



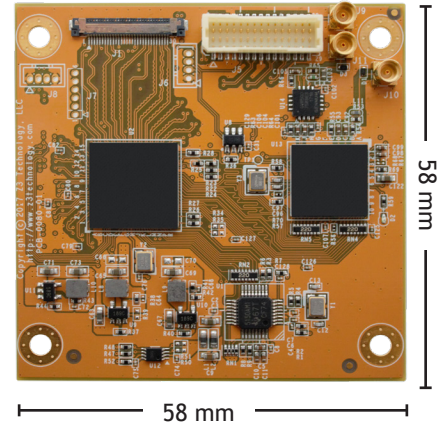
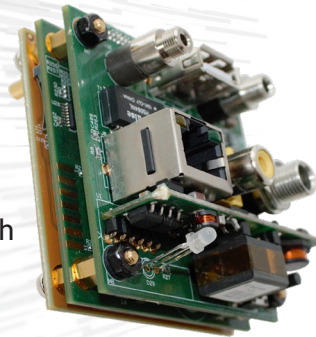
**Z3**  
Technology®

# Dual Camera Full 3G-SDI Encoder

Designed for your Visible & IR Monitoring Needs

FSDI-DCK-1x

- H.265/H.264 Dual Camera Video Streaming
- Interfaces with SDI, LVDS, and Composite cameras
- Programmable to support a variety of cameras
- High Quality Low Latency Encoding Pass Through
- Camera Control Commands over IP
- ONVIF® Profile S & T Compliant
- Composite Video Monitor Output
- Customizations Available\*



The FSDI-DCK-1x is designed for dual camera inspection, surveillance, industrial and UAV applications. The flexibility of the system allows for a visible camera and an infrared or night vision camera. The hardware consists of a 3-board set: Input interface, Encoder and Connector PCB. The system is capable of encoding and streaming multiple channels of H.265 and H.264 video in HD resolutions. The Input interface board features flexible digital and analog input ports. The encoder can be configured to stream over IP and simultaneously record to USB or micro SD card. This compact design only uses 4.5 watts of power when streaming from two cameras. The FSDI-DCK-1x is available in a ready to go production version or a customizable version.



## Technical

Interfaces	<ul style="list-style-type: none"> <li>• 1x 3G-SDI Input with loop</li> <li>• 1x Sony EV7520 compatible</li> <li>• 2x Composite Input</li> <li>• 1x Digital Input</li> </ul>
• Visible Camera Formats	3G-SDI, LVDS, NTSC/PAL/RS170*
• HD and SD IR Formats	LVDS*, NTSC/PAL/RS170*
• Recording	USB, or Micro SD
• Additional Interfaces	PoE, GigE, Audio Input, RS-485, Composite Output, GPIO, I2C, Serial
Video Codecs	H.265, H.264
Encoding Resolutions	1080p (up to 60fps), 720p, NTSC/PAL, VGA, CIF and QVGA
Output Formats	RTP, RTSP, MPEG-2 TS and RTMP <sup>1</sup>
Features	<ul style="list-style-type: none"> <li>• Low Latency, Low Power</li> <li>• Ability to Resize HD Camera Input to Lower Resolutions Keeping Full Field of View</li> <li>• SRT Modes Supported: Caller, Sender, Rendezvous &amp; SRT Encryption</li> <li>• Pass Camera Control Commands over IP</li> <li>• Easy-to-Use HTTP-Based Control Interface</li> <li>• ONVIF® Profile S &amp; T</li> <li>• Compatible with ZEUS® Video Decoders<sup>1</sup></li> </ul>

<sup>1</sup>in H.264 mode only

## Specifications

Encoder Board Size	58 x 58 x 38 mm (2.28 x 2.28 x 1.49 in)
Encoder Board Weight	104g (aluminum heat pipe is additional 40g)
Power Consumption	4.5W typical while encoding 2 cameras in H.265 video at 1080p60
Power Supply	12V DC
Operating Temperature	-5°C to +70°C

## ORDERING OPTIONS

**FSDI-DCK-1x**  
OEM Production Set

- FSDI-DCK-1x Encoder Boards

Note: Camera and cables sold separately

**FSDI-DCK-1x-RPS**  
OEM Starter Kit

- FSDI-DCK-1x Encoder Boards
- Power Supply
- Software SDK
- Documentation
- Serial Cable
- MMCX to BNC Cable

