

- Supports Standard NTSC and PAL Video Specifications¹
- Seamlessly Interfaces With Intel™ DVO Port on Whitney and Future Intel Chipsets
- Supports 24-Bit RGB and YCrCb Input Formats on a 12-Bit Pixel Port
- Supports CCIR-656 YCbCr 4:2:2 Input Format on an 8-Bit Port
- Analog Composite Video Out Formats:
 - NTSC-M
 - PAL-B,D,G,H,I
 - PAL-M
 - PAL-N
 - PAL-Nc
- Simultaneous Composite and S-Video (Y/C Component) or YPrPb Component Output
- SCART Interface (Simultaneous Composite and Interlaced RGB Output)
- Programmable Functionality and I²C Serial Interface²
- Four 10-Bit DACs
- 2X Over-Sampling and Optimized Filters for Luma and Chroma Channels
- Reduced Power Consumption – 1.8 V Digital Core and 3.3 V Analog Circuit
- Lowest Noise and Best Power Dissipation Using TI PowerPAD™ Packaging
- Advanced Technology Using TIs 0.18 μm EPIC–5™ CMOS Process
- TFP6024 Incorporates Macrovision™ 7.11 Support

description

The TFP6022 and TFP6024 are PanelBus™ flat panel display products, part of a comprehensive family of end-to-end PC video solutions. Targeted primarily at desktop and notebook PCs, the TFP6022/6024 finds applications in any design requiring TV-out support, such as PC-to-TV applications with source from DVD players and digital camcorders / cameras.

The scalable (1.1 V to 1.8 V) low-swing digital pixel interface provides a low-EMI and high-speed bus that connects seamlessly with Intel™ digital video out (DVO) port, perfectly linking the graphics controller and the video encoder.

The TFP6022/6024 places a high performance NTSC/PAL video encoder into a compact 64-pin TQFP package, providing a cost-effective video output solution for the most demanding multimedia applications. The video encoder provides advanced horizontal and vertical scaling for overscan compensation and features a 5-tap adaptive anti-flicker filter. These features combine to produce high quality display of noninterlaced data on a traditional interlaced TV.

The TFP6022/6024 combines PanelBus™ circuit innovation with TIs advanced 0.18 μm EPIC–5™ CMOS process technology along with PowerPAD™ ultra-low ground inductance package technology to provide a reliable, low-powered, low noise solution with the highest quality TV output.



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1. The TFP6022 and TFP6024 are compliant to the SMPTE 170M NTSC composite video, and CCIR624/CCIR601 PAL composite video specifications.
2. Programmable functionality includes: arbitrary horizontal and vertical downscaling ratio, sync, black and blank levels, color burst amplitude, luminance and chrominance gains, luminance delay, subcarrier frequency, overscan compensation, flicker removal and SCH.

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PRODUCT PREVIEW

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