

# ENHANCED TRUE COLOR PALETTE-DAC WITH 16-BIT PIXEL PORT

For complete specifications please contact your nearest sales office

- Enhanced true color performance through new double 24-bit packed pixel mode
- Operation up to 135MHz
- Flexible multiplexing using internal PLL
- Standard VGA and high color operation up to 110MHz
- Synchronous PixMix switching between modes
- Programmable power-down features
- On-chip checksum test
- **RS2** pin allows direct write access to registers

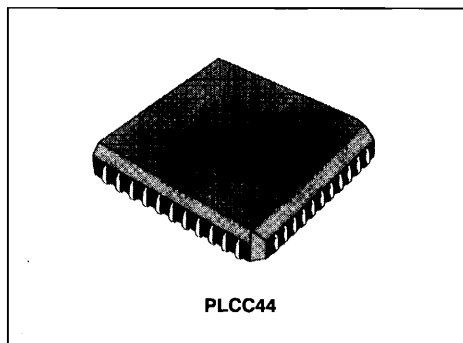
## DESCRIPTION

The STG 1702 is a Super VGA compatible Palette-DAC designed for PC systems requiring up to 135MHz pixel rates. Pixel modes supported by the STG 1702 include:

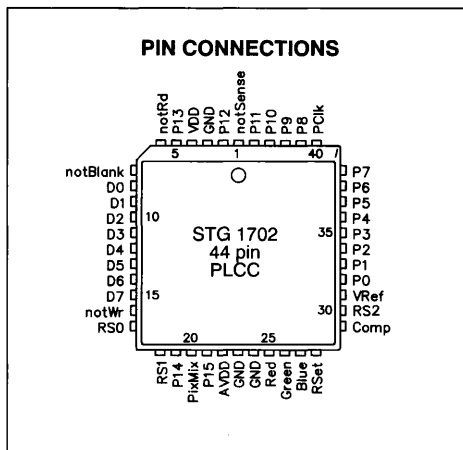
- Serializing 16-bit pixel port providing 135MHz 8-bit and 56MHz 24-bit packed pixel modes using the PLL
- 16-bit pixel port giving faster high color/true color operation up to 110MHz sampling rate
- 8-bit pixel port giving standard SVGA and high/true color modes up to 110MHz sampling rate

The PixMix capability allows pixel-by-pixel switching between modes.

The STG 1702 includes a 135MHz triple 8-bit video DAC, controlled by either an external 1.235V voltage reference or an on-chip voltage reference. A VGA compatible micro port makes use of both the "magic access" sequence and direct **RS2** mapping to control the extended features.



PLCC44



## EXAMPLE MODES AND FREQUENCIES (ALL NON-INTERLACED)

Pixel port mode	Screen resolution	Simultaneous colors	Refresh rate (Hz)	PClk and data frequency (MHz)	Video frequency (MHz)
8-bit pixel port	1280×1024	256	60	110	110
	800×600	65K	80	110	55
	640×480	16.7M	80	102	34
16-bit pixel port	1024×768	65K	80	90	90
	800×600	16.7M	80	110	55
Serializing 16-bit pixel port	1280×1024	256	75	67.5	135
	1024×768	16.7M	55	85	56