

# Kepler Cooled CMOS Cameras

## QSFP Kit

### High Speed Interface for Kepler CMOS Cameras

FLI's QSFP (Quad Small Form factor Pluggable) high speed fiber interface provides extreme bandwidth for high resolution imaging at high frame rates.

The kit includes two transceivers, a 30m fiber optic cable, and PCIe interface card. One transceiver plugs into the back of Kepler cameras, and the other plugs into the PCIe card.

For the Kepler KL4040 camera, the QSFP Kit increases the potential frame rate from about 6 frames per second (fps) with USB 3.0 to 23 fps. The QSFP kit also allows for significantly longer and electrically isolated connections.

The QSFP Kit requires M.2 memory because of the significant amount of data being transferred. Typical SSD memory with a SATA connection does not provide sufficient bandwidth to use the full capabilities of the QSFP. If an M.2 connection is not included on the motherboard of the computer, a PCIe to M.2 adapter card is required which will use a second PCIe port.

### Minimum Requirements

Windows 10 x86 or x64  
FLI Pilot v1.2.19 or later  
7th gen i7 Core CPU  
Motherboard with either {1 M.2 port and 1 PCIe port} or {2 PCIe ports}  
1 PCIe to M.2 adapter (only required if the motherboard does not have an M.2 port)  
250GB M.2 memory  
FLI QSFP PCIe board  
QSFP fiber optic cable or copper QSFP cable (for testing)  
32GB of DDR3 or DDR4 RAM

