


PLESSEY
Semiconductors

ADVANCED PRODUCT INFORMATION

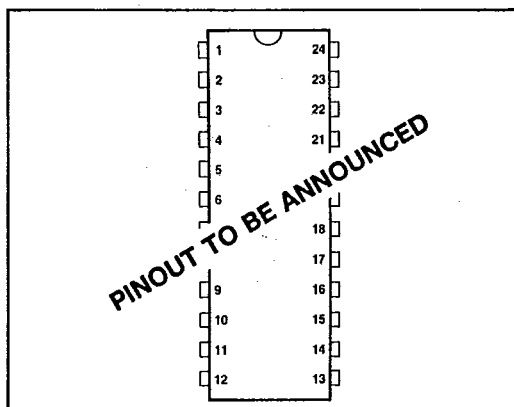
ZN515

T-51-09-08

8-BIT VIDEO D-A CONVERTER

The ZN515 is a monolithic video digital-to-analog converter capable of accepting 8-bits of ECL compatible data at update rates as high as 100MHz, and converting this information to give 1 of 256 levels of grey scale. Output glitches are minimised by careful design of the switch decoding circuits and the provision of on-chip data latches.

The ZN515 incorporates complete composite video controls including sync, blanking, 10% bright and reference white and produces a composite video output to directly drive a doubly terminated 75Ω transmission line. The on-chip bandgap reference can be used externally to drive other converters in the system reducing component count and enhancing temperature tracking. This is particularly useful in high performance colour graphics where the reference of one ZN515 could be used to drive the other two ZN515s.



Pin connections - top view

FEATURES

- 100MHz Update Rate
- Fast, 10ns Settling Time (to $\pm 1/2$ LSB)
- Low Glitch Energy
- $1/2$ LSB Linearity Error
- Precision 1.25V Bandgap Reference
- Composite Sync, Blanking, Reference White and 10% Bright Controls
- ECL Compatible Inputs
- Single 5.2V Supply
- Generates Standard (RS330, RS343) 1V p-p Output across 37.5 Ohms
- 24 Pin DIL Package

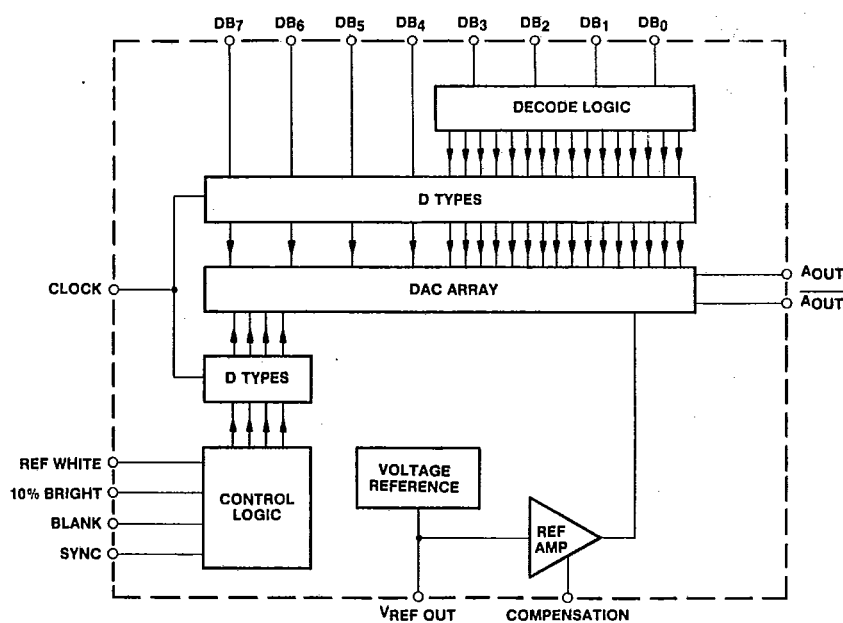


Fig.1 System diagram