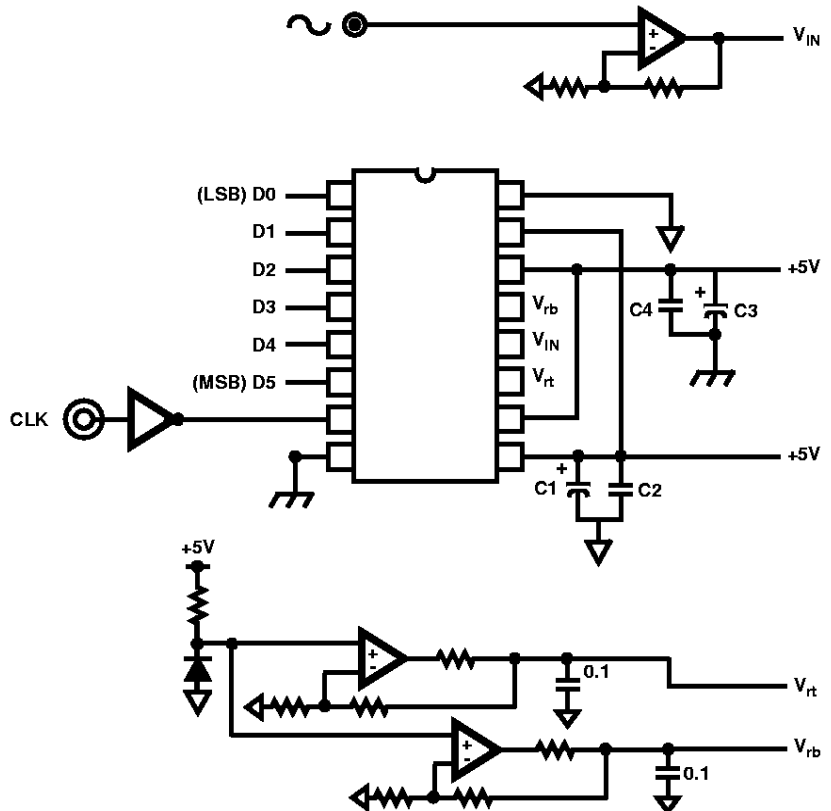
Ordering Information

PART NUMBER	TEMPERATURE RANGE	PACKAGE
HI1172JCP, CXD1172AM	-20°C to +75°C	16 Lead Plastic DIP
HI1172JCB, CXD1172AP	-20°C to +75°C	16 Lead Plastic SOIC

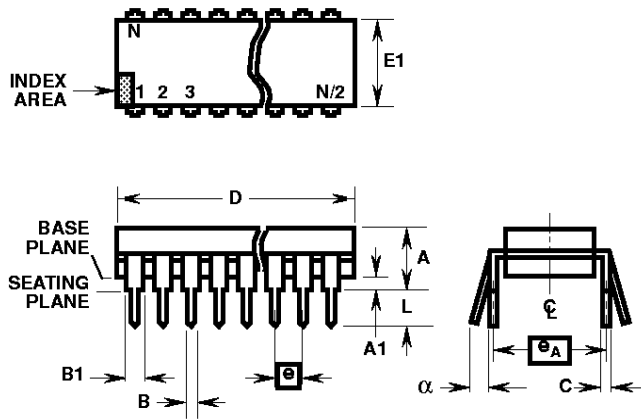
Pinout



Typical Application Circuit



Dual-In-Line Plastic Packages (PDIP)



E16.3A-S
16 LEAD DUAL-IN-LINE PLASTIC PACKAGE

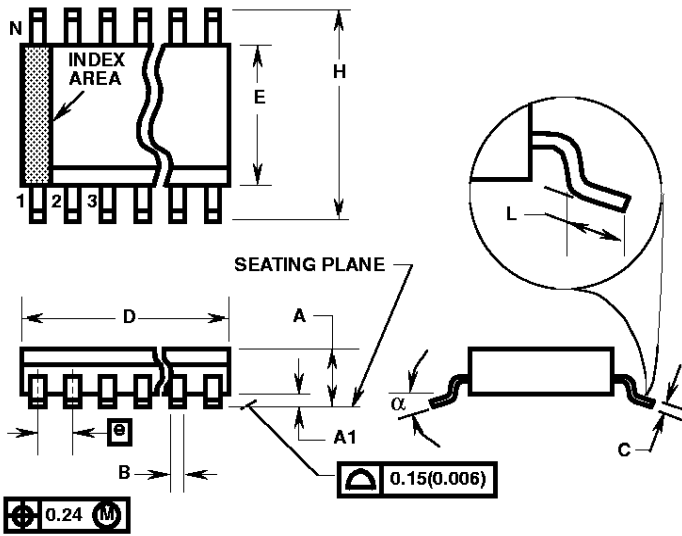
SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN	MAX	MIN	MAX	
A	0.142	0.161	3.60	4.10	2
A1	0.020	-	0.50	-	2
B	0.016	0.023	0.40	0.60	-
B1	0.042	0.053	1.05	1.35	-
C	0.008	0.013	0.20	0.35	-
D	0.752	0.771	19.10	19.60	3
E1	0.244	0.263	6.30	6.70	3
e	0.100 BSC		2.54 BSC		-
e _A	0.300 BSC		7.62 BSC		4
L	0.119	-	3.00	-	2
N	16		16		5
α	0°	15°	0°	15°	-

NOTES:

1. Controlling Dimensions: MILLIMETER. In case of conflict between English and Metric dimensions, the metric dimensions control.
2. Dimensions A, A1 and L are measured with the package seated in JEDEC seating plane gauge GS-3.
3. D and E1 dimensions do not include mold flash or protrusions.
4. e_A is measured with the leads constrained to be perpendicular to base plane.
5. N is the maximum number of terminal positions.

Rev. 0 2/96

Small Outline Plastic Packages (SOIC)



M16.2-S
16 LEAD SMALL OUTLINE PLASTIC PACKAGE (200 MIL)

SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN	MAX	MIN	MAX	
A	0.067	0.078	1.70	2.00	-
A1	0.002	0.011	0.05	0.30	-
B	0.014	0.021	0.35	0.55	-
C	0.006	0.011	0.15	0.30	-
D	0.386	0.405	9.80	10.30	1
E	0.205	0.220	5.20	5.60	2
e	0.050 BSC		1.27 BSC		-
H	0.296	0.326	7.50	8.3	-
L	0.012	0.027	0.30	0.70	3
N	16		16		4
alpha	0°	10°	0°	10°	-

Rev. 0 2/96

NOTES:

1. Dimension "D" does not include mold flash, protrusions or gate burrs.
2. Dimension "E" does not include interlead flash or protrusions.
3. "L" is the length of terminal for soldering to a substrate.
4. "N" is the number of terminal positions.
5. Terminal numbers are shown for reference only.
6. Controlling dimension: MILLIMETER. Converted inch dimensions are not necessarily exact.

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