

# VMIX-HDMI2SDI-IS

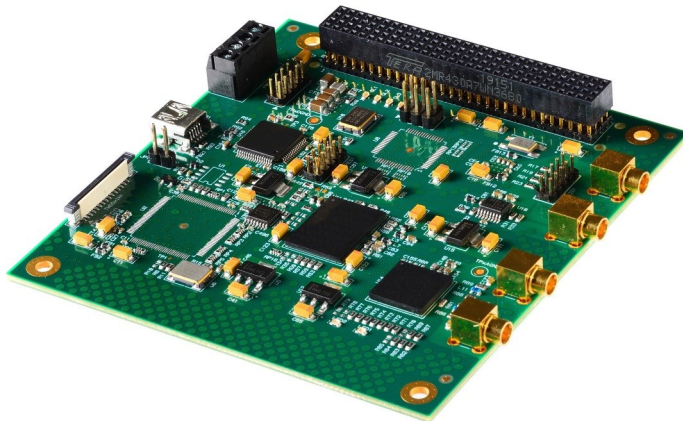
HDMI to HD-SDI stand-alone video converter and mixer



**Advanced Micro  
Peripherals**

THE EMBEDDED VIDEO EXPERTS

The VMIX-HDMI2SDI-IS is an intelligent stand-alone scan converter with video mixing capabilities. The VMIX-HDMI2SDI-IS accepts High definition HDMI/DVI input signal and converts it to HD-SDI.



The VMIX-HDMI2SDI-IS accepts HDMI/DVI signalling over a single flat flex connector. The HDMI/DVI is captured, scaled, converted and output as HD-SDI on a 75 Ohm MCX connector. A secondary HD-SDI output is available as an option. The VMIX-HDMI2SDI-IS features high speed digital signal capture, video scaling, frame rate conversion and timing generation for conversion between display modes.

The VMIX-HDMI2SDI-IS also features a PAL/NTSC/RS-170 video input that can be mixed with the HDMI input and displayed on the HD-SDI output e.g. in a picture-in-picture mode.

The VMIX-HDMI2SDI-IS is an intelligent stand-alone device that does not require a host CPU or other driver software. For mechanical convenience the module can be mounted on a PCI-104 stack without consuming host CPU resources.

## PRELIMINARY INFORMATION (Rev A.00)

Subject to change without notification

HDMI-to-SDI  
Conversion

HDMI input up to  
1080p30

HD-SDI output

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**PC/104**

Embedded PC Modules

# VMIX-HDMI2SDI-IS

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## Features

Stand-alone HDMI-to-SDI conversion

HDMI input up to 1080p30

SDI output at HD resolutions (SMPTE 292)

Primary HD-SDI output - 75 Ohm MCX connector

Secondary HD-SDI output - 75 Ohm MCX connector (option)

NTSC/PAL/RS-170 composite video input

Video mixing / Picture-in-picture

Single +5V operation

Compact and Rugged PCI-104 mechanical form factor

## Applications

Aerospace instrumentation

Instrument panels

Multi function display (MFD)

Situational awareness

Naval/Marine instrumentation

Border security

Video acquisition

On-board MPU for  
intelligent,  
stand-alone  
Operation

Combine HDMI and  
composite video  
(Picture-in-Picture)

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**PC/104**

Embedded PC Modules

Digital Video Input

HDMI/DVI at up to 1080p30

Analog Video input

PAL/NTSC/RS-170 composite video input
Digital line-lock technology for reliable locking
8-bit analog to digital converter

Video output

Primary HD-SDI output
Secondary HD-SDI output (option)
75 Ohm MCX connector used for HD-SDI signalling.
HD-SDI resolutions including:
1280x720 @ 25, 29.97, 30, 50, 59.94 or 60Hz progressive
1920x1080 @ 50, 59.94 or 60Hz interlaced
1920x1080 @ 25, 29.97, 30Hz progressive

Power

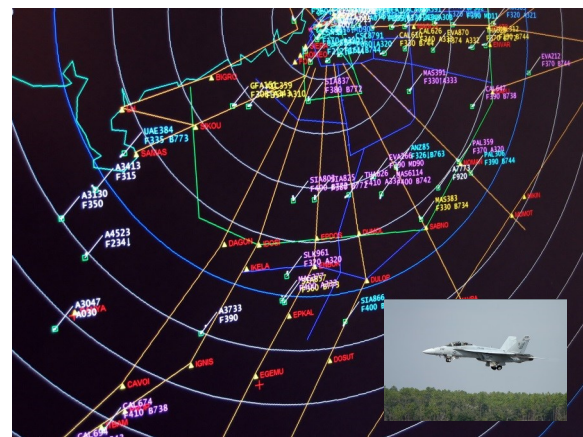
Single +5V power operation

Miscellaneous

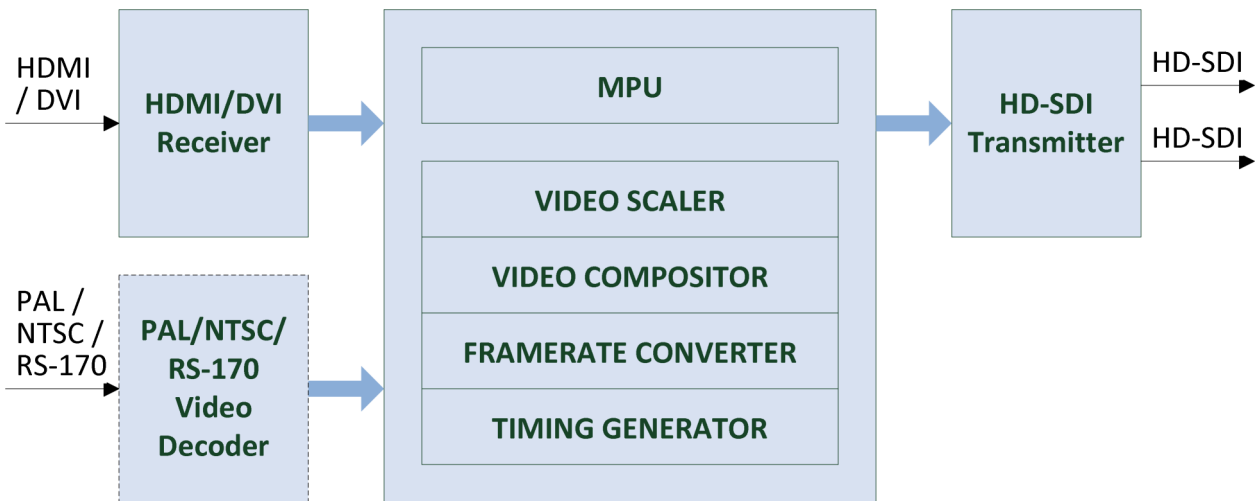
Intelligent stand-alone module, does not require host computer
Standard 3.6"x3.8" PCI-104 form factor
Mechanical mounting for PCI-104 stack
Operating temp -40°C to +85°C

Ordering Information

VMIX-HDMI2SDI-IS-Ext
HDMI to HD-SDI converter (-40°C to +85°C)



Picture-in-Picture example



VMIX-HDMI2SDI-IS Functional Diagram

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