

29 April 2022

### **Review of Operations**

As has been reported throughout the period, achievements were technical in nature, focused on advancing the Company and its technologies toward achieving its commercial objectives. Activities during the period concentrated on advancing 2 primary objectives of our commercialization plan:

- Transition from process development to mass production of our proprietary MEMS transducer and chip packaging
- Transition of working technology from bench development environments to functional devices and systems that provide for the market needs for product and technology demonstrators, and engineering samples.

The primary highlights of our related activities include:

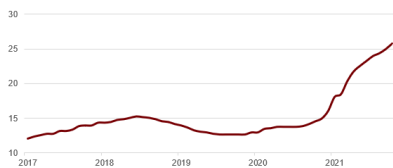
- Quality verification of our patented MEMS transducer produced using production techniques and lines
- The use of advanced artificial intelligence, deep machine learning techniques, novel optics, and electronics to “upgrade” wafer probe station capabilities in order to support high volume, chip characterization, and quality assurance testing within the mass production fabrication lines
- Advancement and refinement of the chip package and package assembly process to support the transition from manual chip packaging to high-volume chip packaging.
- Validation and demonstration of functioning full range speaker chips that reliably operate outside of a cleanroom having a frequency response from 100Hz through 50KHz. This pioneering achievement for the first time delivers a single small form factor transducer (microspeaker) that is capable of reproducing hi-quality sound throughout the audible spectrum (and beyond), amplifying one of the core value propositions of Digital Sound Reconstruction
- Implementing new innovative methods to improve chip performance and applicability - such to improve the sound quality of our chips even further, for example by applying a patent-pending approach to reduce quantization errors/noise; as well as a novel approach to control the sound volume of our chips in a manner that expands its applicability for near-ear applications (such as headphones, wearable displays, etc), and certain incremental improvements to our algorithms and controls.

- Packaging production-grade chips and electronics combined with the porting of software and algorithms from development environments to user appropriate devices and systems using encrypted and embedded code operated by commercially available device processors
- Design, fabrication, and assembly of hardware and software for customer engagement purposes, that will enable customers to independently operate and assess our technology and product potential.

Unquestionably the major accomplishments of the period are anchored in the successful completion of our multiyear effort to mass-produce our patented MEMS transducer with consistency and reliability using commercially viable surface micromachining techniques. This accomplishment is in no small part attributable to the highly productive collaboration effort with EarthMountain. The union of EarthMountains’ formidable resources and proficient skillset in both MEMS fabrication and chip packaging, merged with the company’s extensive real-world process knowledge, has proven to be a winning combination to achieve this remarkable objective. As has been reported this relationship has been memorialized in comprehensive agreements that provide for both the short and long term production requirements.

The company’s original timelines for the introduction of its technology demonstrators, encountered an unanticipated setback resulting from China’s strict enforcement of its

Average global time gap between chip orders and delivery (weeks)



Source: Bloomberg, 2022

ZERO-COVID policies. China’s recent effort to contain what it described as its worst outbreak of COVID-19 since 2020, has even further taxed an already strained industry, by shuttering critical production facilities and distribution networks of microelectronics components and assemblies. The measures imposed since February not only delayed production of our chips, but also halted the delivery of other critical components that are required in our

demonstration systems.

In late March-2022 we began to see a slight easing of restrictions which enabled at least some of our production and deliveries to resume. Of particular significance was the receipt of EarthMountain’s first production wafers.

The results of exhaustive testing and characterization conducted on these wafers met expectations and required specifications. These results signify the successful culmination of our multiyear effort to mass-produce our MEMS transducer arrays using a commercially viable surface micromachining approach. The increasing easing of restrictions combined with the exceptional results of the wafers (and chip packaging) enables management to tentatively revise its schedule for release of initial technology demonstrators, to Q2-2022.

The completion of our proprietary multiphysics simulation models enabled very extensive exploration of the multitude of physical regimes that influence the acoustic output in our transducers. The ability to simulate the impact varying combinations of parameters have on our device function enabled the company to further refine its high-output transducer design even further, thereby potentially offering a significant improvement in the commercial appeal of our devices through the reduced number of chips required to achieve the same or even higher sound pressure levels for particular applications. During the reporting period, the company undertook the conversion of these findings into prototypes of high-performance devices, with first silicon anticipated sometime in June.

In addition to the three new patent applications that were submitted during the period, the company filed for global trademark protection of “AudioPixels” which has been already approved by various regional authorities.

On a sour note, during the period the company has been unable to avoid the impact the unprecedented shortages of human capital available to the tech industry in Israel. The combination of unprecedented sector growth, record-breaking capital available, and the rapid expansion of multinationals, make our multidisciplined talent extremely appealing for poaching. Sadly, we have lost 3 engineers during the reporting period, two of which have already been replaced. Management will continue to work with the Board on ways to enhance our incentive programs to better recruit and retain our exceptional talent.

