

The Z3-DM8169-4K-RPS starter kit features Ultra HD video encode and decode. This system offers real-time 4K encoding and decoding capabilities while maintaining low power consumption. The Z3-DM8169-4K-RPS consists of a hardware package and software bundle designed to enable rapid development of multimedia applications. The hardware consists of one Z3-DM816x-MOD-4K System on Module card and one Z3-DM8169-APP-6x Application (I/O) Board. The software bundle consists of the necessary components for developing advanced multimedia, graphics, and DSP applications. This application board uses the I/O expansion capability of the Z3-DM816x-MOD-4K to implement additional functions not present in the base module.

BENEFITS

- > Versatile encoding modes such as: low latency, low bitrate and high quality
- > Production-proven, fully integrated hardware and software audio/video system
- >Easily controlled through RS-232 or an HTTP-based GUI
- >Full A/V synchronization even after hours of recording
- > Ready to use, out-of-the-box commands for encoding, decoding and streaming

APPLICATIONS

Medical Imaging Applications

Digital Signage and Video Kiosks

Video Security and Surveillance

Industrial Video Solutions

Military Applications

Customized Applications*

*Contact Z³ Technology for Customized Product Options

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Z3-DM8169-4K-RPS

Rapid Production Starter Kit



125 mm

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Module	Z3-DM816x-MOD-4K
Application Board	Z3-DM8169-APP-6x
Processor	DSP + ARM Cortex A8
Video Inputs	HDMI
Video Outputs	HDMI
Video Codecs	H.264
Audio Interfaces	Embedded HDMI
Audio Codecs	AAC, G.711* and PCM*
Additional Interfaces	GigE, 2x SATA2, 2x USB 2.0 and Serial

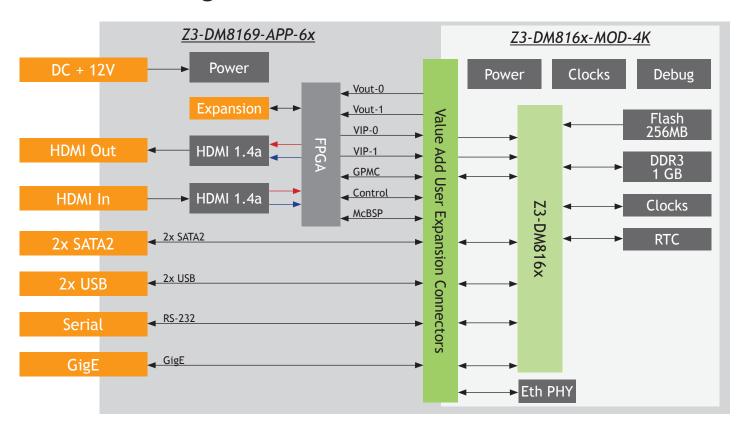
Software

Soltware	
Software Development	Texas Instruments® RDK, Z³ Technology software components for RDK, Z³ Applications
Operating System	Linux 2.6 (root file-system, NAND boot, tool chain and flash programming tool), u-boot
Encoding Resolutions	H.264 video from QCIF to 2160p30 (4K)
Output Formats	RTP, MPEG-2 TS and TS File
Decoding Resolutions	H.264 video from QCIF to 2160p30 (4K)
Input Formats	RTP, MPEG-2 TS and TS File
	Low latency mode
Features	 Fully controllable parameters: resolution, max bitrate and GOP
	 Source code license available*

Specifications

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Module Size	108 x 68 mm (4.25 x 2.67 in)
Application Board Size	125 x 121 mm (4.92 x 4.76 in)
Power Supply	12V
Power Consumption	14W

HW Block Diagram



SW Block Diagram To/From Network To/From Storage SATA2, USB LINUX 2.6 OS RTP, MPEG-2 TS or TS File Formats **Encode and Stream Decode From Stream** File Based Encode, Decode Z³ Multi-Channel Framework **Optimized Capture/Display Drivers** Ultra HD Video Source Ultra HD Video Display *Contact Z³ Technology for Customized Product Options sales@Z3technology.com +1.402.323.0702 www.Z3technology.com

Z³ Technology is the market leader in providing production-ready embedded multimedia solutions and systems. From our founders to our world-class engineers to our sales and customer service team, we understand your requirements and speak your language. Our experience allows us to provide cost-effective solutions to meet your multimedia product requirements. With the assistance of our robust worldwide distribution and sales networks, we can provide a simple solution for your multimedia needs.

