HARRIS
SEMICONDUCTOR

HI1106, CXA1106

8-Bit 35 MSPS High-Speed D/A Converter (TTL Input)

June 1996

Features

- **Resolution 8-Bit**
- **High Speed Operation .... 35 MSPS (Maximum Conversion Speed)**
- **Non Linear Error .... less than ± 1/2 LSB**
- **Low Glitch**
- **TTL Compatible Input**
- **Power Supply .... +5V Single**
  ±5V Dual
- **Low Power Consumption**
  - **+5V Single Power Supply .... 200mW (Typ)**
  - **±5V Dual Power Supply .... 400mW (Typ)**

Function

- **8-Bit 35 MSPS D/A Converter**

Description

The HI1106, CXA1106 is an 8-bit 35 MSPS high-speed D/A converter IC. Summing type current for the upper 2-bits and ladder type resistance for the lower 6-bits, ensure a low power consumption of 200mW (Single power supply).

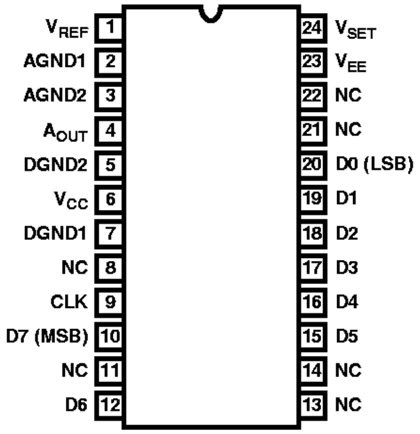
This IC is suitable for digital TVs, graphic displays and other applications.

Ordering Information

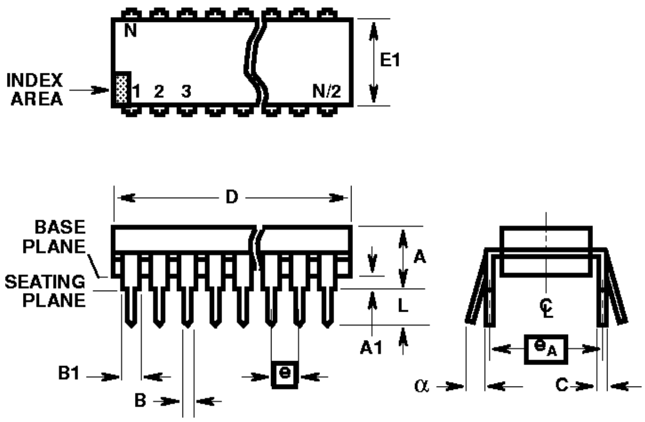
PART NUMBER	TEMPERATURE RANGE	PACKAGE
HI1106JCB, CXA1106M	-20°C to +75°C	24 Lead Plastic SOIC
HI1106JCP, CXA1106P	-20°C to +75°C	24 Lead Plastic DIP

Pinout

HI1106, CXA1106
(24 LEAD PDIP, PSOP)
TOP VIEW



Dual-In-Line Plastic Packages (PDIP)



E24.4-S

24 LEAD DUAL-IN-LINE PLASTIC PACKAGE (400 MIL)

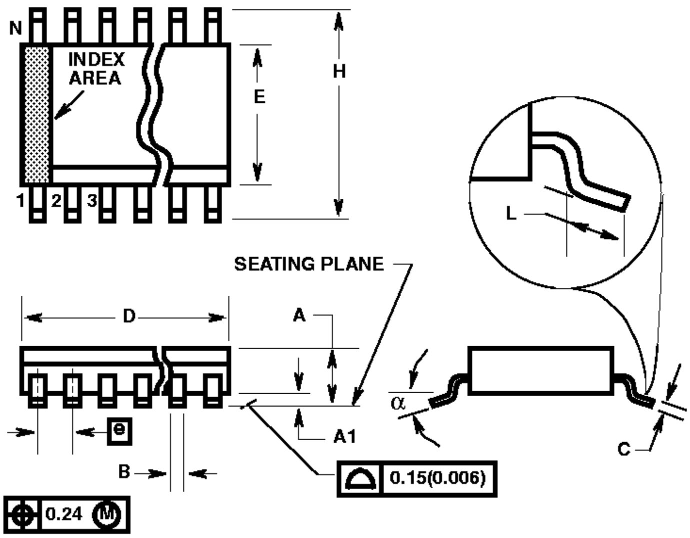
SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN	MAX	MIN	MAX	
A	0.142	0.161	3.60	4.10	2
A1	0.020	-	0.50	-	2
B	0.016	0.023	0.40	0.60	-
B1	0.042	0.053	1.05	1.35	-
C	0.008	0.013	0.20	0.35	-
D	1.185	1.204	30.10	30.60	3
E1	0.331	0.346	8.40	8.80	3
e	0.100 BSC		2.54 BSC		-
e_A	0.400 BSC		10.16 BSC		4
L	0.119	-	3.0	-	2
N	24		24		5
α	0°	15°	0°	15°	-

Rev. 1 4/95

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. $\boxed{e_A}$ is measured with the leads constrained to be perpendicular to base plane.
5. N is the maximum number of terminal positions.

Small Outline Plastic Packages (SOIC)



M24.2-S

24 LEAD SMALL OUTLINE PLASTIC PACKAGE (200 MIL)

SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN	MAX	MIN	MAX	
A	0.067	0.088	1.70	2.25	-
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	0.587	0.606	14.9	15.4	1
E	0.205	0.220	5.2	5.6	2
e	0.050 BSC		1.27 BSC		-
H	0.296	0.326	7.5	8.3	-
L	0.012	0.027	0.30	0.70	3
N	24		24		4
α	0°	10°	0°	10°	-

Rev. 1 4/95

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.

Sales Office Headquarters

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