Z3 Technology®

Z3-HE1080-MOD
OEM Production-Ready Module

Compact H.265 in Full HD

Actual Size

42 mm

68 mm
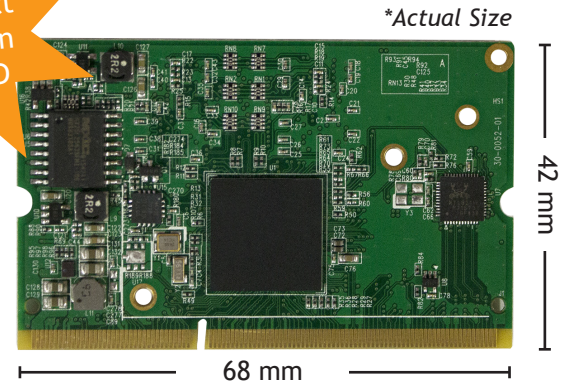
The Z3-HE1080-MOD-0x is a compact OEM module which supports up to 1080p60 H.265 encode in streaming or storage mode. These combined features create an ideal platform for UAV solutions, low-latency and low bit-rate streaming and many other video streaming and recording applications. This powerful, production-ready MOD offers the latest in integrated processor technology combined with Z3 Technology's reputation for compact, production quality embedded modules and software solutions.

BENEFITS

> H.265 high-efficient encode in resolutions up to 1080p60

> SODIMM connector for ease of integration

> Versatile design geared to reduce time-to-market and overall costs

> Linux-based system, easy to customize if needed

APPLICATIONS

UAV Solutions

Medical Imaging

Video Security and Surveillance

Industrial Video

Digital Signage

Customized Applications*

Hardware

Pre-loaded, OEM Ready Video Application Executable Commands License Available with RPS Development Kits

Module	Z3-HE1080-MOD
Processor	ARM A7 at 600 MHz
Video Codecs	H.265, H.264
Expansion Interface	•200-pin expansion connector
Interfaces *(Available via Expansion Connectors or Z3 Application Boards)*	Analog & Digital Video I/O MMC/SD Analog & Digital Audio UART USB 2.0 I2C GigE SPI
Audio Codecs	HE-AAC, HEv2-AAC, AAC-LC
Memory	DDR3: 1 GB

Software

Operating System	Embedded Linux (root file-system, NAND boot, tool chain and flash programming tool), u-boot
Encoding Resolutions	H.265 encode in resolutions up to 1080p60 H.264 video from QCIF to 1080p at 60 fps
Output Formats	RTP, RTSP, MPEG-2 TS over UDP, RTMP, TSRTP, MPTS and TS File
Features	• Low latency • Fully controllable parameters: resolution, max bitrate, GOP and on-the-fly bitrate control • Source code license available*

Specifications

Module Size	68 x 42 mm (2.66 x 3.75 in)
Power Supply	5V
Typical Power Consumption	2W

Z3-HE1080-MOD-0x

BtB Expansion Conectors

- Real Time Clock
- GigE — Eth PHY
- USB 2.0
- SPI, I2C, PWM
- GPIO
- 2x SDIO
- 3x UART
- Digital Parallel Video In
- Digital Parallel Video Out
- 2x MIPI Video In
- Composite Video Out
- Audio Line In
- Audio Line Out
- Temperature

ARM + H.265 Encoder

- DDR3 1 GB
- Debug
- Flash
- Drivers
- Control
- Terminations
- Power
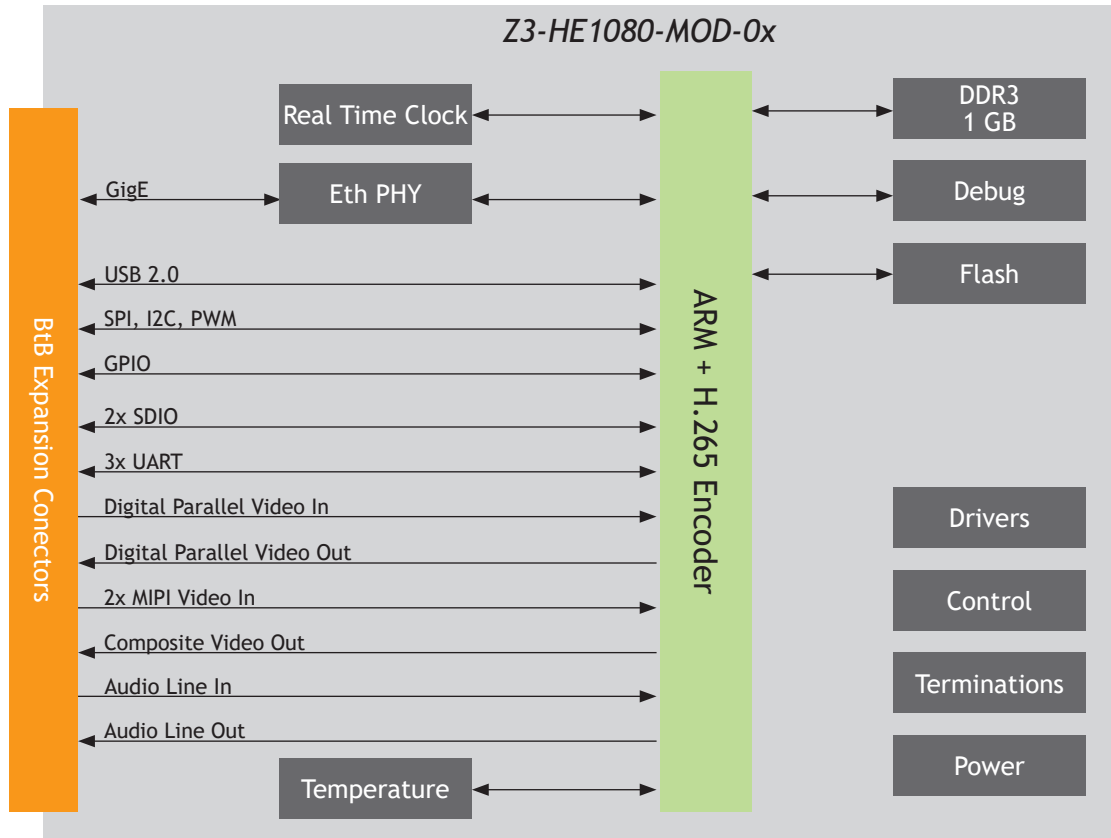
RPS Starter Kits

Starter Kits include the Z3-HE1080-MOD, an Application (I/O Board), Pre-loaded Production Software and Documentation.
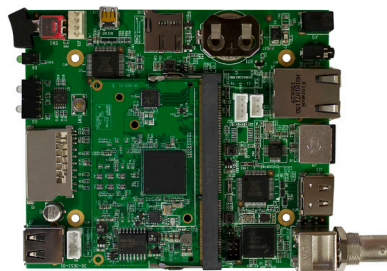
Z3-HE1080-RPS

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.