



**Chairman's Address to the Annual General Meeting of Shareholders held on the
29th of May 2019 at 9.30 am in the Barnet Room, The Westin Sydney, No. 1
Martin Place, Sydney NSW, 2000 Australia**

I would like to start by acknowledging and thanking all stakeholders (shareholders, employees, and management) in helping to make Audio Pixels a first class international company.

Notwithstanding our recent disappointment that an unforeseen computer crash forced the temporary interruption of our acoustic testing; this past year has seen many significant accomplishments. Undoubtedly the most significant accomplishment is that we, together with our fabrication partner Tower Semiconductor, appear to have finally completed the development and fabrication process of devices that reliably adhere to the required electro mechanical performance specifications.

As many of you know, the production of devices capable of withstanding the negative effects of high-voltage electrostatics has been the primary obstacle facing the company. The accumulated knowledge and experience that has been expended to resolve this issue has in our assessment put the company at the forefront of design and manufacture of microscale devices that require larger amplitudes. Yuval Cohen will shortly present a few examples documenting this effort and our achievements.

Most significantly the production of reliably functioning devices has finally enabled the company to progress to the acoustic development phase of the product. While the results attained so far appear promising, we are at the very early stages of this step. Efforts to recover from the slight setback are well underway and we expect acoustic testing and validation to resume in full force within the coming weeks.

Following Yuval Cohen's technical update, we will open the floor to your questions.

