HARRIS SEMICONDUCTOR

HI3050, CXD2308

10-Bit, 50 MSPS High Speed 3-Channel D/A Converter

February 1996

Features

- 10-Bit Resolution
- 50 MSPS Throughput Rate
- 3-Channel, RGB, I/O
- RS-343A/RS-170 Compatible Outputs
- Low Power Consumption 500mW (Typ)
- ±0.5 LSB Differential Linearity Error
- Low Glitch Energy
- CMOS Compatible Inputs

Applications

- NTSC, PAL, SECAM Displays
- High Definition Television (HDTV)
- Presentation and Broadcast Video
- Image Processing
- Graphics Displays

Description

The HI3050, CXD2308 is a triple, 10-bit D/A converter, fabricated in a silicon gate CMOS process, ideally suited for RGB video applications.

The converter incorporates three 10-bit input data registers with a common blanking capability, forcing all outputs to 0mA. The HI3050, CXD2308 features low glitch, high impedance current outputs and single 5V supply operation. Low current inputs accept standard TTL/CMOS levels. The architecture is a current cell arrangement providing low differential and integral linearity errors.

The HI3050, CXD2308 requires a 2V external reference and a set resistor to control the output current. The HI3050, CXD2308 also features a chip enable/disable pin for reducing power consumption(<5mW) when the part is not in use.

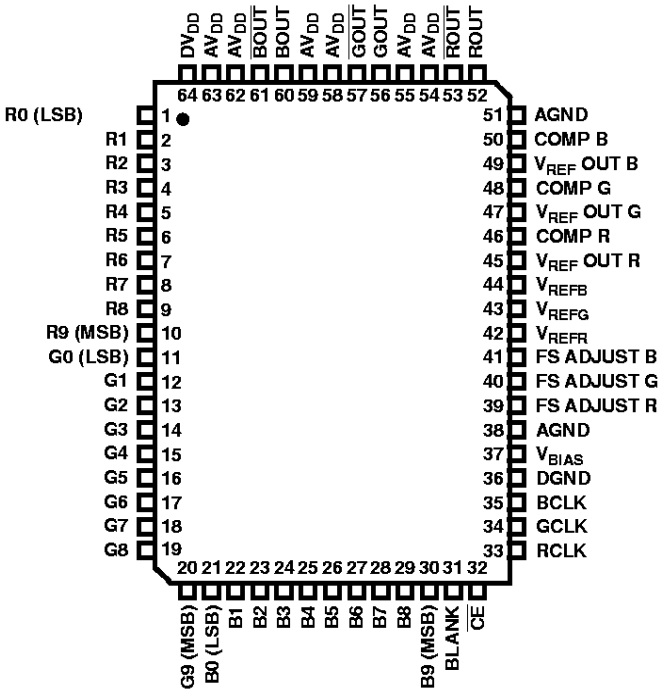
The HI3050, CXD2308 can generate RS-343A and RS-170 compatible video signals into doubly terminated and singly terminated 75Ω loads.

Ordering Information

PART NUMBER	TEMPERATURE RANGE	PACKAGE
HI3050JCQ, CXD2308Q	0^{o}C to +75^{o}C	64 Lead Metric Plastic Quad Flatpack

Pinout

HI3050, CXD2308 (MQFP)
TOP VIEW



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