Evaluation Kit for Harrier Interface Board

This is a QuickStart Guide is for Active Silicon's Harrier series interface boards for the Tamron MP1110, Tamron MP1010 and Sony EV series cameras.

Evaluation Kit Part Number: AS-CIB-3GSDI-001-EVAL-A
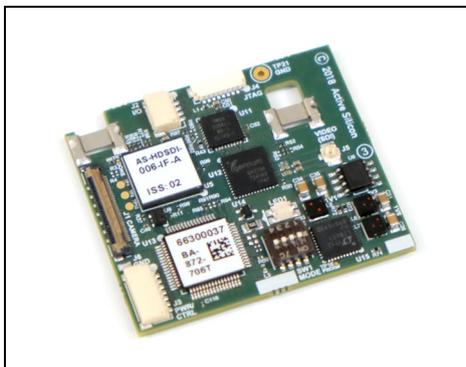

Evaluation Kit

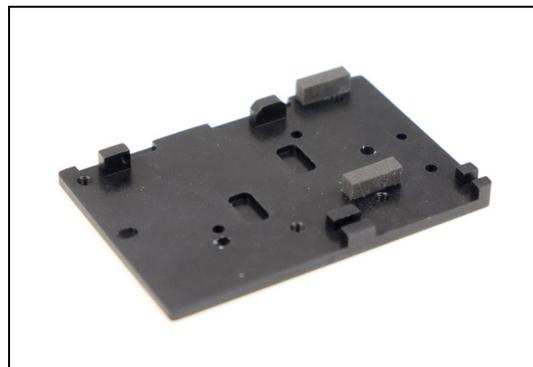
Harrier Interface Board fitted to camera

Introduction

The purpose of the Evaluation Kit is to allow users to get up and running quickly with the camera and interface board. The kit provides power and serial communications to the camera and interface board, and 3G/HD-SDI out.

If a camera was ordered with the Evaluation Kit, then the interface and board and bracket will already be fitted to the camera if requested. Otherwise the interface board and bracket will be separate items as shown below:
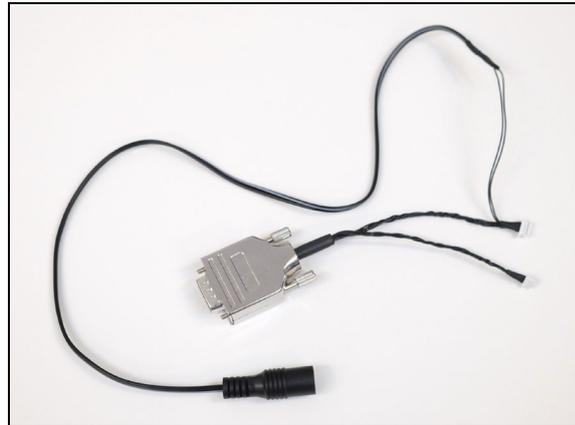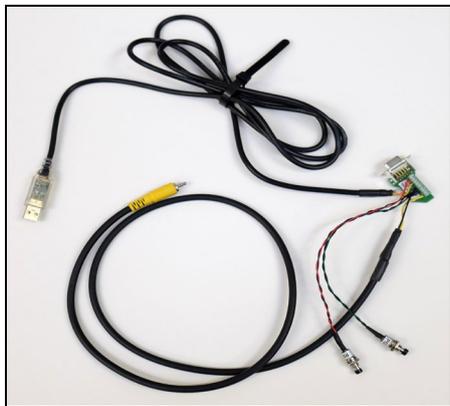

Interface Board

Bracket

Kit Contents

Power supply

Breakout Cable to Interface Board

Breakout Cable to PC / analog out

Micro-coax connector to BNC
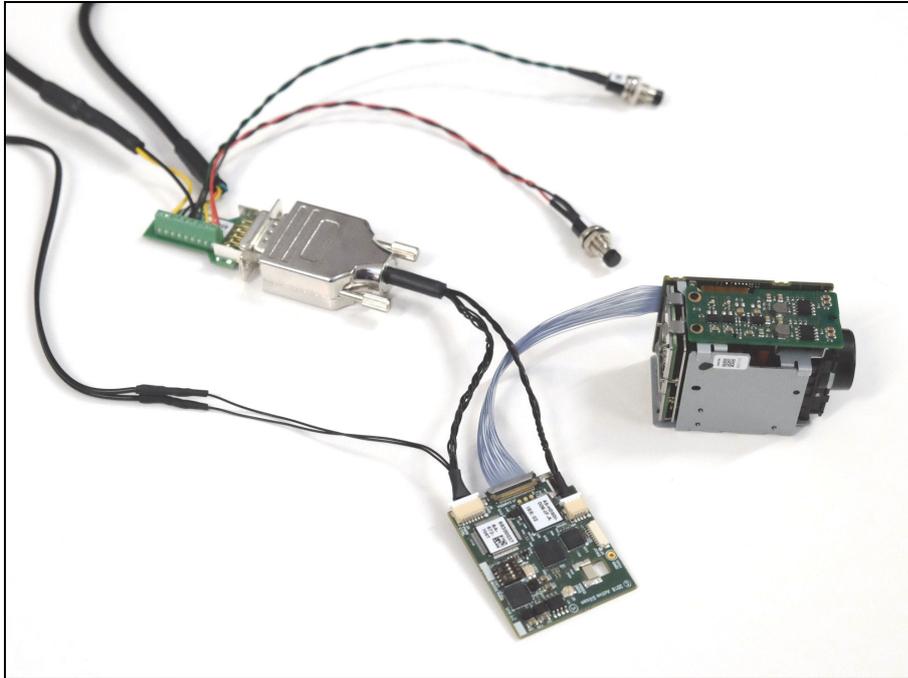
Phono to BNC adapter

