



e-con Systems Inc. +1-314-732-1152 sales@e-consystems.com

For release on October 16th only

e-con Systems announces 5MP Full HD MIPI Camera support for Wandboard e-CAM51IMX6 interfaces on to Freescale® i.MX6 based Wandboard - Streaming, Recording, Displaying Full HD 1080p @30fps

St. Louis, USA / Chennai, India – October 16th, **2013**, **e-con Systems Inc.**, a leading embedded design services company specializing in development of advanced camera solutions announces the release of 5MP Full HD MIPI Camera Board, <u>e-CAM51IMX6</u> for <u>Wandboard – an low power complete computer based on Freescale® i.MX6 Development Board</u>. The Wandboard is an open source project built around the ARM Cortex A9 powered Freescale i.MX6 CPU. This e-CAM51IMX6 is interfaced directly to the CSI-2 MIPI interface on the Wandboard. The e-CAM51IMX6 includes <u>e-CAM57_MI5640_MOD</u>, a 5 MP Autofocus 2-lane MIPI CSI-2 camera module with 70mm flexible PCB length.

The e-CAM51IMX6 board comes with full schematics and Linux driver support with source code. e-con Systems shall be announcing the support for Android soon.

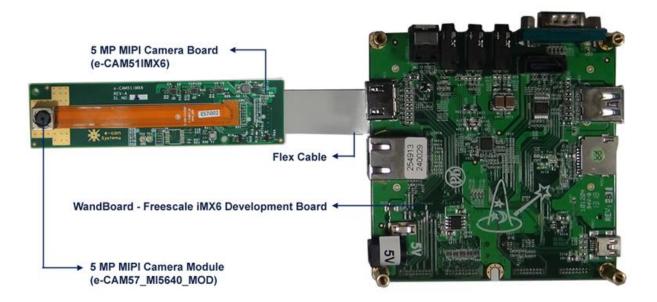


Figure 1 e-CAM51IMX6 Daughter card with 5MP MIPI camera module for Wandboard - Freescale® i.MX6 Development Board

e-CAM51IMX6 can stream Full HD 1080p@30fps and supports HD 720p@60fps. The i.MX6 processor has support for dual camera interfaces and has the ability to record video at 1080p and 720p resolutions in various industry standard video encoding formats. The e-CAM51IMX6 can be plugged directly to the MIPI CSI-2 camera header of Wandboard through the 33 pin flex cable.

The Wandboard is an ultra-low power complete computer with high performance multimedia capabilities based on the Freescale i.MX6 family of processors. The i.MX6 CPU family is based on ARM Cortex A-9 core and is available with single, dual and quad core versions with each core clocking at a maximum of 1.2GHz. The i.MX6 CPU family has a dedicated multi-format





e-con Systems Inc. +1-314-732-1152 sales@e-consystems.com

video codec engine and e-con's camera solution has been integrated very well with this engine. With e-CAM51IMX6, Wandboard can record 1080p video at 30 fps and stream 1080p@30fps over Wi-Fi or Wired Ethernet.

The e-CAM51IMX6 camera solution is well integrated with the i.MX6 processor and its internal multi-format video codec engine. Customers can take advantage of this powerful combination of e-CAM51IMX6 with Wandboard as a ready-to-use reference platform for developing their video streaming/recording/processing applications on the powerful i.MX6 CPU. E-con has also demonstrated the simultaneous streaming/recording/displaying 720p or 1080p video on the same platform.

"We are excited with the launch of e-CAM51IMX6 for Wandboard, as this expands our camera solutions offering for Freescale i.MX6 family of processors. With our e-CAM51IMX6 camera, we are able to demonstrate the encoding/recording to SD memory card, video streaming over Ethernet/WiFi and local playback – all of them simultaneously and at 720p60 and 1080p30 resolutions." commented Ashok Babu, President, e-con Systems. "Such a high level of integration with Freescale i.MX6 platform by leveraging its video processing sub-system will be an ideal base for our customers who may want to build their solutions around this simultaneous video processing capabilities. In addition e-con can also customize its existing range of camera modules with Wandboard on request", he added.

Customers designing handheld devices, tablets, automotive infotainment, health-care equipment/devices, diagnostic equipment, video streaming, video conferencing terminals etc, can immensely benefit from this ready-to-use camera module. E-con also provides extensive customization services starting from integrating of other CMOS/CCD Image sensors and also customizing the Linux, Windows Embedded Compact and Android device drivers to meet the customer applications. Customers can approach e-con for interfacing any other image sensors/camera modules or for customized software development on the same platform.

e-CAM57_MI5640_MOD is based on Omnivision's OV5640 image sensor and comes with a 70mm flex cable and this can be customized to any form or shape. This provides flexibility in enclosure design as the camera module can be placed as far as 100 mm from the processor interface and solves the complex mechanical design requirements of a typical consumer device.

OmniVision's OV5640 CameraChip™ sensor, which is part of the e-CAM57_MI5640_MOD, has an embedded ISP. The sensor features automatic image control functions including automatic exposure control (AEC), automatic white balance (AWB), automatic band filter (ABF), 50/60Hz automatic luminance detection, and automatic black level calibration (ABLC).

The e-CAM51IMX6 camera board is available for purchase at the cost of USD 69 from e-con Systems' Webstore immediately.

For more information, visit the e-CAM51IMX6 Product Webpage and YouTube video.

About e-CAM

e-CAM is e-con Systems' reference design featuring a camera board with a camera module interfaced to a processor on its high speed CMOS interface. e-con Systems also provides sample drivers for WinCE, Linux and Android. For processors that don't have the Camera ISP pipeline, e-con Systems provides the complete software stack for raw image sensors.



PRESS RELEASE

e-con Systems Inc. +1-314-732-1152 sales@e-consystems.com

In addition to 'off-the-shelf' solutions, e-con Systems also offers individually crafted custom designs for customers interested in camera modules.

For more information, please visit www.e-consystems.com/cameramodule.asp and www.e-consystems.com/cameramodule.asp and www.e-consystems.com/cameramodule.asp and www.e-consystems.com/cameramodule.asp and www.e-consystems.com/cameramodule.asp.

About e-con Systems

e-con Systems is an embedded product development services company focused on concept to product solutions with a strong technology leadership in camera solutions.

e-con Systems has expertise in application processors including TI AM/DM37x, Freescale i.MX53x, i.MX6, TI's OMAP4 and Digital Media Processors and has been using its product engineering services to help customers develop products based mainly on camera-like Stereo vision systems, video surveillance equipment, IP cameras, Low vision aid equipment and document visualizers.

For more information please contact:

Harishankkar

sales@e-consystems.com

e-con Systems Inc., +1 314 732 1152

e-con Systems India Pvt. Ltd., +91 44 45532053

Website: http://www.e-consystems.com

Note: References to corporate, product or other names may be trademarks or registered trademarks of their respective owners.