



System-On-Chip Technologies

## PRODUCT BRIEF

### VoIP-X-4K

Designed for seamless deployment, this board is perfect for conducting product demonstrations, and accelerating product development.

The VoIP-X-4K has all the essential video I/O ports as well as networking capabilities to support plug-and-play integration.

Powered by the Xilinx Artix-7 FPGA, the VoIP-X-4K offers versatile connectivity and advanced features, making it an ideal solution for a wide range of applications.

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## SOC VoIP-X-4K Board: Ultimate Standalone Solution for Video Encoding and Decoding

Elevate your video solutions with the SOC VoIP-X-4K Board, featuring a preloaded SOC MPEG CODEC IP core. This advanced standalone carrier excels as both a 4K video encoder and decoder, achieving resolutions up to 4K at 60 or 4x1080 at 60.

Supporting HDMI and 4K over quad 3G-SDI, the VoIP-X-4K offers multiple channel encoding as a standalone product and can extend encoding/decoding capabilities with SOC's modules. Ideal for OEM applications, it provides flexibility for product development with bidirectional capabilities and robust 4K transmissions.

## VoIP-X-4K Key Features

- — □ Xilinx Artix-7 XC7A200T FPGA
- — □ SUPPORTS SOC SoM MODULES
- — □ 4x3G HD-SDI PORTS FOR EITHER INPUTS OR OUTPUTS
- — □ DDR3 MEMORY
- — □ HDMI INPUT & OUTPUT
- — □ TRI-SPEED ETHERNET (10/100/1000Mbps)
- — □ MINI USB as UART
- — □ 10cm x 10cm

# Product Table (SOC CODEC Modules based on the VoIP-X-4K)

Specifications						
Standard	Profile	Resolution	Chroma	Precision	Frame Rate	Audio
MPEG-2 Encoder	Up to High	Up to 1080i/p	4:2:0/4:2:2	8 bits	Up to 60fps	ACC or MPEG2-L2
MPEG-2 Decoder	Up to High	Up to 1080i/p	4:2:0/4:2:2	8 bits	Up to 60fps	ACC or MPEG2-L2
H.264 Encoder	Up to High	Up to 1080i/p	4:2:0/4:2:2	Up to 10 bits	30fps	ACC or MPEG2-L2
H.264 Decoder	Up to High	Up to 1080i/p	4:2:0/4:2:2	Up to 10 bits	30fps	ACC or MPEG2-L2