MCS6562/6563
Video Interface Chip (VIC)

- **Fully Programmable System With 16K Byte Address Space**
- **Mask-programmable Sync Generation (NTSC-6562 or PAL-6563)**
- **On-Chip Color Generation**
- **Up to 1000 Independently Programmable and Movable Background Locations**
- **Screen Grid Size Up to 320 x 200**
- **Two Selectable Graphic Character Sizes**
- **On-Chip Sound System**
- **On-Chip DMA and Address Generation**
- **16 Addressable Control Registers**
- **Light Gun/Pen for Target Games**

DESCRIPTION

The MCS6562/6563 is functionally nearly identical to the MCS6560/6561 described in this section of the Data Catalog. Like the 6560/6561, the 6562/6563 is designed to be used in implementing color video graphics applications such as low-cost CRT terminals, biomedical monitors, control system displays and arcade/home video games. It provides all circuitry necessary for generating color programmable character graphics with high-screen resolution. VIC also incorporates sound effects and A/D converters for use in a video game environment.

Principal differences between the 6562/6563 and the 6560/6561 lie in the size of screen display attainable. The 6562/6563 is capable of up to 1000 independently programmable and movable background locations on a standard TV and the screen grid may be up to 320 horizontal dots by 200 vertical dots. In addition, the 6562/6563 sound synthesizer produces three waveforms and features three amplitude modulators, along with programmable frequency and programmable noise generator.

In virtually all other respects, the 6562/6563 is identical to the 6560/6561 and the interested reader is referred to that data sheet in the Data Catalog for further discussion.

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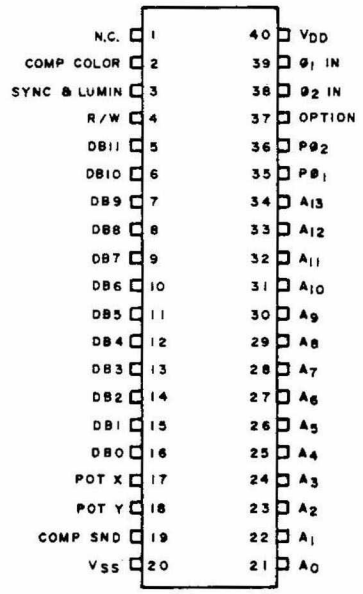
PIN CONFIGURATION



BLOCK DIAGRAM

See Block Diagram for MCS 6560/6561 in this section of Data Catalog.