Overall, the magnitude of accomplishments achieved during the reporting period presents a very positive outlook on the company’s ability to achieve its next series of milestones. The primary milestone is commencing the “public” exposure phase of the company’s industry-altering technology via a series of demonstrations.

As noted in the accompanying Appendix 4C, the Company has engaged an Australian broker to facilitate a placement of ordinary shares to sophisticated investors which is expected to be completed prior to the Annual General Meeting to be held on Monday 30 May 2022 at 9.30 am. The minimum capital raising will be \$10m and part of the placement proceeds will be used to repay the unsecured loans.

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



### **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/](http://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.

## Appendix 4C

### Quarterly cash flow report for entities subject to Listing Rule 4.7B

**Name of entity**

AUDIO PIXELS HOLDINGS LIMITED

**ABN**

98 094 384 273

**Quarter ended ("current quarter")**

31 MARCH 2022

| <b>Consolidated statement of cash flows</b>               | <b>Current quarter<br/>\$A'000</b> | <b>Year to date<br/>(3.months)<br/>\$A'000</b> |
|---|------------------------------------|--|
| <b>1. Cash flows from operating activities</b>            |                                    |  |
| 1.1 Receipts from customers                               | 53                                 | 53   |
| 1.2 Payments for  |                                    |  |
| (a) research and development                              | (1,070)                            | (1,070)  |
| (b) product manufacturing and operating costs             | -                                  | -  |
| (c) advertising and marketing                             | -                                  | -  |
| (d) leased assets   | -                                  | -  |
| (e) staff costs   | (137)                              | (137)  |
| (f) administration and corporate costs                    | (103)                              | (103)  |
| 1.3 Dividends received (see note 3)                       | -                                  | -  |
| 1.4 Interest received                                     | -                                  | -  |
| 1.5 Interest and other costs of finance paid              | (52)                               | (52)   |
| 1.6 Income taxes paid                                     | -                                  | -  |
| 1.7 Government grants and tax incentives                  | -                                  | -  |
| 1.8 Other (provide details if material)                   | -                                  | -  |
| <b>1.9 Net cash from / (used in) operating activities</b> | <b>(1,309)</b>                     | <b>(1,309)</b>                                 |
| <b>2. Cash flows from investing activities</b>            |                                    |  |
| 2.1 Payments to acquire or for:                           |                                    |  |
| (a) entities  | -                                  | -  |
| (b) businesses  | -                                  | -  |
| (c) property, plant and equipment                         | (13)                               | (13)   |
| (d) investments   | -                                  | -  |
| (e) intellectual property                                 | -                                  | -  |
| (f) other non-current assets                              | -                                  | -  |

| Consolidated statement of cash flows                      | Current quarter<br>\$A'000 | Year to date<br>(3.months)<br>\$A'000 |
|---|----------------------------|---------------------------------------|
| 2.2 Proceeds from disposal of:                            |                            |                                       |
| (a) entities  | -                          | -                                     |
| (b) businesses  | -                          | -                                     |
| (c) property, plant and equipment                         | -                          | -                                     |
| (d) investments   | -                          | -                                     |
| (e) intellectual property                                 | -                          | -                                     |
| (f) other non-current assets                              | -                          | -                                     |
| 2.3 Cash flows from loans to other entities               | -                          | -                                     |
| 2.4 Dividends received (see note 3)                       | -                          | -                                     |
| 2.5 Other (provide details if material)                   | -                          | -                                     |
| <b>2.6 Net cash from / (used in) investing activities</b> | <b>(13)</b>                | <b>(13)</b>                           |

|   |              |              |
|---|--------------|--------------|
| <b>3. Cash flows from financing activities</b>  |              |              |
| 3.1 Proceeds from issues of equity securities (excluding convertible debt securities)       | -            | -            |
| 3.2 Proceeds from issue of convertible debt securities                                      | -            | -            |
| 3.3 Proceeds from exercise of options   | -            | -            |
| 3.4 Transaction costs related to issues of equity securities or convertible debt securities | -            | -            |
| 3.5 Proceeds from borrowings  | 1,200        | 1,200        |
| 3.6 Repayment of borrowings   | -            | -            |
| 3.7 Transaction costs related to loans and borrowings                                       | -            | -            |
| 3.8 Dividends paid  | -            | -            |
| 3.9 Repayment of lease liabilities  | (45)         | (45)         |
| <b>3.10 Net cash from / (used in) financing activities</b>                                  | <b>1,155</b> | <b>1,155</b> |

