

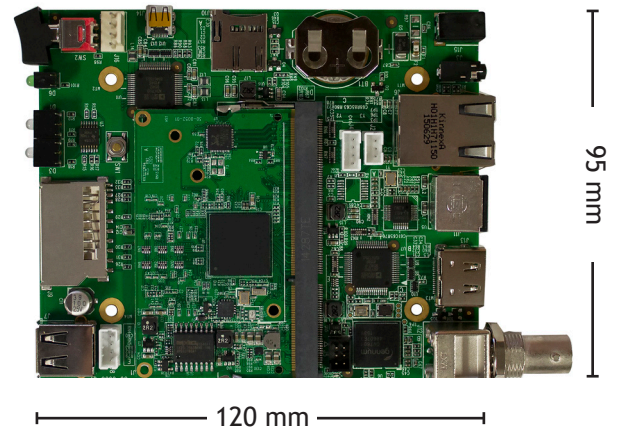


**Z3**  
Technology®

# Z3-HE1080-RPS

## Rapid Production Starter Kit

The Z3-HE1080-RPS starter kit allows HEVC/H.265 or H.264 encode of 1080p60 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-HE1080-MOD-0x System on Module card and one Z3-HE1080-APP-0x Application (I/O) Board. The Z3-HE1080-MOD-0x is a compact OEM module which supports up to 1080p60 HEVC encode in streaming or storage mode. The application board uses the I/O expansion capability of the Z3-HE1080-MOD to implement additional functions not present in the base module. The software bundle consists of the necessary components for developing advanced multimedia, graphics, and DSP applications.



### BENEFITS

- > HEVC/H.265 high efficient encode in full HD resolutions through HDMI or 3G-SDI interfaces
- > Compact design ideal for quick implementation in customized solutions
- > Easily controlled through RS-232 serial or an HTTP-based GUI
- > Ready to use, out-of-the-box commands for encoding and streaming

### APPLICATIONS

- Medical Video Applications
- Video Security and Surveillance
- Industrial Video Applications
- Government/Military Applications
- Broadcast Video Encoding
- Customized Applications\*

**\*Contact Z3 Technology for Customized Product Options**

[sales@Z3technology.com](mailto:sales@Z3technology.com)

+1.402.323.0702

[www.Z3technology.com](http://www.Z3technology.com)

### Hardware

Module	Z3-HE1080-MOD-0x
Application Board	Z3-HE1080-APP-0x
Processor	ARM A7 at 600 MHz
Video Inputs	3G-SDI, HDMI and Composite
Video Codecs	HEVC/H.265 and H.264
Audio Interfaces	Embedded HDMI and Embedded SDI
Audio Codecs	AAC, G.711* and PCM*
Additional Interfaces	GigE, USB 2.0, Micro SD Card and RS-232 Serial