Sincerely

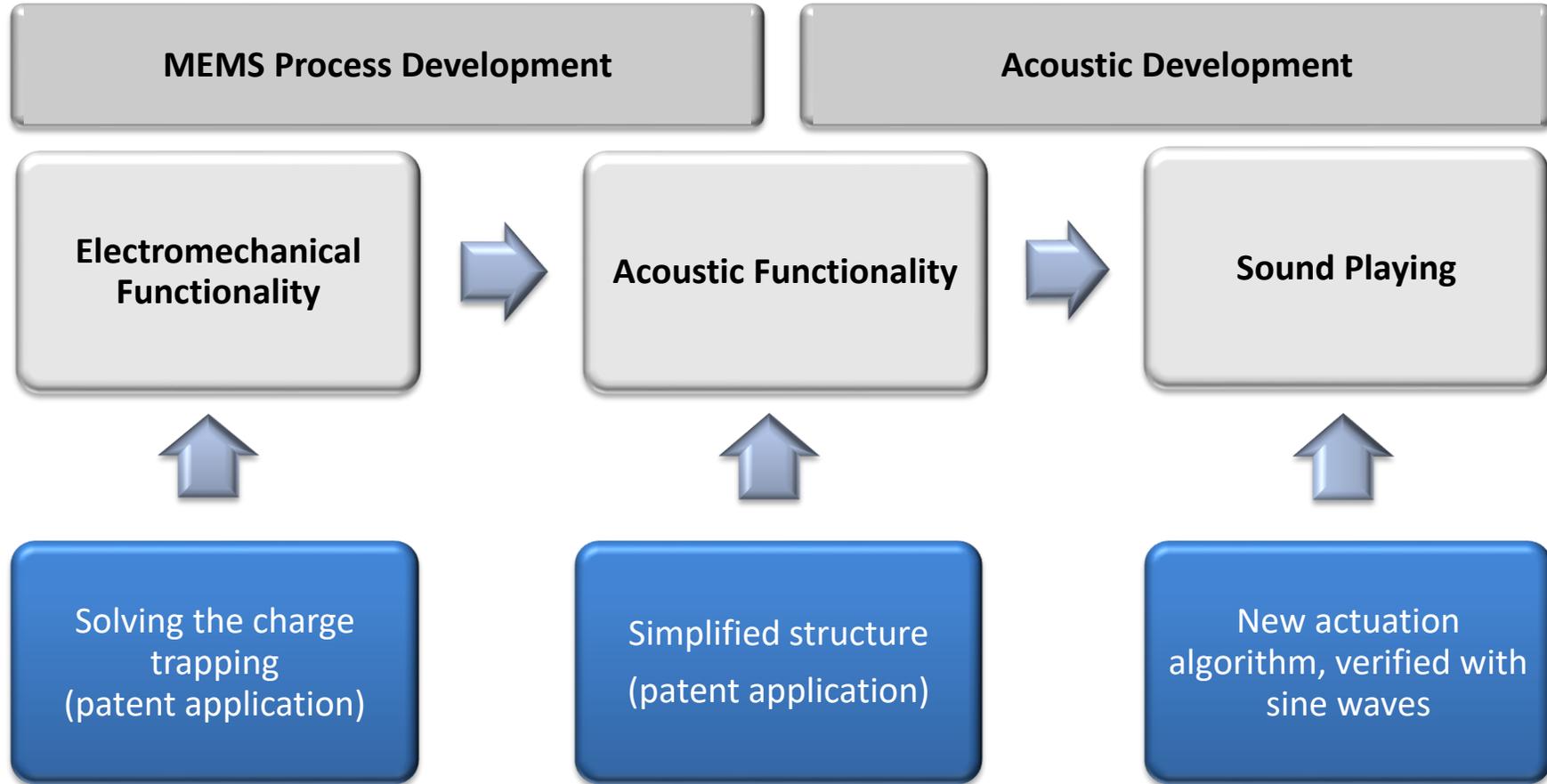
Fred Bart
Chairman
29 May 2019



Breaking the Barriers of Sound

AGM
May 2019

Dec 2018 recap



Technical highlights

1. Initial testing on full structured wafers has so far confirmed:
 - I. Newly devised mechanism for preventing Stiction (charging) issues – **Works!**
 - II. Our embodiment of Digital Sound Reconstruction – **Works!**
 - III. Our Passive Matrix system – **Works!**
 - IV. Our drive algorithm module – **Works!**
 - V. Fabrication process development nears completion
2. Modified simplified-structure wafers that have been produced and studied reveal new acoustic phenomena that requires further study and development.

I. Newly devised mechanism for preventing Stiction (charging) issues

The screenshot displays the 'frontend' software interface, which is used for controlling and measuring the device. The interface is divided into several main sections:

