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Company Announcements Office ASX Limited Exchange Centre 20 Bridge Street Sydney NSW 2000

# **Breakthrough in Independent MEMS Process Development**

Audio Pixels Holdings Limited is pleased to announce a major technological and strategic breakthrough that materially advances the commercialisation of its groundbreaking solid-state digital loudspeaker platform.

## **Background**

Audio Pixels' advanced device architecture has consistently pushed the practical limits of conventional MEMS fabrication processes. Achieving the precision required for the Company's second-generation MEMS transducer array had, until now, proven unattainable despite extensive engagements with multiple world-class foundry partners.

As announced in March 2025, the Company elected to address this challenge directly by initiating an independent MEMS fabrication process-flow development program. The primary objective of this program was to definitively determine whether a reliable, repeatable, and scalable manufacturing pathway exists for the Gen-II MEMS architecture.

Management is pleased to confirm that the program has achieved its intended objectives, delivering a positive outcome.

Test and measurement results from recently delivered wafers confirm that the Company's independent process development has successfully established a robust and reliable fabrication process flow that meets the product's demanding specifications and, in several critical areas, achieves performance levels previously considered beyond the practical limits of conventional MEMS manufacturing.



This milestone confirms that production of the Company's devices is not only feasible but well within operational reach. Accordingly, instructions have already been issued to the fabrication partner to advance additional wafers through the now-established process flow.

#### **Acoustic Characterisation**

The Company's focus has now shifted to quantifying acoustic performance. Precise acoustic measurements at the wafer level is inherently complex, particularly when testing is conducted on bare wafers that have not yet undergone back-end processes (final metallisation, passivation and singulation). In this state, devices cannot be acoustically evaluated using the Company's existing wafer probers, nor can they be acoustically evaluated using test methods typically employed for packaged devices.

Additional time is therefore required to complete acoustic characterisation. However, based on the electromechanical measurements obtained to date, this reflects the need to adapt testing infrastructure and procedures rather than any limitation in the underlying device performance. Acoustic results will be reported once testing has been completed under appropriate conditions.

This announcement has been authorised for release to ASX by Fred Bart.

### About Audio Pixels Holdings Limited

Audio Pixels Limited, founded in 2006, is a wholly owned subsidiary of Audio Pixels Holdings Limited, listed in Australia under the stock code of AKP (Level 1 ADR's on OTC - ADPXY). Backed by exceptional multidisciplinary scientific research, design, and production capabilities, Audio Pixels has become a world leader in digital loudspeaker technologies. Audio Pixels' patented technologies employ entirely new techniques to generate sound waves directly from a digital audio stream using micro-electromechanical structures (MEMS). Its revolutionary technological platform for reproducing sound enables the production of an entirely new generation of speakers that will exceed the performance specifications and design demands of the world's top consumer electronics manufacturers. For more information, visit www.audiopixels.com.au/.

#### Forward-looking statements

This release may contain certain forward-looking statements with respect to the financial condition, results of operations and business of AKP and certain of the plans and objectives of AKP with respect to these items. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and there are many factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements.