



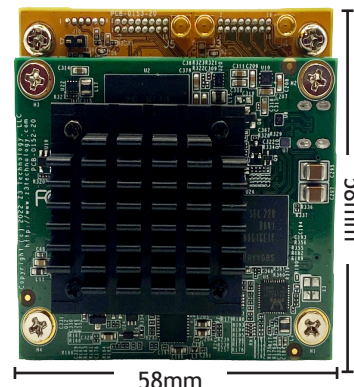
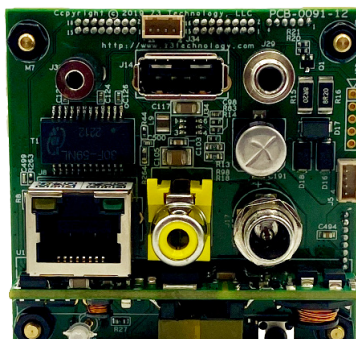
**Z3**  
Technology®

# Dual Camera Full 3G-SDI Encoder

*Designed for your Visible & IR Encoding Needs*

**FSDI-13A**

- H.265/H.264 Dual Camera Video Streaming
- Interfaces with SDI, LVDS, and Composite cameras
- Supports Visible and Thermal Cameras
- Low Latency Encoding With Simultaneous Streaming & Recording
- Camera Controls Sent over IP
- Pass KLV Metadata



The FSDI-13A is designed for dual camera inspection, surveillance, industrial and UAV applications. The flexibility of the system allows for a visible camera and an infrared camera. The system is capable of encoding and streaming H.265 and H.264 video. The encoder can be configured to stream over IP and simultaneously record to USB, micro SD card, or NFS.

## Technical

### Interfaces

- 1x 3G-SDI Input
- 1x LVDS via KEL
- 1x Composite Input

### • Visible Cameras

3G-SDI Cameras

### • IR Cameras

LVDS\*, NTSC/PAL/RS170\*, Boson, Tau2, Tamarisk, Tenum

### • Recording

USB, Micro SD, or NFS

### • Additional Interfaces

PoE, Gigabit Ethernet, SDI Loop Out, Audio Input, RS-485, Composite Output, HDMI Output, UART, RS232 Serial

### Video Codecs

H.265, H.264

### Encoding Resolutions

1080p (up to 60fps), 720p, NTSC/PAL, VGA, CIF and QVGA

### Output Formats

RTP, TSRTTP, RTSP, MPEG-2 TS, RTMPS, and RTMP

### Features

- Low Latency, Low Power
- Ability to Resize HD Camera Input to Lower Resolutions Keeping Full Field of View
- Control via Easy-to-Use HTTP-Based Control Interface, API, or Serial/SSH
- Live video preview in the web GUI
- ONVIF® Profiles S & T Compliant
- Compatible with ZEUS® Video Decoders
- Pass Camera and PTZ Controls over IP
- Embedded KLV Metadata Support via SDI or Serial, MISB 0601 Compliant
- High Precision Timestamps Across Multiple Streams, MISB 0604 Compliant
- Multiline text Overlay via the Web Gui or the API
- Logo or Image overlay via the API
- NMEA GPS Overlay
- Region of Interest: Configurable Field of View
- AI Ready for on the edge analytics

## Specifications

Encoder Board Size	58 x 58 x 46 mm (2.28 x 2.28 x 1.81 in)
Encoder Board Weight	90g (heat pipe is an additional 25g)
Power Consumption	4.5W typical while encoding 2 cameras in H.265 Video



## ORDERING OPTIONS

### FSDI-13A-RPS OEM Starter Kit

- FSDI-13A Encoder Boards
- Power Supply
- Software SDK
- Documentation
- Serial Cable
- MMCX to BNC Cable
- KEL Ribbon Cable

*Note: Camera sold separately*

### FSDI-13A OEM Production Set

- FSDI-13A Encoder Boards

*Note: Camera and cables sold separately*

## APPLICATIONS

Unmanned Systems

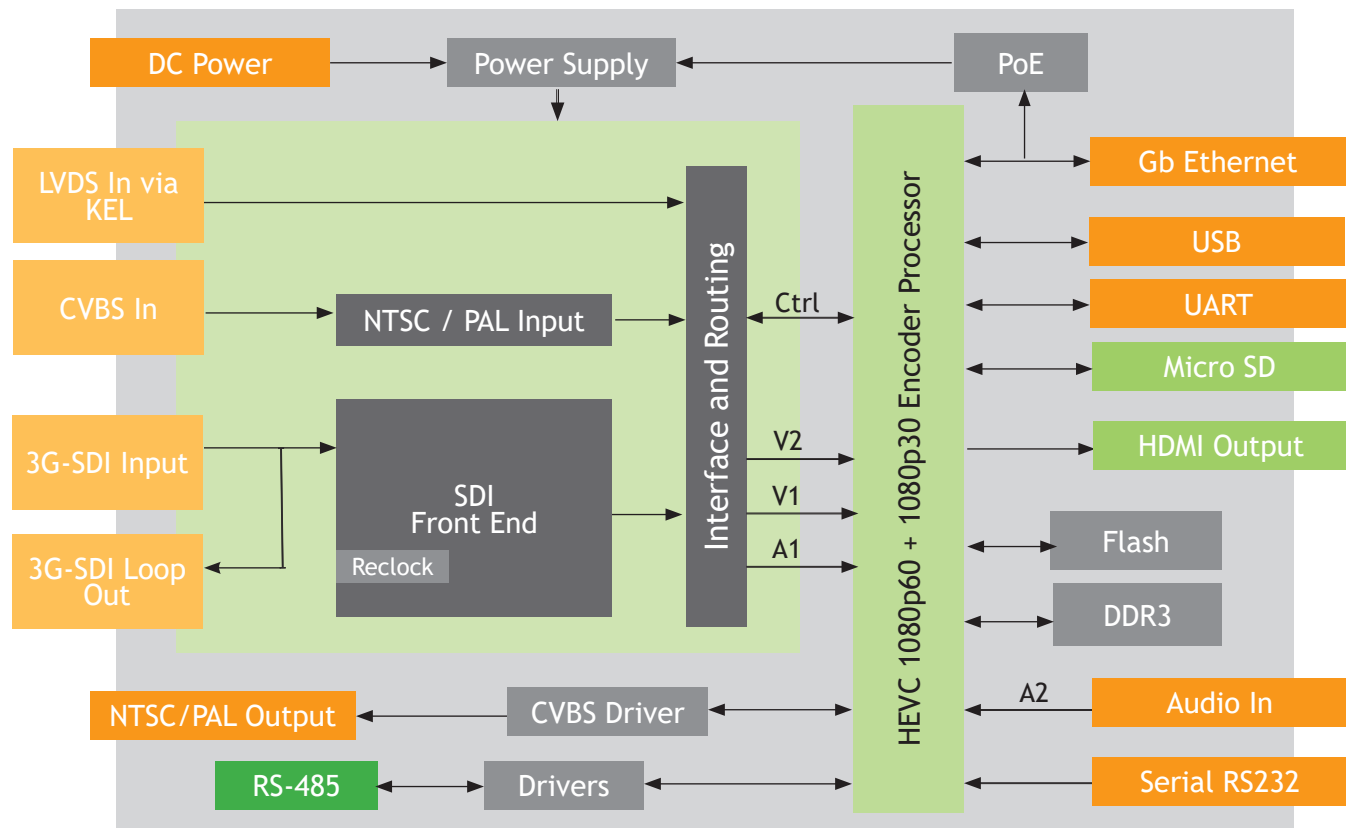
Military Systems

Inspection

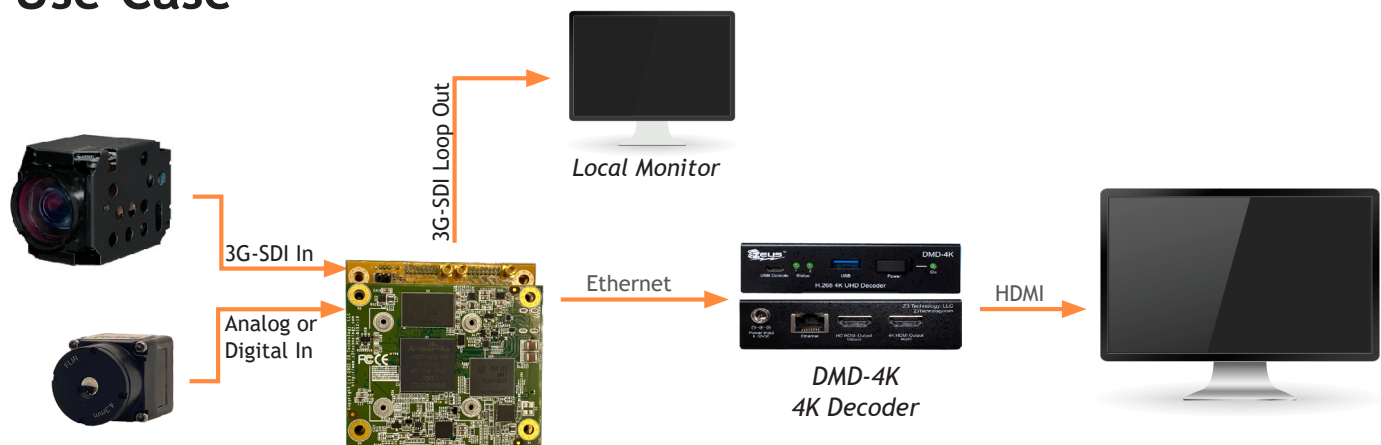
Surveillance

# HW Block Diagram

## FSDI-13A Encoder (H.265 1080p60 + Composite)



## Use Case



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

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.