### Software

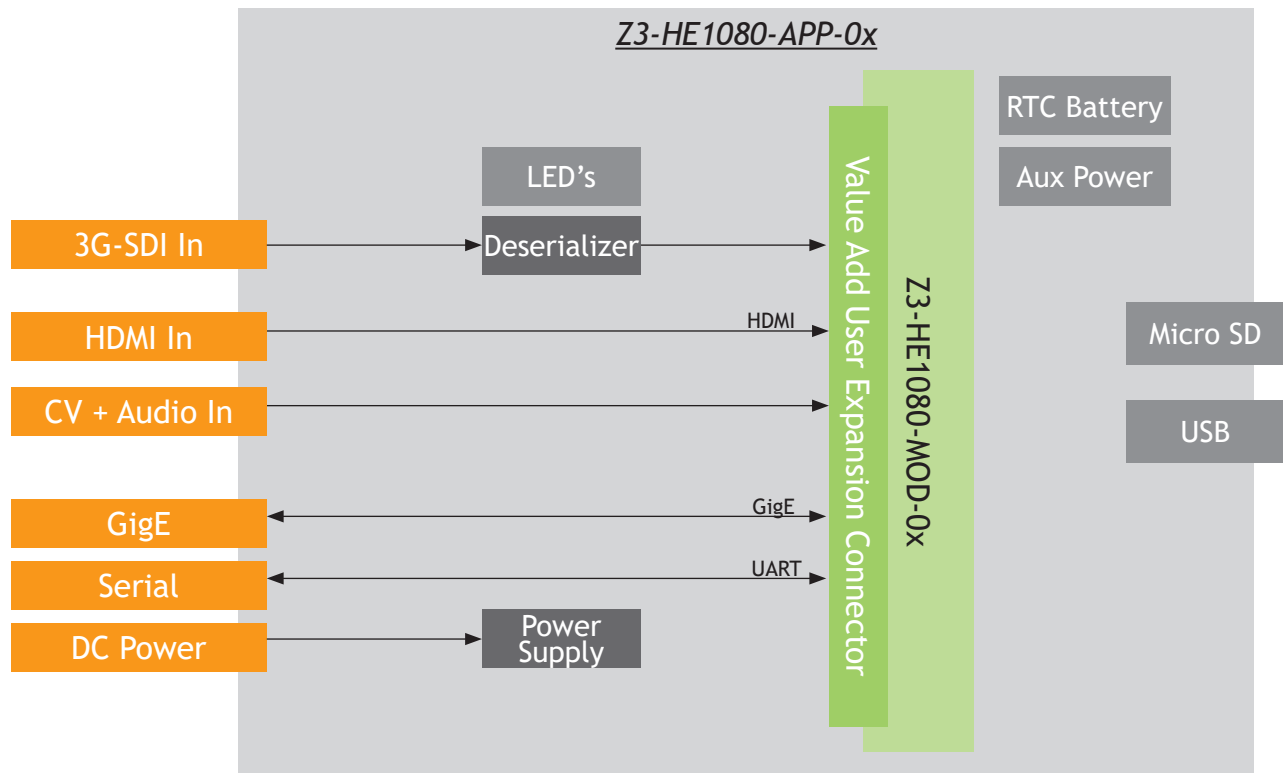
Operating System	Embedded Linux (root file-system, NAND boot, tool chain and flash programming tool), u-boot
Encoding Resolutions	HEVC/H.265 or H.264 encode in resolutions from QCIF to 1080p at 60 fps
Output Formats	RTP, RTSP, MPEG-2 TS, RTMP*, TSRTMP, MPTS* and TS File*
Features	<ul style="list-style-type: none"> <li>• Pro-MPEG Forward Error Correction (FEC)</li> <li>• Zixi Feeder™ enabled</li> <li>• KLV support</li> <li>• Ultra low bandwidth support</li> <li>• Low latency mode</li> <li>• Fully controllable parameters: resolution, max bitrate, GOP and on-the-fly bitrate control</li> <li>• Source code license available*</li> </ul>

### Specifications

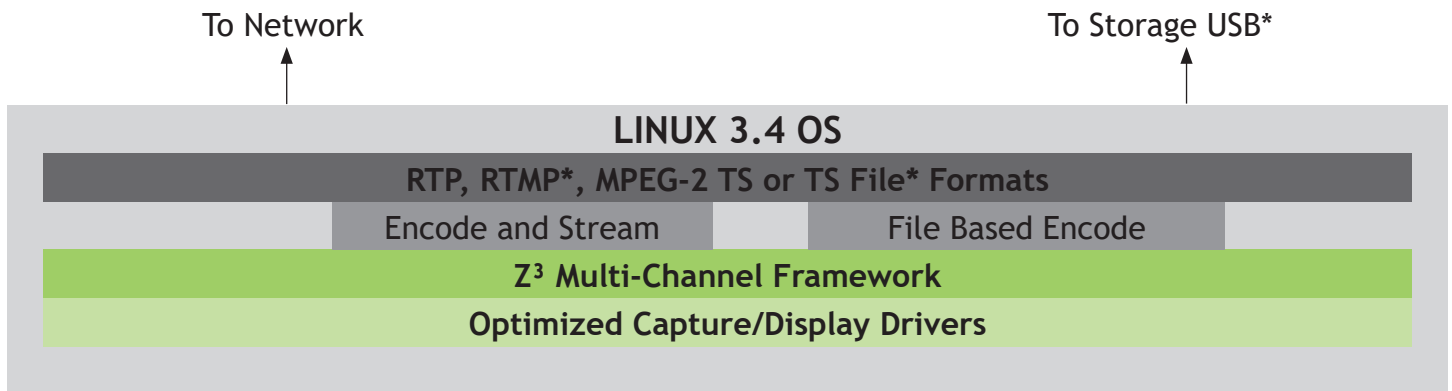
Module Size	68 x 42 mm (2.66 x 1.65 in)
Application Board Size	120 x 95 mm (4.72 x 3.75 in)
Power Supply	5V
Power Consumption	4.1W

# HW Block Diagram

# Z3-HE1080-RPS



# SW Block Diagram



**\*Contact Z<sup>3</sup> Technology for Customized Product Options**  
[sales@Z3technology.com](mailto:sales@Z3technology.com)    +1.402.323.0702    [www.Z3technology.com](http://www.Z3technology.com)



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.