Break cables for development purposes
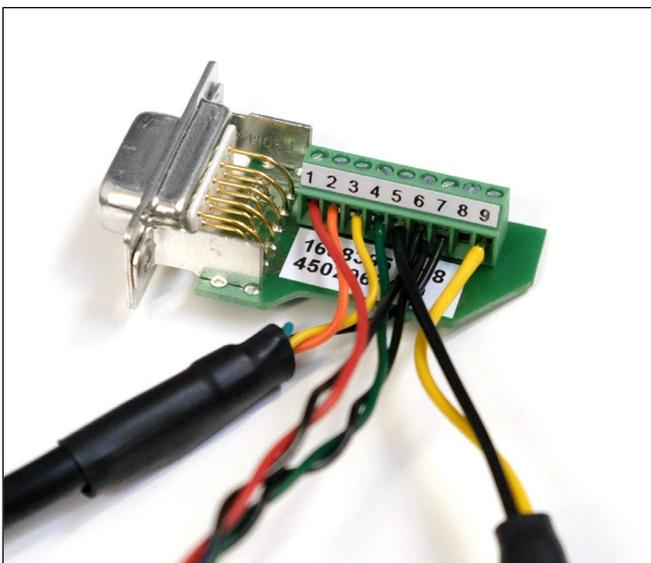
Camera to Interface Board cable

Operation

The interface board is connected up to the camera as show below:
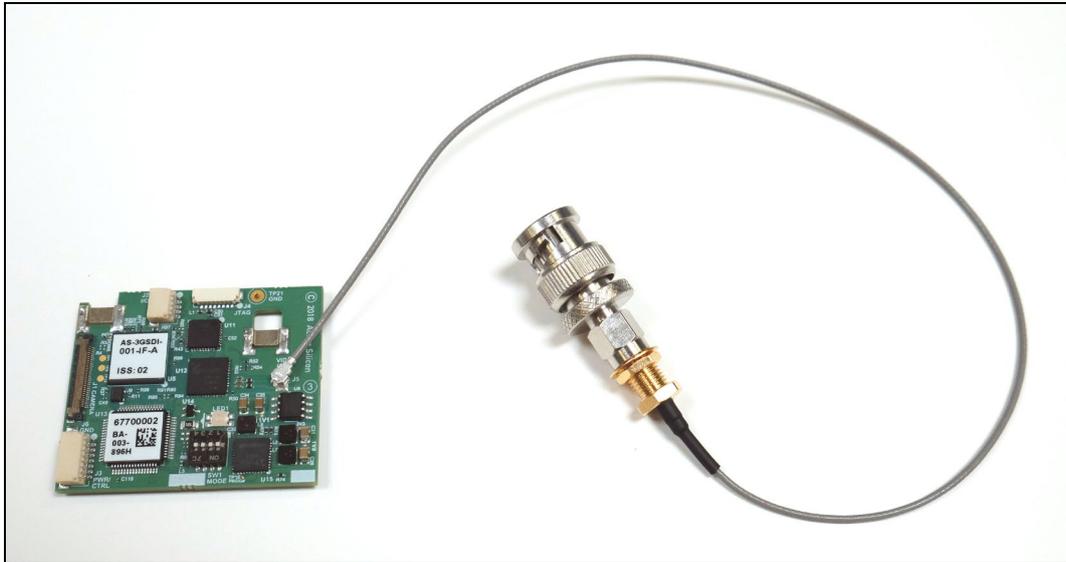

The power supply is not shown in this photo but connects to the inline PSU connector in the Breakout Cable.

The push buttons are to (a) select the Test Pattern (PGEN, pin 1, J2) and (b) Reset. The Reset is used to apply a new default video setting to the camera. So for example, if the camera is in 720p60 mode (and DIP switches 1,2,3 are all off – so VISCA controlled), then via a VISCA command the camera is changed to say 720p50 and then a Reset applied, the camera will reboot and the default will now be the new mode, 720p50. When switching from 3G modes to HD modes, the Dual LVDS mode must also be switched to Single LVDS mode (via VISCA commands) and vice-versa. Further details are in the camera manufacturer's manual.

Close up of Breakout Connector for reference

The 3G-SDI output can now be connected via the micro-coax to SMA/BNC connector:

On power up, live video data should now be available on the output.

For information on camera configuration, please refer to the camera manufacturer's manual. Refer also to Active Silicon's datasheet on the interface board as well as the document "Harrier Series - Extended VISCA Commands" available on the website at www.activesilicon.com.