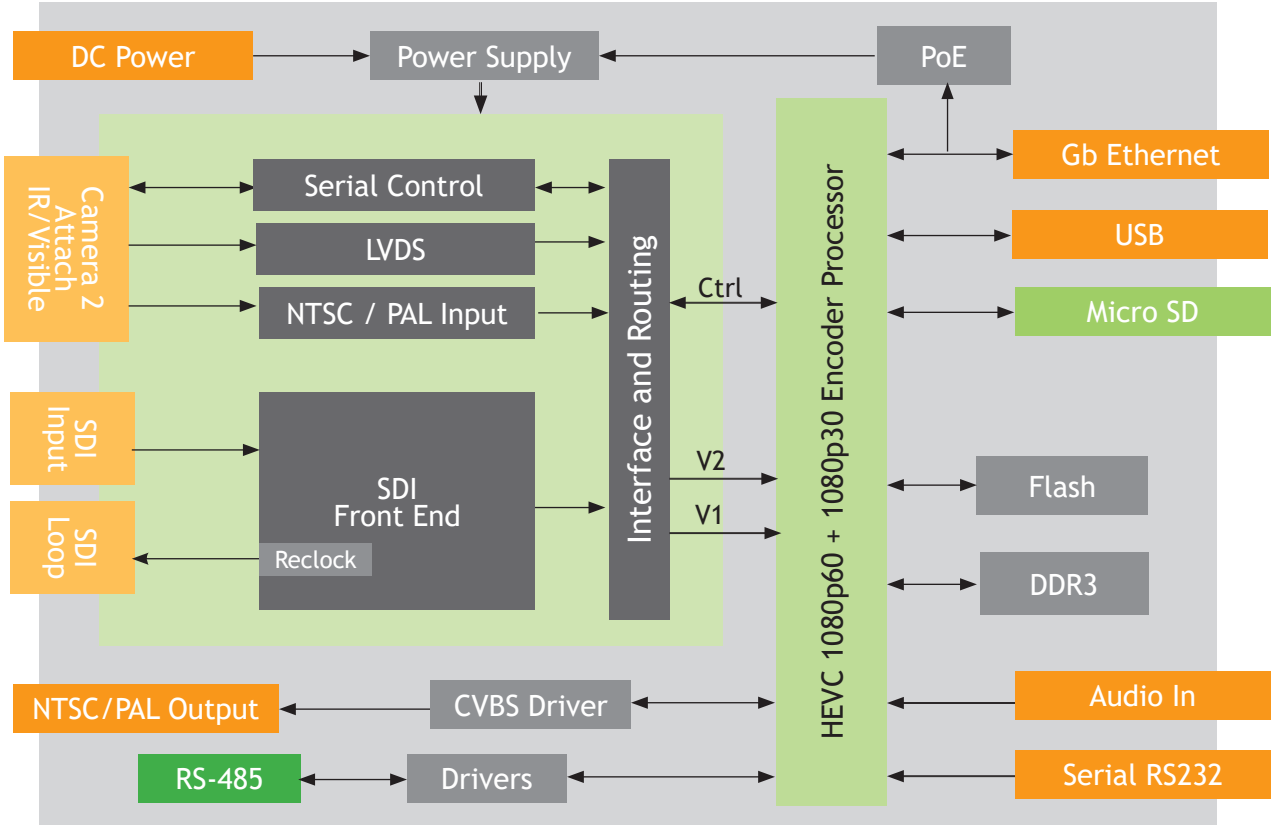
Note: Camera Block sold separately

## APPLICATIONS

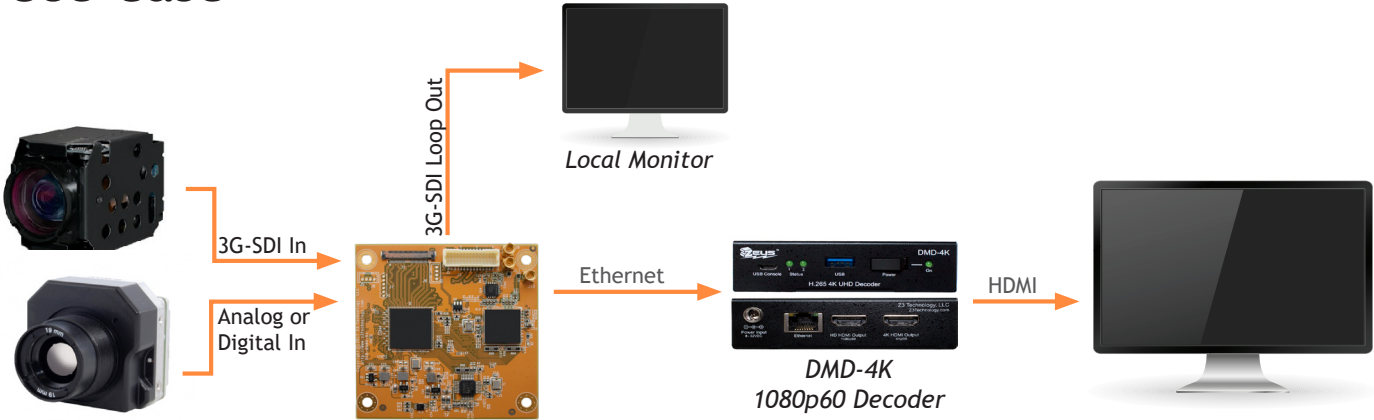
- Inspection
- Security and Surveillance
- Industrial
- UAV and Drones
- Video Conferencing
- Customized Applications\*

# HW Block Diagram

FSDI-DCK-1x Encoder (H.265 1080p60 + 1080p30)



## Use Case



**\*Contact Z<sup>3</sup> Technology for Customized Product Options**  
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Z<sup>3</sup> Technology is an industry-leading, USA-based manufacturer of production-ready embedded multimedia solutions and IP camera 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.

