

T-52-33-43

Advance Information


**Advanced
Micro
Devices**

Am81C453

CMOS Color Palette

DISTINCTIVE CHARACTERISTICS

- Plug-In replacement for Bt453
- Macintosh II compatible
- Available in 40- and 66-MHz versions
- Available in 44-pin PLCC package
- 256 x 24 color Look-Up Table (LUT)
- Triple 8-bit DACs
- RS343A/RS-170A-compatible RGB outputs
- 3 x 24 dual-port overlay RAM
- Standard MPU Interface
- +5-V monolithic, high-performance CMOS

GENERAL DESCRIPTION

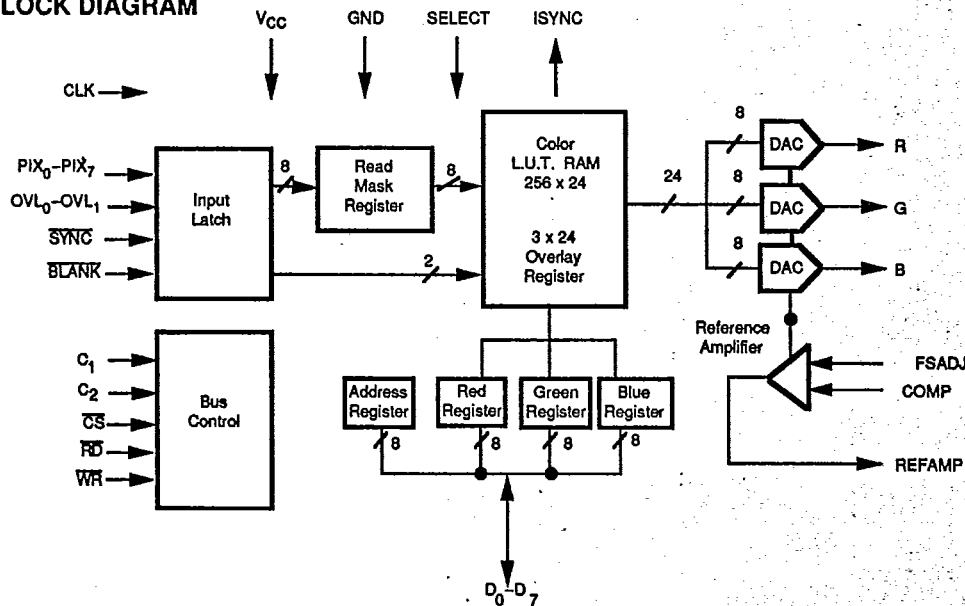
The Am81C453 CMOS Color Palette has been designed specifically for the Macintosh II market. Applications include high-resolution color graphics, CAD/CAM/CAE, image processing, and desktop publishing. The Am81C453 operates at speeds sufficient to support screen resolutions up to 1024 x 768.

The Am81C453 has an input latch, a 256 x 24 Look-Up Table, a 3 x 24 Overlay Table, and triple 8-bit video DACs. It can simultaneously display 259 colors out of an available set of 16.8 million colors. Proprietary DAC decoding techniques minimize glitch energy and skew. It is available in versions with pixel rates as high as 66 MHz.

The Am81C453 generates RS-343A-compatible outputs into doubly terminated 75-ohm loads and RS-170-compatible output into a singly terminated 75-ohm load, without external buffers. Overlaying cursors, text, grids, etc. can be implemented using the three overlay registers.

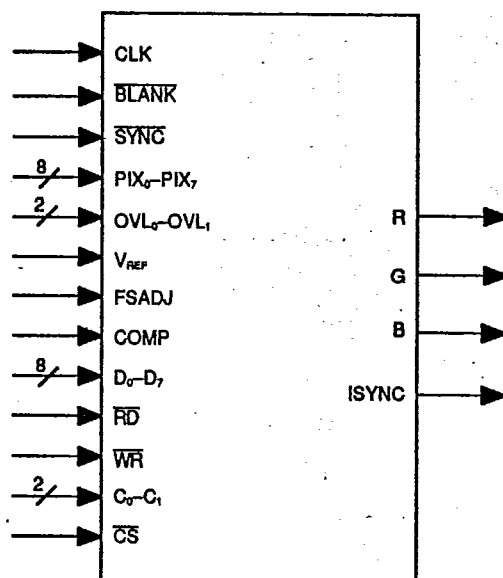
The Am81C453 is fabricated using AMD's state-of-the-art 1.2 μ CMOS process. The device is available in a 44-pin PLCC package. The Am81C453 is pin and functionally compatible with the Bt453.

