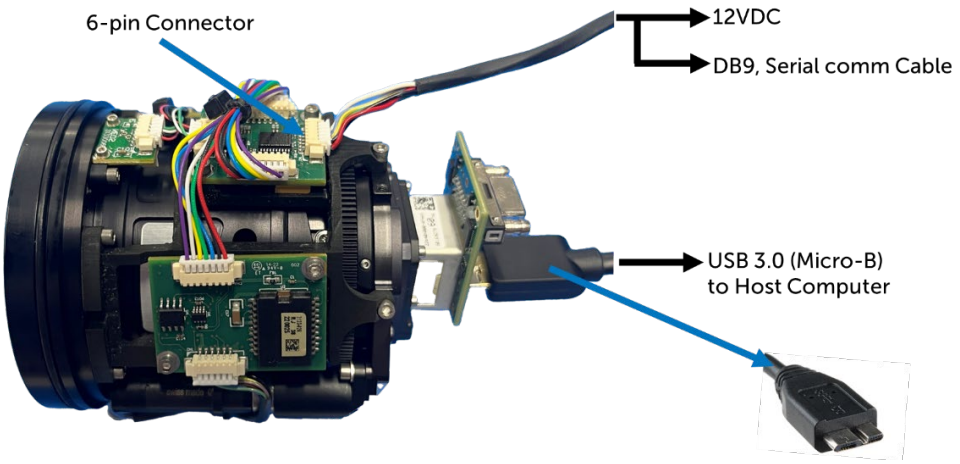

Figure 4. Cable connection for Boson+ CZ 14-75 with Camera Link Accessory Board

5.3 Operating the Lens Using Terminal

The commands and specifications in this section provide the basic information needed to interface the motorized optical system with the host computer using the serial terminal emulator, e.g., HyperTerminal or Putty. Details of all provided commands and additional commands can be found in Lens Controller User Manual M-006 and M-007, provided upon request.

5.3.1 Communications and Power

All commands to the Teledyne FLIR lens (controller) and replies from the lens are ASCII strings. Strings sent to the lens must be terminated by a <CR>. Reply strings from the lens typically end with a command-prompt character (>). The proper COM port number should be entered in the terminal emulator setting in addition to the following setup. The COM port number can be found in the "Ports (COM & LPT)" section of the Device Manager in Windows OS. See section 6.1 for details.

- Protocol: RS232
- Baud Rate: 38400
- Data Bits: 8
- Parity: None

5.3.2 FOV Motion

Axis number 1 is the FOV axis. The alias for this axis is the letter v. Commands include:

- Move to WFOV: /MPAv 0, p
- Move to NFOV: /MPAv 100, p
- Move to intermediate FOV: /MPAv xx,p where xx is the percentage of travel (0-100)
- Move to a specific Focal Length: /MPAv xx, F where xx is the target EFL in mm (14-75)

5.3.3 Focus Motion

Axis number 2 is the focus axis. The alias for this axis is the letter f. Commands include:

- Move to infinity focus: /MPAf 100, u
- Move a small amount toward a near object: /MPRf -25
- Move a small amount toward a far object: /MPRf 25
- Move a large amount toward a near object: /MPRf -200
- Move a large amount toward a far object: /MPRf 200
- Get the current focus axis position in encoder counts: /GMSf[2] 1

5.3.4 Miscellaneous Commands

Additional helpful commands include:

- Get the lens temperature: /GTV
- Reset the Teledyne FLIR controller: /RST0 NEOS
- Initiate Home sequence for an axis: /HOMx where x is the axis number specified above
- Turn On temperature compensation: /MDF[4] 2
- Turn Off temperature compensation: /MDF[4] 0
- Turn On range compensation: /MDF[5] 2
- Turn Off range compensation: /MDF[5] 0