|   |         |         |
|---|---------|---------|
| <b>4. Net increase / (decrease) in cash and cash equivalents for the period</b> |         |         |
| 4.1 Cash and cash equivalents at beginning of period                            | 750     | 750     |
| 4.2 Net cash from / (used in) operating activities (item 1.9 above)             | (1,309) | (1,309) |
| 4.3 Net cash from / (used in) investing activities (item 2.6 above)             | (13)    | (13)    |

| <b>Consolidated statement of cash flows</b> |  | <b>Current quarter<br/>\$A'000</b> | <b>Year to date<br/>(3.months)<br/>\$A'000</b> |
|---|--|------------------------------------|--|
| 4.4   | Net cash from / (used in) financing activities (item 3.10 above) | 1,155                              | 1,155  |
| 4.5   | Effect of movement in exchange rates on cash held                | (18)                               | (18)   |
| <b>4.6</b>                                  | <b>Cash and cash equivalents at end of period</b>                | <b>565</b>                         | <b>565</b>                                     |

| <b>5.</b>  | <b>Reconciliation of cash and cash equivalents</b><br>at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | <b>Current quarter<br/>\$A'000</b> | <b>Previous quarter<br/>\$A'000</b> |
|------------|---|------------------------------------|-------------------------------------|
| 5.1        | Bank balances   | 565                                | 750                                 |
| 5.2        | Call deposits   | -                                  | -                                   |
| 5.3        | Bank overdrafts   | -                                  | -                                   |
| 5.4        | Other (provide details)   | -                                  | -                                   |
| <b>5.5</b> | <b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>  | <b>565</b>                         | <b>750</b>                          |

| <b>6.</b>  | <b>Payments to related parties of the entity and their associates</b>                   | <b>Current quarter<br/>\$A'000</b> |
|--|---|------------------------------------|
| 6.1  | Aggregate amount of payments to related parties and their associates included in item 1 | 45                                 |
| 6.2  | Aggregate amount of payments to related parties and their associates included in item 2 | -                                  |
| <p>The amount included in Item 6.1 includes directors fees and superannuation paid to entities associated with the non-executive directors of \$37,400 and consulting fees paid to entities associated with non-executive directors of \$7,500</p> |   |                                    |

## Quarterly cash flow report for entities subject to Listing Rule 4.7B

| 7.  | <b>Financing facilities</b>   | <b>Total facility amount at quarter end<br/>\$A'000</b> | <b>Amount drawn at quarter end<br/>\$A'000</b> |
|-----|---|---|--|
|     | <i>Note: the term "facility" includes all forms of financing arrangements available to the entity.<br/>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>   |   |  |
| 7.1 | Loan facilities   | 3,000   | 2,600  |
| 7.2 | Credit standby arrangements   | -   | -  |
| 7.3 | Other (please specify)  | -   | -  |
| 7.4 | <b>Total financing facilities</b>   | 3,000   | 2,600  |
| 7.5 | <b>Unused financing facilities available at quarter end</b>   |   | 400  |
| 7.6 | Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.   |   |  |
|     | The Company has unsecured loan facility agreements with 4F Investments Pty Limited (a company associated with Fred Bart - Chairman) of \$2m and Link Enterprises Group for A\$1m. The interest rate on the unsecured loan facilities is 6% and they both expire on 30 June 2022. The original \$2m facility which expired on 31 December 2021 was extended for a further six months to 30 June 2022. On 31 December 2021 4F Investments Pty Limited (a company associated with Fred Bart - Chairman) agreed to provide an additional loan facility of \$1m on the same terms and conditions as the initial \$2m facility. |   |  |

| 8.    | <b>Estimated cash available for future operating activities</b>  | <b>\$A'000</b> |
|-------|--|----------------|
| 8.1   | Net cash from / (used in) operating activities (item 1.9)  | (1,309)        |
| 8.2   | Cash and cash equivalents at quarter end (item 4.6)  | 565            |
| 8.3   | Unused finance facilities available at quarter end (item 7.5)  | 400            |
| 8.4   | Total available funding (item 8.2 + item 8.3)  | 965            |
| 8.5   | <b>Estimated quarters of funding available (item 8.4 divided by item 8.1)</b>  | 0.7            |
|       | <i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>   |                |
| 8.6   | If item 8.5 is less than 2 quarters, please provide answers to the following questions:  |                |
| 8.6.1 | Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?  |                |
|       | Answer: Yes  |                |
| 8.6.2 | Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?   |                |
|       | Answer: The Company has engaged an Australian broker to complete a capital raising of a minimum of A\$10m once the technology can be demonstrated to potential investors which should take place before the Annual General Meeting scheduled for 31 May 2022. The Directors believe that the capital raising will be successful. |                |



8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes

*Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.*

### Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 29 APRIL 2022

Authorised by: By the Board  
(Name of body or officer authorising release – see note 4)

### Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.