

Sheba Microsystems to Unveil Next Generation Micro Piston Actuator Technology for Mobile Phone Cameras at CES 2019

TORONTO, January 3rd, 2019: Sheba Microsystems, a leader in the development of next generation micro actuators (MEMS) for mobile phone camera modules, will unveil its new, innovative actuator camera module at the 2019 International Consumer Electronics Show (CES).

The module uses micro piston actuators designed specifically to accelerate mobile photography development for 3D, slow motion, high-resolution, electronic zoom, and low light photography. The proprietary approach promises to provide mobile phone OEMs and consumers with DSLR high-resolution picture quality and capabilities via their mobile devices.

“With the significant advancements in the image processing capabilities such as super resolution imaging, bokeh effect, and high Frame per Second (FPS) streaming, an enabling hardware platform is needed to make the most use of such capabilities. The incumbent VCM actuation technology is not an ideal candidate” Said Faez Ba-Tis, CEO, Sheba Microsystems. “Sheba MEMS actuators with their high speed and sub-pixel accuracy, are able to provide consumers with that high-end mobile phone photography experience they are missing today.”

Showcased initially as an autofocus camera at CES 2018, the next generation on display in 2019 will advance on the same path of technological disruption for mobile camera modules with an established new design that goes beyond proof of concept. Visitors to Sheba Microsystems’ booth this year will see first-hand the capabilities of the new module via a unique demonstration. By installing a mobile phone to a continuous vibrating and shifting motion axis, visitors will be able to see first-hand how the MEMS inside the camera module allow for an unwaveringly stable picture using an optical image stabilization technology while simultaneously achieving autofocusing.

The micro piston actuators at use have demonstrated their strength, reliability, and unprecedented payload capacity, allowing for existing high-end lenses and sensors to be attached directly. They provide a complete optical solution including autofocusing and optical image stabilization for mobile phone cameras. This differentiated approach from other technologies (flex lens actuators, VCMs) in market provides a significant technological improvement that drastically improves image and video quality and speed.

At this stage of development, the micro piston actuators used in the actuator camera module can multiply pixels by a factor of four and offer picture stability. The micro piston actuator compensates for vibration and unwanted user movements, saving software and processing resources, stabilizes the picture frame and increases the speed and quality of the picture acquisition process. The process itself has an intrinsic benefit to mobile phone design and optimizes the use of resources which are then redeployed toward the picture intake process.

Video demonstration of the technology is available online at www.shebamicrosystems.com, and in-person demonstrations at CES 2019 will be taking place at the Canada pavilion #1021, in the Westgate, Tech East.

NOTE: Some of these statements are forward-looking. Sheba Microsystems is a private company located at the MaRS Discovery District in Toronto, in conjunction with the support of the University of Toronto, and was established in Toronto in 2016. Sheba Microsystems' technology is patented.

About Sheba Microsystems Inc.

Sheba Microsystems is a leading fab-less semiconductor company that develops high-end MEMS actuators for optical solutions, including autofocus (AF), Optical Image Stabilization (OIS), and zooming for miniature cameras. With their high speed and high repeatability, low power consumption, and small size, the Sheba MEMS actuators are revolutionizing the quality and capability of digital photography for everyday devices. Visit us online at www.shibamicrosystems.com.

For more information, please contact:

Cedric Canu
Director of Corporate Development, Sheba Microsystems Inc.
Tel: 416-270-0397
cedric.canu@shebamicrossystems.com
www.shebamicrossystems.com