Quick Start Guide
RHP-BOS-CL-SY-IF

RHP BOSON CAMERA LINK WITH SYNC INTERFACE MODULE

USB Connection
The BOS-CL-SY-IF Camera Link module is designed for the FLIR Boson camera and can connect via USB for video streaming, power, and communication.

Digital Data via Camera Link Connection
The Camera Link module takes CMOS-type digital data from the FLIR Boson camera and converts it to Camera Link.
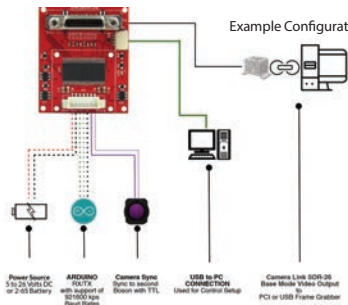
Camera Sync
It is also possible to enable master/slave sync communication with the RHP-BOS-CL-SY-IF Camera Link module. The Master/Slave Sync Option allows the Boson to be connected in parallel with a 3.3v buffered port. The BOS-CL-SY-IF provides a 3.3V TTL/UART control to transmit and receive serial data.

With External Sync **Master Mode**, a Boson camera sends output pulses that indicate to external equipment when frame data acquisition has begun. This output will be 30 Hz or 60 Hz depending on the average mode setting.

When the External Sync is in **Slave Mode**, external equipment sends reference pulses to the camera which begin the acquisition of each video frame by the Boson camera. The input signal can be 10 - 60 Hz rate to match the nominal video acquisition rate of the Boson camera.

The RHP-BOS-CL-SY-IF can be powered by the 4-pin JST to USB cable to allow standard 5-26VDC.
Video, power & communication can be performed through the FLIR Camera Controller Graphical User Interface (GUI), or the 7-pin PicoBlade connector with voltage range of 5-26VDC for both the camera and interface.
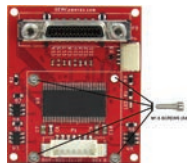
The camera uses serial communication at 921600 Baud by creating a virtual COM Port on your computer for USB communication or by using the 3.3V TTL/UART.

Example Configuration

For more FLIR Boson accessories and products
visit: https://www.oemcameras.com/boson

Power Source
5 to 26 Volts DC
or 2-6S Battery

ARDUINO
RX/TX
with support of
921600 kps
Baud Rates

Camera Sync
Sync to second
Boson with TTL

USB to PC
CONNECTION
Used for Control Setup

Camera Link SDR-26
Base Mode Video Output
to
PCI or USB Frame Grabber

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Connect the BOS-CL-SY-IF to the back of the Boson by lining up the hirose connector. Press together until you feel the board snap into place

Secure the Assembly to the rear of the boson using the four cap screws provided in the kit.
Be careful not to over-tighten the screws.
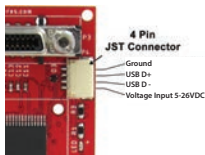
USB Connection

Connect the USB Cable to the Interface as shown above. Once connected, plug the USB connector into a power source or computer. The light will illuminate and the Boson will power up.
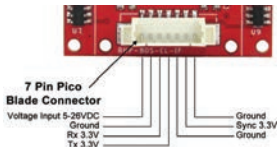
7-Pin PicoBlade Connection

Alternately, you may use the 7-Pin PicoBlade connector. Connect it to the interface assembly as shown above. Once connected to a power source, the board will illuminate and the Boson will be active to transmit and receive signals.

USB Pin Out

4 Pin JST Connector
- Ground
- USB D+
- USB D -
- Voltage Input 5-26VDC

PicoBlade Pin Out

7 Pin Pico Blade Connector
- Voltage Input 5-26VDC
- Ground
- Rx 3.3V
- Tx 3.3V
- Ground
- Sync 3.3V
- Ground

Note: Both connectors may be used simultaneously.