Serial Control Software

The camera can be setup and controlled via the Tamron application for the Tamron cameras and the Sony application for the Sony cameras.

Part of the Breakout Cable has a USB lead and connector. This can be plugged into a standard Windows PC or laptop, and this will result in serial port drivers being installed that the control software can use.

The Sony software is available from Sony here –

https://www.image-sensing-solutions.eu/FCB-EV7520.html

The Tamron software is available here –

https://www.activesilicon.com/camera-files/MP1110M-VC-Camera-Control-Software.zip

Technical Reference Manuals for Tamron cameras -

https://www.activesilicon.com/camera-files/MP1010M-VC-Technical-Manual.pdf

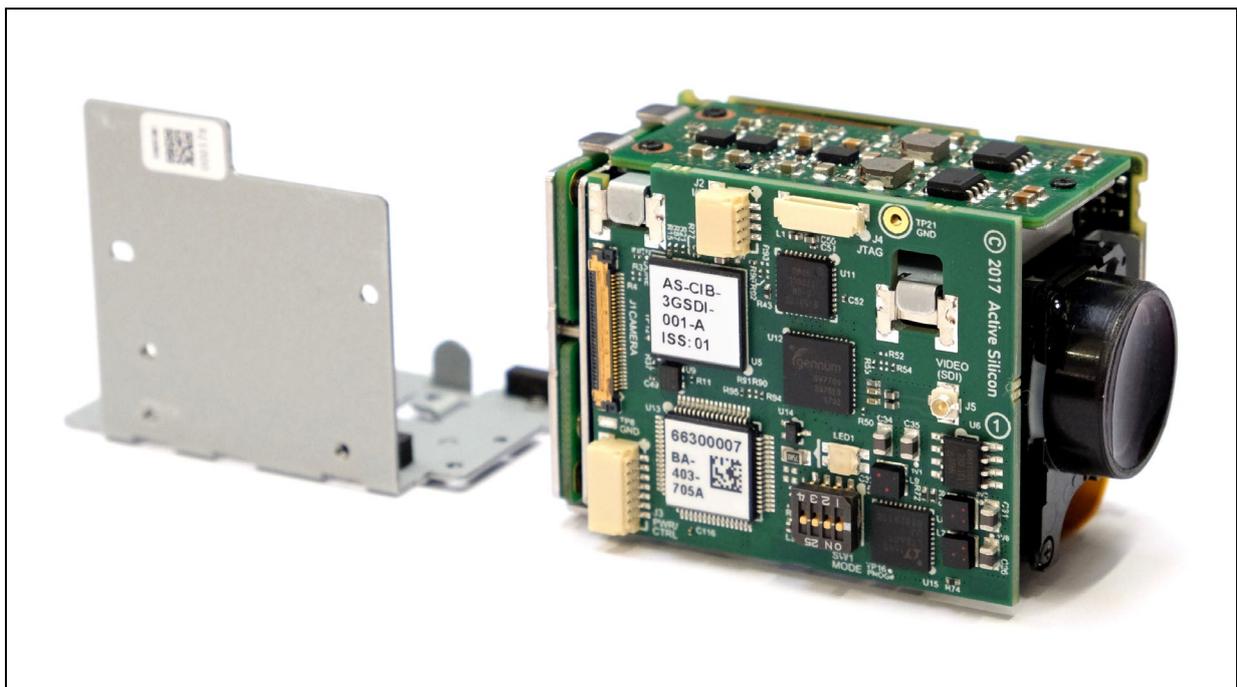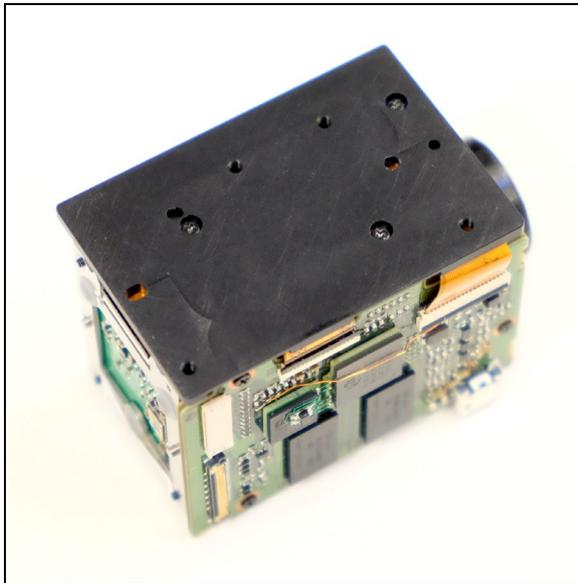https://www.activesilicon.com/camera-files/MP1110M-VC-Technical-Manual.pdf

Fitting the Bracket

It should be fairly self-explanatory how to fit the bracket, but the following photos will be a useful guide.

1) Remove the original bracket as shown below – this has three base screws and one side screw, and clip in the interface board as shown below.

2) Carefully align and attach the new bracket as shown below. Re-use the three base screws that were removed originally.

Technical Support

In case of any issues, please contact Active Silicon Technical Support on the telephone numbers below or by email to techsupport@activesilicon.com

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