



# TR9C1710 GRAPHICS COLOR PALETTE

## PRODUCT INFORMATION

### DISTINCTIVE CHARACTERISTICS

- o Combination Look-up Table and Triple Video DAC
- o Directly drives single- and double-terminated 75-ohm transmission lines
- o Displays 256 colors from a palette of 256K colors
- o Asynchronous Microprocessor interface
- o Read and Write contents of Look-up Table
- o VGA, Super-VGA, VESA, TIGA™, and 8514/A compatible with enhanced features
- o Unlimited access to Look-up Table; no need to wait for retrace
- o Unlimited access to Mask Register
- o 28-pin PDIP and 32- and 44-pin PLDCC Packages
- o Available in 110-, 80-, 66-, and 50-MHz Pixel Rates
- o High-Performance CMOS for low operating power
- o TTL-compatible inputs

### GENERAL DESCRIPTION

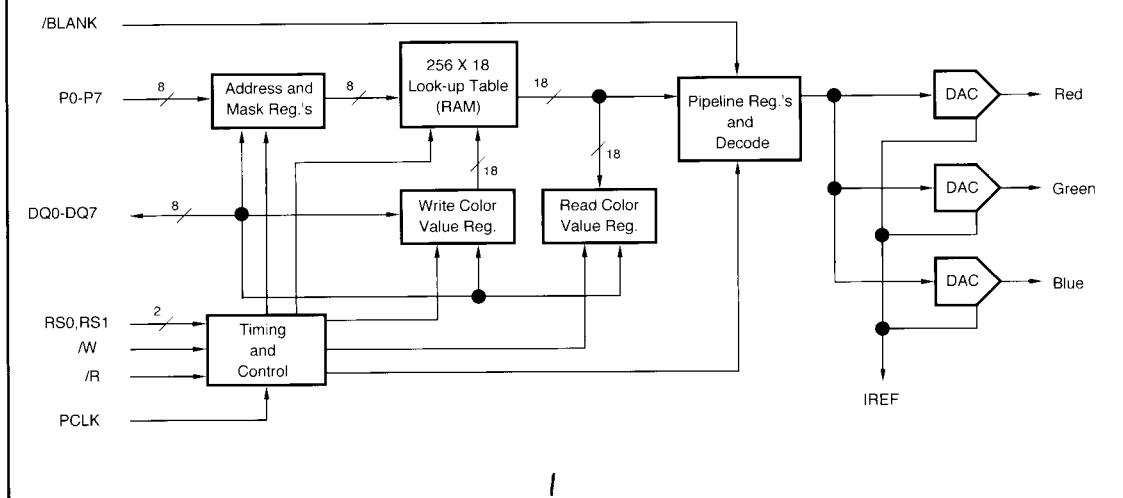
The TR9C1710 is a monolithic 256-word by 18-bit Look-up Table and Triple Video DAC, with 6-bit DACs. The Look-up Table accepts up to eight bits per pixel from the Frame Buffer and performs a translation into three 6-bit values for conversion into Red, Green, and Blue analog signals. Each of the Video DACs can directly drive a double-terminated 75-ohm transmission line.

The TR9C1710 incorporates a proprietary feature called Pixel Replicate™ that allows both Read and

Write operations to occur to the Look-up Table when the display is active without causing random noise on the screen.

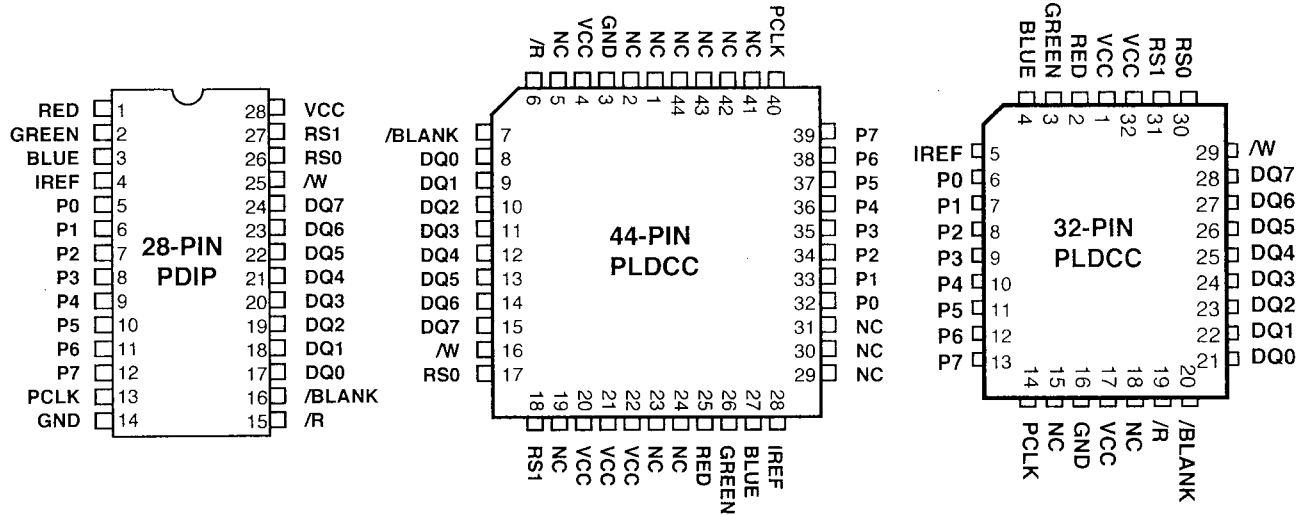
The TR9C1710 is available in standard 28-pin DIP and 32- and 44-pin PLDCC packages and supports screen resolutions up to 1280 by 1024 pixels with the color capacity necessary for high-performance Personal Desktop Computers and Workstation Graphics systems. The TR9C1710 is fully compatible with VGA and Super-VGA industry standards.

### BLOCK DIAGRAM



# MU9C1710

## PINOUT DIAGRAMS



## ORDERING INFORMATION

| Part Number   | Speed   | Package             | Temperature Range |
|---------------|---------|---------------------|-------------------|
| TR9C1710-XXYC |         |                     | 0 to 70°          |
| XX = 50       | 50 MHz  |                     |                   |
| XX = 66       | 66 MHz  |                     |                   |
| XX = 80       | 80 MHz  |                     |                   |
| XX = 11       | 110 MHz |                     |                   |
| Y = P         |         | 28-pin, Plastic DIP |                   |
| Y = D         |         | 44-pin, PLDCC       |                   |
| Y = E         |         | 32-pin, PLDCC       |                   |

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