- CMOS Technology
- 135-MHz Pipelined Architecture
- Available Clock Rate . . . 80, 110, 135 MHz
- Dual-Port Color RAM
  256 Words x 24 Bits
- Bit-Plane Read and Blink Masks
- EIA RS-343-A Compatible Outputs
- Functionally Interchangeable With
  Brooktree® Bt458
- Direct Interface to SMJ340xx Graphics
  Processors (110M)

- Direct Interface to TMS340XX Graphics
  Processors
- Standard Microprocessor Unit (MPU)
  Palette Interface
- Multiplexed-TTL Pixel Ports
- Triple Digital-to-Analog Converters (DACs)
- Dual-Port Overlay Registers . . . 4 × 24 Bits
- 5-V Power Supply
- Data Sheet Available†

description

The TLC34058 color-palette integrated circuit is specifically developed for high-resolution color graphics in such applications as CAE/CAD/CAM, image processing, and video reconstruction. The architecture provides for the display of 1280 × 1024 bit-mapped color graphics (up to eight bits per pixel resolution) with two bits of overlay information. The TLC34058 has a 256-word × 24-bit RAM used as a lookup table with three 8-bit, video, D/A converters.

On-chip features such as high-speed pixel clock logic minimize costly ECL interface. Multiple pixel ports and internal multiplexing provide TTL-compatible interface (up to 32 MHz) to the frame buffer while maintaining sophisticated color graphic data rates (up to 135 MHz). Programmable blink rates, bit plane masking and blinking, color overlay capability, and a dual-port palette RAM are other key features. The TLC34058 generates red, green, and blue signals compatible with EIA RS-343-A and can drive 75-Ω coaxial cables terminated at each end without external buffering.
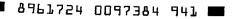
AVAILABLE OPTIONS

			PACKAGE		
T$_A$	SPEED	DAC RESOLUTION	CERAMIC GRID ARRAY (GA)	PLASTIC CHIP CARRIER (FN)	QUAD FLATPACK (HFG)
0°C to 70°C	80 MHz	8 Bits	–	TLC34058-80FN	–
	110 MHz	8 Bits	–	TLC34058-110FN	–
	135 MHz	8 Bits	–	TLC34058-135FN	–
−55°C to 125°C	110 MHz	8 Bits	TLC34058-110MGA	–	TLC34058-110MHFG

† For the complete data sheet, refer to the Graphics and Imaging Data Book (SLAD002).
Brooktree is a registered trademark of Brooktree Corporation.

Copyright © 1995, Texas Instruments Incorporated

TEXAS INSTRUMENTS

POST OFFICE BOX 655303 • DALLAS, TEXAS 75265

8961724 0097384 941

This Material Copyrighted By Its Respective Manufacturer

TLC34058
256 × 24 COLOR PALETTE

functional block diagram