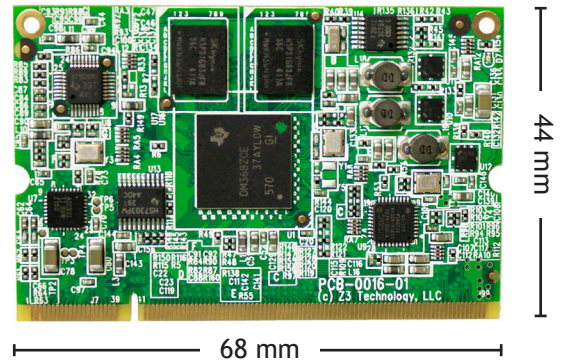# Z3-DM368-MOD
## OEM Production-Ready Module

Measuring only 68 x 44 mm, the **Z3-DM368-MOD** is one of the most compact production-ready video encoder/decoder system-on-modules on the market. The Z3-DM368-MOD is designed to facilitate the implementation of video and audio functions on media-embedded applications such as kiosks, machine vision and other industrial applications, information centers, digital signs, medical imaging, POS, etc. Its versatile design allows the system designer to focus on the end application, with confidence that the Z3-DM368-MOD will handle all audio and video media operations required with little or no additional engineering effort. Whether the end application requires encode or decode media from storage or streaming, the readily available, production-ready Z3-DM368-MOD will simplify the overall system design, reducing time to market and costs.



44 mm

68 mm

*Actual Size*

## BENEFITS

> Compact design featuring accelerated video compression

> Production-proven, fully integrated hardware and software audio/video system

> Power efficient encode and decode in resolutions up to 1080p30

> Cost effective design, optimized for manufacturing in volume

> Encode or decode from storage or streaming

> Ready to use, out-of-the-box commands for encoding, decoding and streaming

## APPLICATIONS

Digital Signage and Kiosks

Machine Vision

Medical Imaging

Industrial Video Interface Displays

Customized Applications*

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

sales@Z3technology.com

+1.402.323.0702

www.Z3technology.com

## Hardware

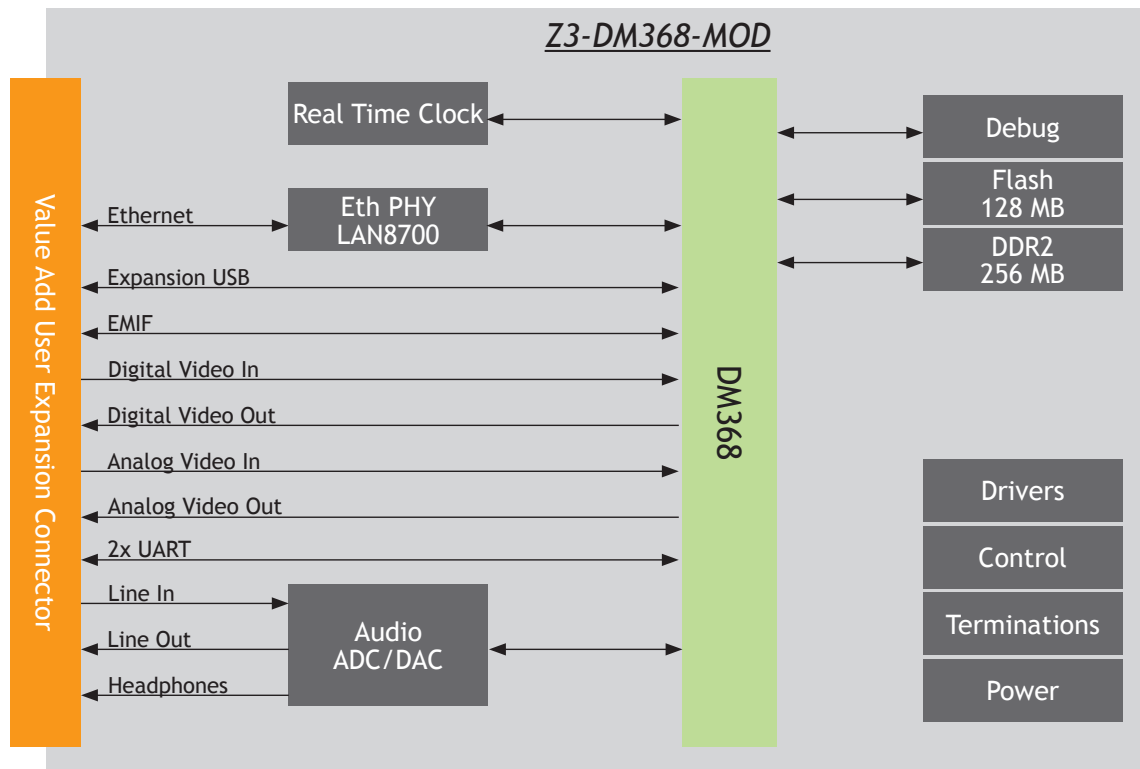*Pre-loaded, OEM Ready Video Application Executable Commands License Available with RPS Development Kits*

