



FLEXIBLE, EASY-TO-USE DEVELOPMENT  
PLATFORM FOR ACCELERATING DIGITAL  
TV DESIGN CYCLES

## SPARTAN-6 FPGA CONSUMER VIDEO KIT 2.0: COST-EFFECTIVELY DELIVERING NEXT-GENERATION PRODUCTS

### ➤ Today's Digital TV Design Challenges

- Delivering picture quality and feature sets that stand out from the competition
- Simplifying delivery on multiple platforms for maximized return on investment
- Streamlining video algorithm development and overall design cycles for shorter time to market

### ➤ The Xilinx Solution

- Programmability, for flexible design modification at any point in the lifecycle of the product
- Proven methodology, for saving time and allowing more product differentiation
- Rich set of IP, for maximizing results even with smaller budgets and tighter schedules
- Steady stream of innovations, for designing to tomorrow's standards

At a time when DTV design teams face budget cutbacks, the competition is fiercer than ever and consumers more sophisticated and discerning. Xilinx offers a cost-effective solution that can simultaneously speed time to market while facilitating highly differentiated designs. The Xilinx® Spartan®-6 FPGA Consumer Video Kit 2.0, based on the 45nm Spartan-6 FPGA family, provides a ready-to-use design platform including the latest software, design tools, and video-specific IP. The kit gives design teams a proven Targeted Design Platform methodology that enables simulating video algorithms in real time. Designers can implement the latest serial video interconnects without having to code from scratch, and can seamlessly migrate designs to low-cost, high-volume Spartan-6 devices. A broad range of Xilinx and third-party IP facilitates the development of next-generation products on time and on budget.

### Simpler, Smarter Platform for Pioneering Digital TV Innovations

The Spartan-6 FPGA Consumer Video Kit 2.0 provides a simpler way to update and modify video algorithms, and rapidly design to the newest HD and 3D video standards such as HDMI 1.4a and V-by-One® HS. Xilinx's advanced integrated design environment helps designers more efficiently develop and test high-speed serial interfaces and debug HDMI or DVI-based solutions. The Spartan-6 FPGA Consumer Video Kit 2.0 uniquely equips designers to implement tomorrow's features today. The latest kit enhancements allow designers to leverage all eight SERDES channels for very-high-bandwidth designs, support eight channels of LVDS, and enable more user capabilities and connectivity options.

#### SPARTAN-6 FPGA CONSUMER VIDEO KIT 2.0



The Spartan-6 FPGA Consumer Video Kit 2.0 is available in two versions. Designers can purchase the entry-level Foundation Kit with LVDS and FPGA Mezzanine Connection (FMC) or the fully featured Professional Kit which includes HDMI 1.4a TX & RX FMCs, DisplayPort, V-by-One HS, and LVDS FMC support.

## SPARTAN-6 FPGA CONSUMER VIDEO KIT 2.0 FEATURES

FEATURES	FOUNDATION KIT	PROFESSIONAL KIT
CVK 2.0 XC6SLX150T Baseboard	●	●
LVDS FMC	●	●
V-by-One HS FMC	—	●
DisplayPort FMC	—	●
HDMI 1.4a Tx and Rx FMCs	—	●
DisplayPort 1.1a Tx/Rx LogiCORE IP – Full System Evaluation	—	●
V-by-One HS IP Core – Full System Evaluation	—	●
Reference Designs	●	●
Power Supply	●	●
LVDS Cables	●	●
MMCX to SMA Connectors	●	●
Xilinx Platform Cable USB-II	●	●
V-by-One HS Cables	●	●
Documentation and Setup Guides	●	●
ISE Design Suite 12.4 – Logic Edition	●	—
ISE Design Suite 12.4 – Embedded Edition	—	●

Fully compatible with the Spartan-6 FPGA Consumer Video Kit, the optional FMCs below are sold separately.

## ADDITIONAL FMCs

COMPONENT	DESCRIPTION
USB 3.0 FMC	Powered by Inventure, this option FMC comes with an evaluation version of USB 3.0 IP
SATA Gen 2 FMC	Powered by Design Gateway, this option FMC comes with an evaluation version of SATA Gen 2 IP
HDMI 1.3 Tx/Rx FMC	This option FMC uses ADI PHY and has improved EDID support

## Take the NEXT STEP

For more information on the Spartan-6 FPGA Consumer Video Kit 2.0, please visit [www.xilinx.com/S6CVK](http://www.xilinx.com/S6CVK)

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