

The Z3-DM8107-SDI2-RPS starter kit allows encode of HD video through SDI or HDMI inputs, and encode of SD video through a composite input. It consists of a hardware package and software bundle designed to enable rapid development of multimedia applications. The hardware

consists of one Z3-DM8107-MOD-0x System on Module card and one Z3-DM8107-APP-2x Application (I/O) Board. The Z3-DM8107-MOD-0x is a compact OEM module which supports up to 1080p60 H.264 encode in

streaming or storage mode and dual channel encode up to 1x 1080i30 and 1x 720p60. The application board uses the I/O expansion capability of the Z3-DM8107-MOD to implement additional functions not present in the base module. The software bundle consists of the necessary components for developing advanced

## Z3-DM8107-SDI2-RPS

Rapid Production Starter Kit

 Image: Contract of the contract

- 120 mm

### BENEFITS

multimedia, graphics, and DSP applications.

- >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
- >Optional Support for KLV\*
- >Ready to use, out-of-the-box commands for encoding, decoding and streaming

#### **APPLICATIONS**

Broadcast Video Encoding

- Industrial Video Applications
- Video Security and Surveillance
- Commercial and Educational Video
- **Customized Applications\***

#### \*Contact Z<sup>3</sup> Technology for Customized Product Options

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#### Hardware

Module	Z3-DM8107-MOD-0x
Application Board	Z3-DM8107-APP-2x
Processor	ARM Cortex A8
Video Inputs	3G-SDI, HDMI and Composite
Video Outputs	Mini-HDMI
Video Codecs	H.264
Audio Interfaces	Embedded SDI, Embedded HDMI and Analog Stereo
Audio Codecs	AAC, G.711* and PCM*
Additional Interfaces	GigE, USB 2.0 and Serial

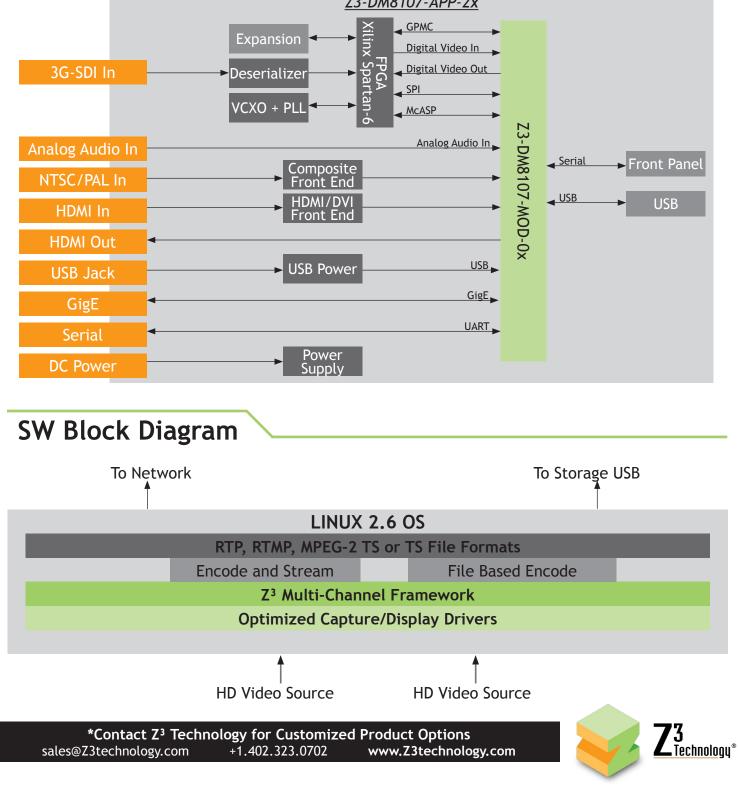
#### Software

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Software Development	Texas Instruments® RDK, Z <sup>3</sup> Technology software components for RDK, Z <sup>3</sup> 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 1080p/i at 60 fps Dual Channel encode up to 1x 1080i and 1x 720p60
Output Formats	RTP, MPEG-2 TS, RTMP, TSRTP, MPTS and TS File
Decoding Resolutions	H.264 decode from QCIF to 1080p/i at 60 fps
Input Formats	RTP, MPEG-2 TS and TS File
Features	<ul> <li>Closed Captioning (EIA-608, EIA-708)</li> <li>Stream one source in multiple resolutions</li> <li>Low latency mode</li> <li>Flexible resizer to allow full frame display of smaller resolutions</li> <li>Fully controllable parameters: resolution, max bitrate, GOP and on-the-fly bitrate control</li> <li>SDI KLV capture &amp; KLV synchronous transport available*</li> </ul>

#### Specifications

specifications	
Module Size	82 x 43 mm (3.23 x 1.69 in)
Application Board Size	120 x 89 mm (4.72 x 3.50 in)
Power Supply	5V
Power Consumption	6W

# HW Block Diagram Z3-DM8107-SDI2-RPS



Z<sup>3</sup> 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.

