

Light Control Metasurface (LCM™) Evaluation Kit

Lumotive's **LCM Evaluation Kit (LEK)** is a flexible platform which enables customers to evaluate LCM beamforming in their own environment, for their own applications.

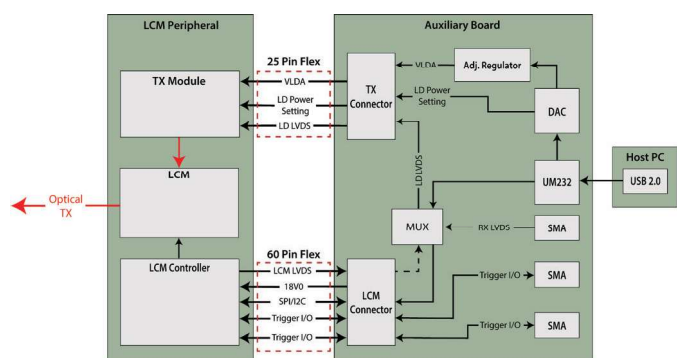
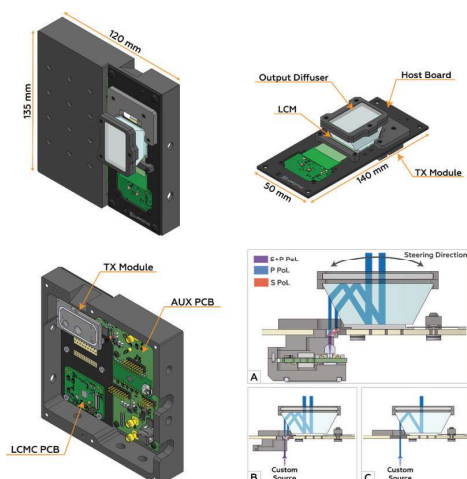
- Perform benchtop experiments with different lasers and optical coupling configurations
- Experiment with software-defined scan patterns and novel beamforming control
- Develop a 3D sensing proof-of-concept system when coupled with a receive time-of-flight sensor



The LEK is exclusively available through Lumotive's **Technology Access Program (TAP)**, which includes everything needed for successful product development with LCM technology. Contact us to learn more!



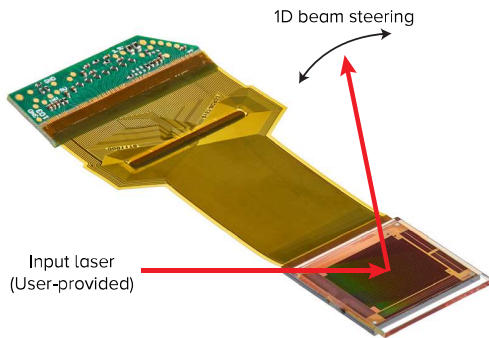
LX10 LEK shown
Available for all LCM products



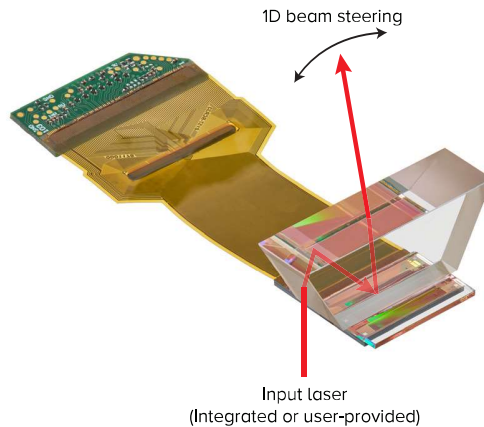
The LEK consists of a pre-assembled and mechanically aligned LCM, Transmit Module (incl. VCSEL, collimating optics, and polarization optics), LCM Control Board, Host Interface Board and an Auxiliary Breakout board. Connectivity to key synchronization signals is provided for attaching a custom RX sensor and processing solution to create a complete 3D sensing prototype system.

LEK Configurations and System Requirements

Free Space Coupling



Prism Coupling



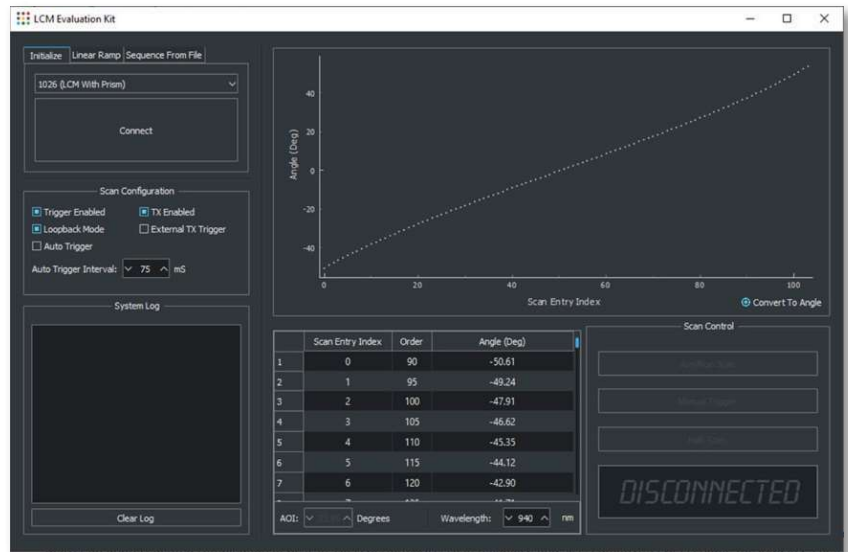
Free space or attached prism optical coupling options are available. When using the attached prism option, integrated diffusers with 60°, 90°, and 120° fan angles are supported.

SDK Contents

GUI	Scripts	Implemented in Python
LCM Control Libraries	C/C++ library with Python bindings	
HW Drivers	Shipped as compiled shared libraries	

System Requirements

Operating System	Windows 10 or Ubuntu Linux 20.04
Hardware	USB port (2.0 or higher)



About Lumotive

Lumotive's award-winning optical semiconductor solutions enable advanced sensing and perception capabilities in next-generation consumer, mobility, and industrial automation products such as mobile devices, autonomous vehicles, and robots. The company's patented Light Control Metasurface (LCM™) beam steering chips deliver an unparalleled combination of high performance, exceptional reliability, and low cost — all in a tiny, easily integrated solution. Lumotive has received measurable industry acclaim including Fierce Electronics' 2021 Startup of the Year award, CES Innovation Awards in 2022 and 2024, Fast Company's Next Big Thing in Tech 2023, a 2022 SPIE PRISM Award, and a prestigious Edison Award. Investors include Gates Frontier, MetaVC Partners, Quan Funds, Samsung Ventures, and Uniquet.