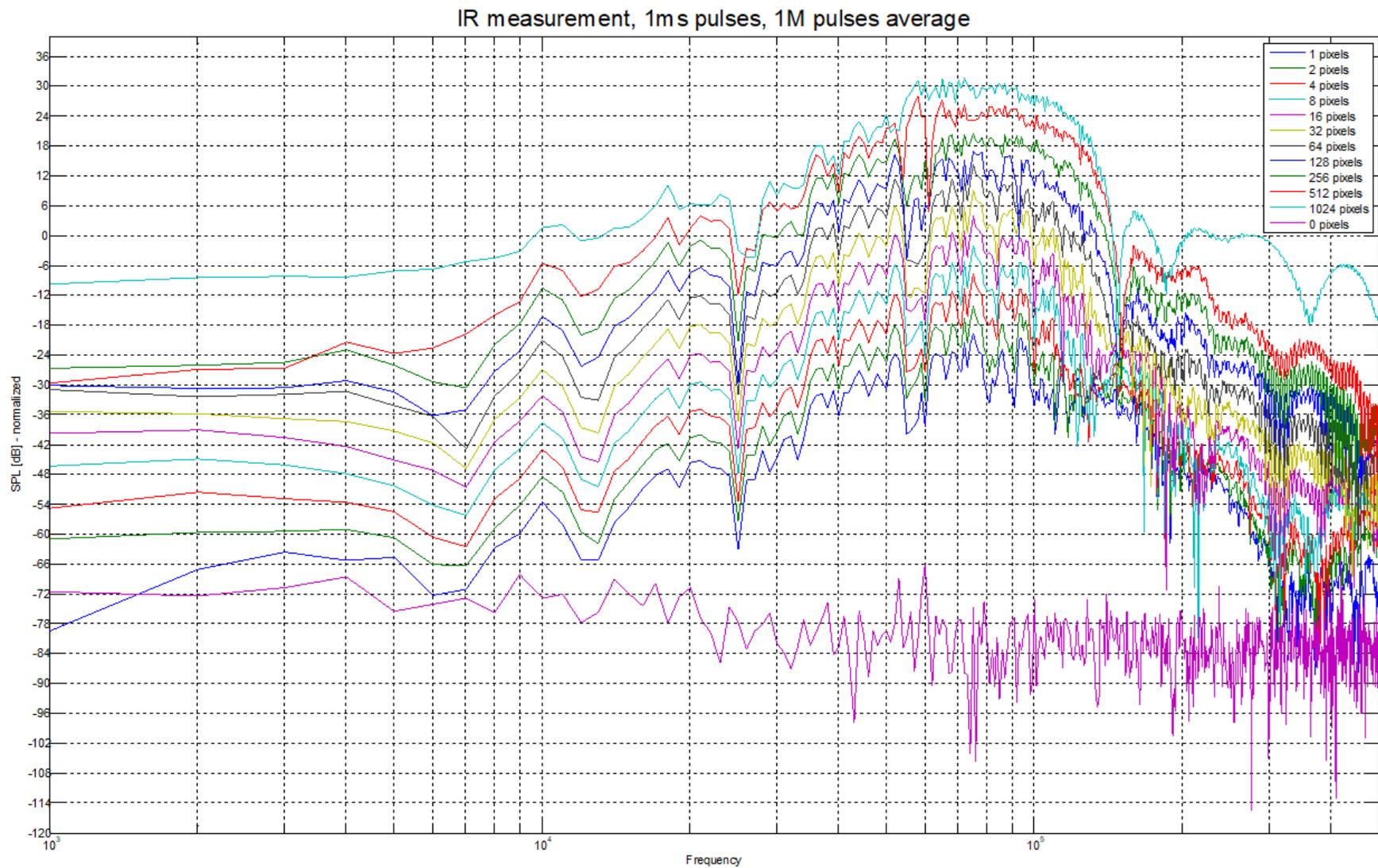
- Top Left:** A small overview window showing a grid of pixels with a blue square highlighting a specific area.
- Top Center:** A larger window showing a similar grid of pixels, with a blue square highlighting a specific area. Below the grid is a 'Pixels:' dropdown menu set to 'all'.
- Top Right:** A panel for 'Supplies' and 'Environmental' conditions. It includes fields for 'Enable', 'VRHI', 'VRLO', 'VCHI', 'VCLO', 'IRHI', 'IRLO', 'ICHI', 'ICLO', 'mA', 'C', 'Pa', and 'Cor'.
- Middle Left:** A panel for 'Sensor head' and 'Measurement'. It includes fields for 'Vibrometer', 'Large mic', 'Small mic', 'mm', 'ABS Step', 'X', 'Y', 'Z', and 'Successful latches'.
- Middle Right:** A panel for 'Parameters' and 'Measurement'. It includes fields for 'Comments', 'Measurement', 'wobble check', 'Duration', 'Release time', 'What to test', and 'Threshold'.
- Bottom Left:** A panel for 'Signal Generator' and 'Static' settings. It includes fields for 'VRHI', 'VRLO', 'VCHI', 'VCLO', 'IRHI', 'IRLO', 'ICHI', 'ICLO', 'mA', 'Rows', 'Tops', 'Bots', and 'Play' buttons.
- Bottom Right:** A 'Ni scope' window showing a waveform plot. It includes a 'Trigger' section with 'Synchronized', 'Single', and 'Rolling' options, and an 'FFT' button.