| | |
|---|---|
| Module | Z3-DM368-MOD |
| Processor | ARM9 |
| Video Codecs | H.264 and MPEG-2 |
| Connectors | 200-pin expansion connector |
| Interfaces<br>*(Available via Expansion Connectors or Z3 Application Boards)* | Analog & Digital Video I/O    EMIF<br>Analog & Digital Audio    I2C<br>USB 2.0    SPI<br>Ethernet    PRTCSS<br>SD Card    Multi-Function I/O<br>UART |
| Audio Codecs | AAC or PCM |
| Memory | DDR2: 256 MB<br>Flash: 128 MB |

## Software

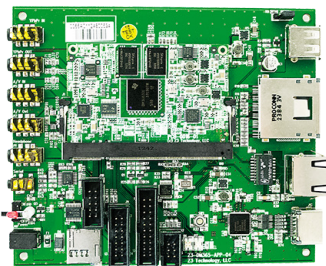| | |
|---|---|
| Software Development | Texas Instruments® DVSDK, Z³ Technology software components for DVSDK, Z³ Applications |
| Operating System | Linux 2.x (root file-system, NAND boot, tool chain and flash programming tool), u-boot |
| Encoding Resolutions | H.264 video from QCIF to 1080p30 |
| Output Formats | RTP and MPEG-2 TS |
| Decoding Resolutions | H.264 video from QCIF to 1080p30 |
| Input Formats | RTP and MPEG-2 TS |
| Features | • Digital Video input interface for use with CMOS sensors or other devices<br>• Digital Video output interface for use with LCD or other devices<br>• Source code license available* |

## Specifications

| | |
|---|---|
| Module Size | 68 x 44 mm (2.68 x 1.73 in) |
| Power Supply | 5V, Battery Powered or Power over USB 2.0 |
| Typical Power Consumption | 2W |

## Z3-DM368-MOD

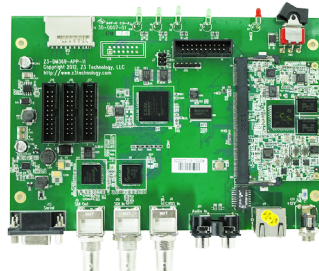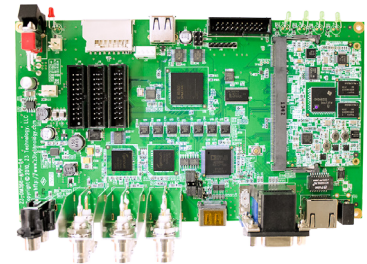| Value Add User Expansion Connector | | DM368 | |
|---|---|---|---|
| Real Time Clock | | | Debug |
| Ethernet → Eth PHY LAN8700 | | | Flash 128 MB |
| Expansion USB | | | DDR2 256 MB |
| EMIF | | | |
| Digital Video In | | | |
| Digital Video Out | | | |
| Analog Video In | | | Drivers |
| Analog Video Out | | | Control |
| 2x UART | | | Terminations |
| Line In / Line Out / Headphones → Audio ADC/DAC | | | Power |

# RPS Starter Kits

Each Starter Kit includes the Z3-DM368-MOD, an Application (I/O) Board, Pre-loaded Production Software and Documentation.



**Z3-DM368-RPS**



**Z3-DM368-SDI-RPS**



**Z3-DM368-VI-RPS**

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

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.