BLOCK DIAGRAM



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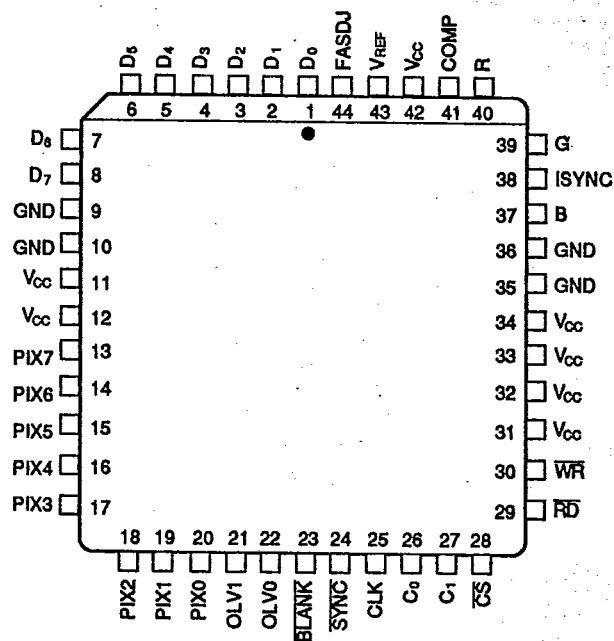
LOGIC SYMBOL



CONNECTION DIAGRAM

Top View

3



11447A-002A

Am81C453

3-135

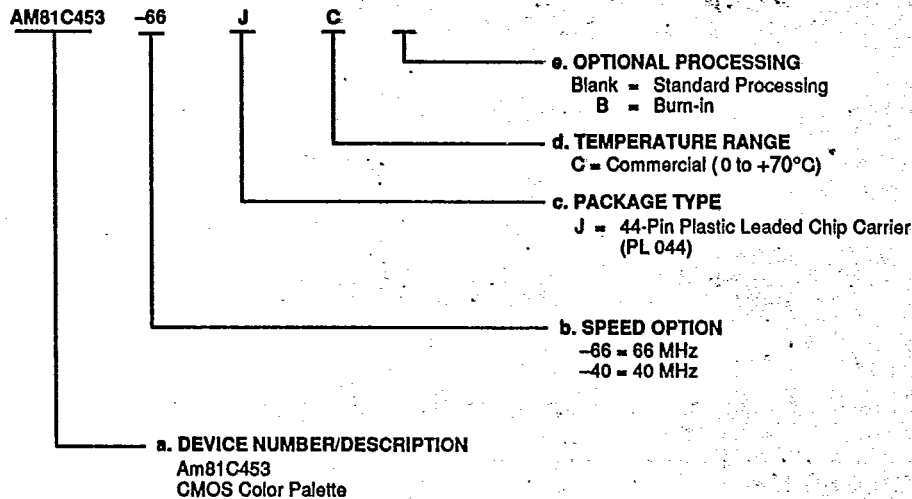
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ORDERING INFORMATION**Standard Products**

AMD standard products are available in several packages and operating ranges. The ordering number

(Valid Combination) is formed by a combination of:

- a. Device Number
- b. Speed Option (if applicable)
- c. Package Type
- d. Temperature Range
- e. Optional Processing



Valid Combinations	
AM81C453-66	JC
AM81C453-40	

Valid Combinations

Valid Combinations list configurations planned to be supported in volume for this device. Consult the local AMD sales office to confirm availability of specific valid combinations, to check on newly released combinations, and to obtain additional data on AMD's standard military grade products.