HI2302, CXD2302

8-Bit 50 MSPS Video A/D Converter with Clamp Function

February 1996

Features

- **Resolution . . . . . 8-Bit ± 1/2 LSB (DL)**
- **Maximum Sampling Frequency . . . . . 50 MSPS**
- **Low Power Consumption . . . . . .125mW at 50 MSPS (Typ) (Reference Current Excluded)**
- **Synchronizing Clamp Function**
- **Clamp ON/OFF Function**
- **Reference Voltage Self-Bias Circuit**
- **Input CMOS/TTL Compatible**
- **Three-State TTL Compatible Output**
- **Power Supply . . . . . .5V Single or 5V/3.3V Dual**
- **Low Input Capacitance 15pF**
- **Reference Impedance . . . . . .370Ω (Typ)**

Applications

- **Wide Range of Applications that Require High-Speed A/D Conversion such as TV and VCR**

Description

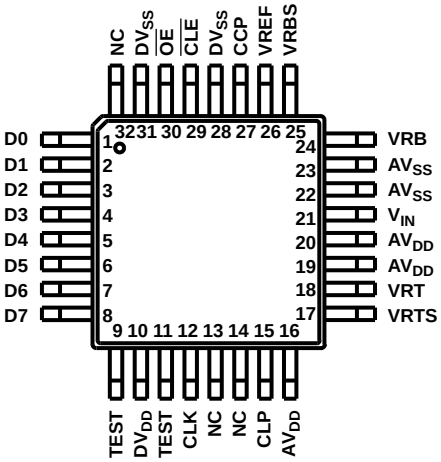
The HI2302, CXD2302 is an 8-bit CMOS A/D converter for video with synchronizing clamp function. The adoption of 2 step-parallel method achieves low power consumption and a maximum conversion rate of 50 MSPS.

Ordering Information

PART NUMBER	TEMPERATURE RANGE	PACKAGE
HI2302JCQ, CXD2302Q	-20°C to +75°C	32 Lead Metric Plastic Quad Flatpack

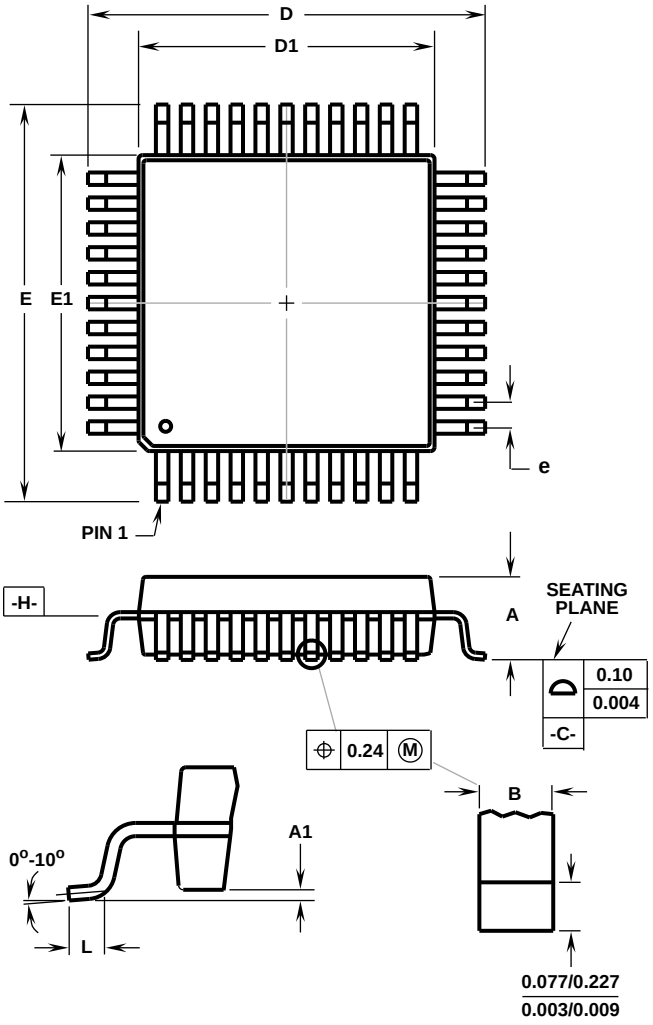
Pinout

HI2302, CXD2302
(32 LEAD MQFP)
TOP VIEW



File Number **4105**

Metric Plastic Quad Flatpack Packages (MQFP)



Q32.7x7-S

32 LEAD METRIC PLASTIC QUAD FLATPACK PACKAGE

SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN	MAX	MIN	MAX	
A	0.054	0.072	1.35	1.85	-
A1	0.000	0.011	0.00	0.30	-
B	0.008	0.017	0.20	0.45	5
D	0.347	0.362	8.80	9.20	2
D1	0.272	0.287	6.90	7.30	3, 4
E	0.347	0.362	8.80	9.20	2
E1	0.272	0.287	6.90	7.30	3, 4
L	0.012	0.027	0.30	0.70	-
N	32		32		6
e	0.032 BSC		0.80 BSC		-

Rev. 2 4/95

NOTES:

1. Controlling dimension: MILLIMETER. Converted inch dimensions are not necessarily exact.
2. Dimensions D and E to be determined at seating plane -C-.
3. Dimensions D1 and E1 to be determined at datum plane -H-.
4. Dimensions D1 and E1 do not include mold protrusion.
5. Dimension B does not include dambar protrusion.
6. “N” is the number of terminal positions.

All Harris Semiconductor products are manufactured, assembled and tested under **ISO9000** quality systems certification.

Sales Office Headquarters

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