features

- Functionally Interchangeable With ATT20C409
- 170/135 MHz
  - 170 MHz 2:1 Multiplexer Rate for 8-Bit Pseudocolor Operation
  - 73 MHz True-Color Operation
- 16-Bit Pixel Port, Usable as 8-Bit Port
  - Compatible With ATT20C490 Using P(7-0)
  - Compatible With ATT20C498 Using P(15-0)
- 9 Software-Selectable Color Modes
  - 24-Bit Packed Pixels
  - 24-Bit 16-Bit True Color
  - 8-Bit Pseudocolor
- 2:1 and 1:1 Pixel Multiplexing
- Power Dissipation of 1.19 W at 135 MHz Typ
- Dual Programmable-Clock Synthesizers
  - Pixel Clock
  - Memory Clock
  - Reset to 28.322 MHz and 25.175 MHz VGA Frequencies
  - Strobe Input Latches Frequency Select Lines
- On-Chip PLL Clock Doubler
  - 85 MHz Input
  - 170 MHz Pixel Output
- 256 × 24 Color RAM
- Software Compatible With the AT&T ATT20C498/499/409
- 68-Terminal Plastic Leaded Chip Carrier (PLCC) Package
- Data Manual Available†

applications

- Screen Resolutions (noninterlaced)
  - 1600 × 1280, 8-Bit/Pixel, 60 Hz
  - 1280 × 1024, 16-Bit/Pixel, 60 Hz
  - 1024 × 768, 16-Bit/Pixel, 85 Hz
  - 1024 × 768, 24-Bit/Pixel, Packed, 70 Hz
  - 800 × 600, 24-Bit/Pixel, Unpacked, 72 Hz
- True-Color Desktop, PC Add-in Card
- X-Windows Terminals
- Green PCs

PRODUCT PREVIEW

description

The TVP3409 is functionally interchangable with the ATT20C409 RAMDAC.

The TVP3409 RAMDAC supports 8-bit multiplexed operation that can be input on 16-pixel terminals. The TVP3409 retains register compatiblity with the ATT21C498 and ATT20C499 parts.

The TVP3409 features 24-bit, packed pixel modes that provide 24-bit graphics in a 3-Mbyte frame buffer at 1024 x 768 screen resolution. Dual clock synthesizers offer two programmable and two fixed frequencies in phase-locked loop (PLL) (A), and one programmable and three fixed frequencies in PLL (B). After reset the frequencies are:

PLL (A): 25.175, 28.322, 50, and 75 MHz

PLL (B): 30, 40, 50, and 60 MHz

AVAILABLE OPTIONS

T_A	SPEED	DAC RESOLUTION	PACKAGE
			CHIP CARRIER (FN)
0°C to 70°C	135 MHz	8 Bits	TVP3409–135CFN
	170 MHz	8 Bits	TVP3409–170CFN

† For the complete data manual, refer to the Graphics and Imaging Data Book (SLAD002).

functional block diagram

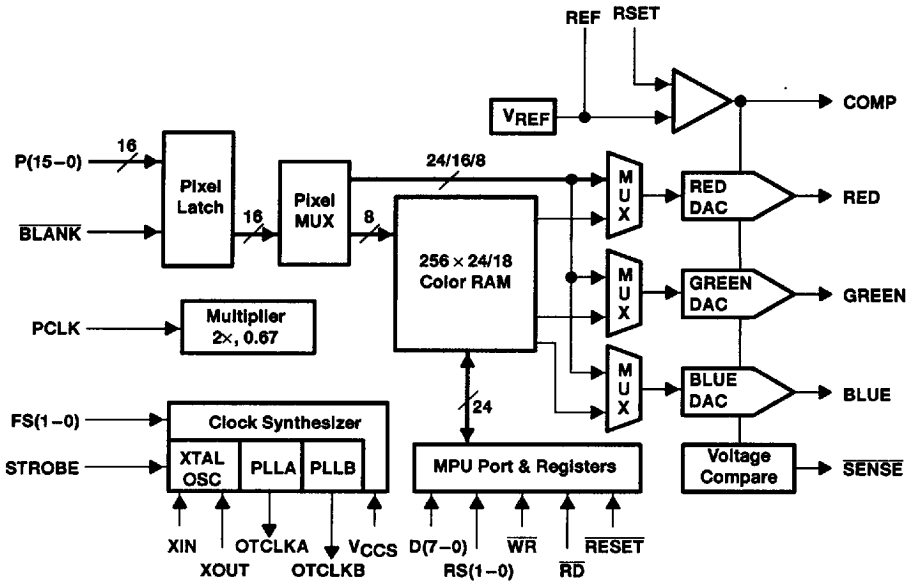

Figure 1. Functional Block Diagram

PRODUCT PREVIEW

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