Under stress Many shorts & stuck pixels develop

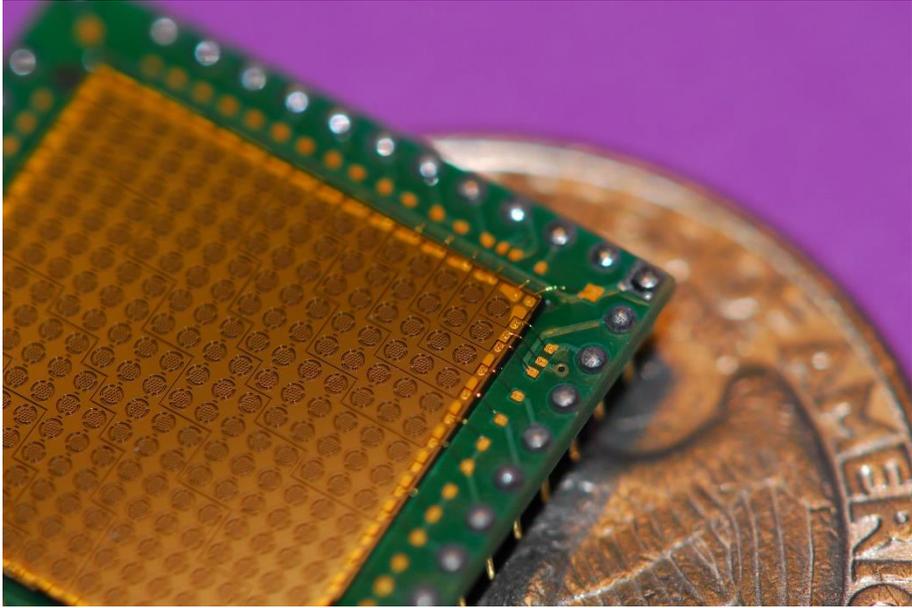
Nearly all pixels work

No stiction

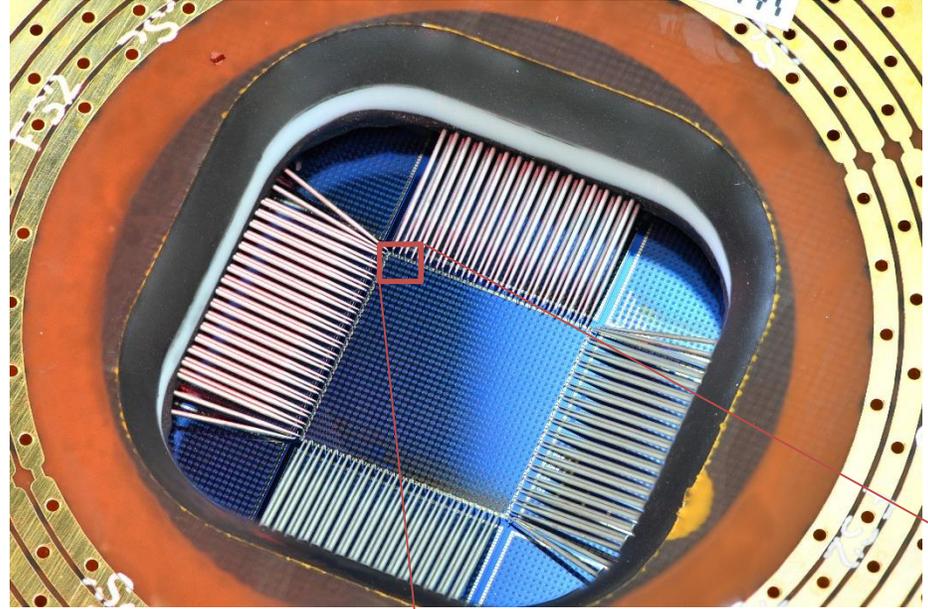
II. Our embodiment of Digital Sound Reconstruction – Works!



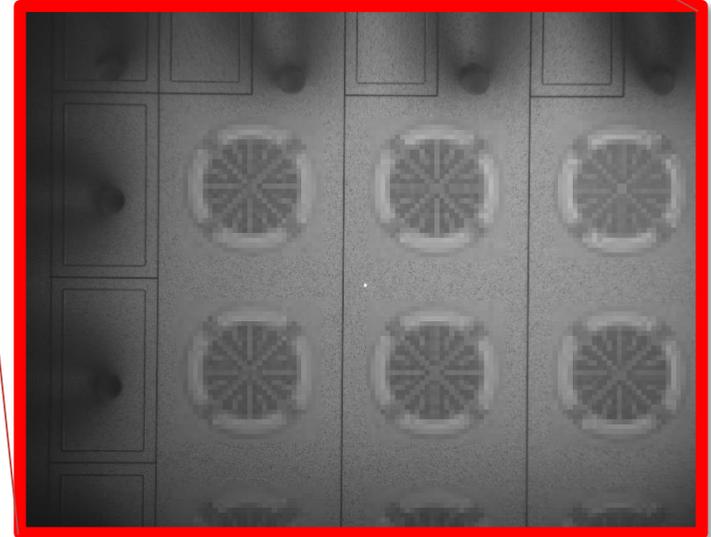
III. Our Passive Matrix system – Works!



Binary weighted array (2009)



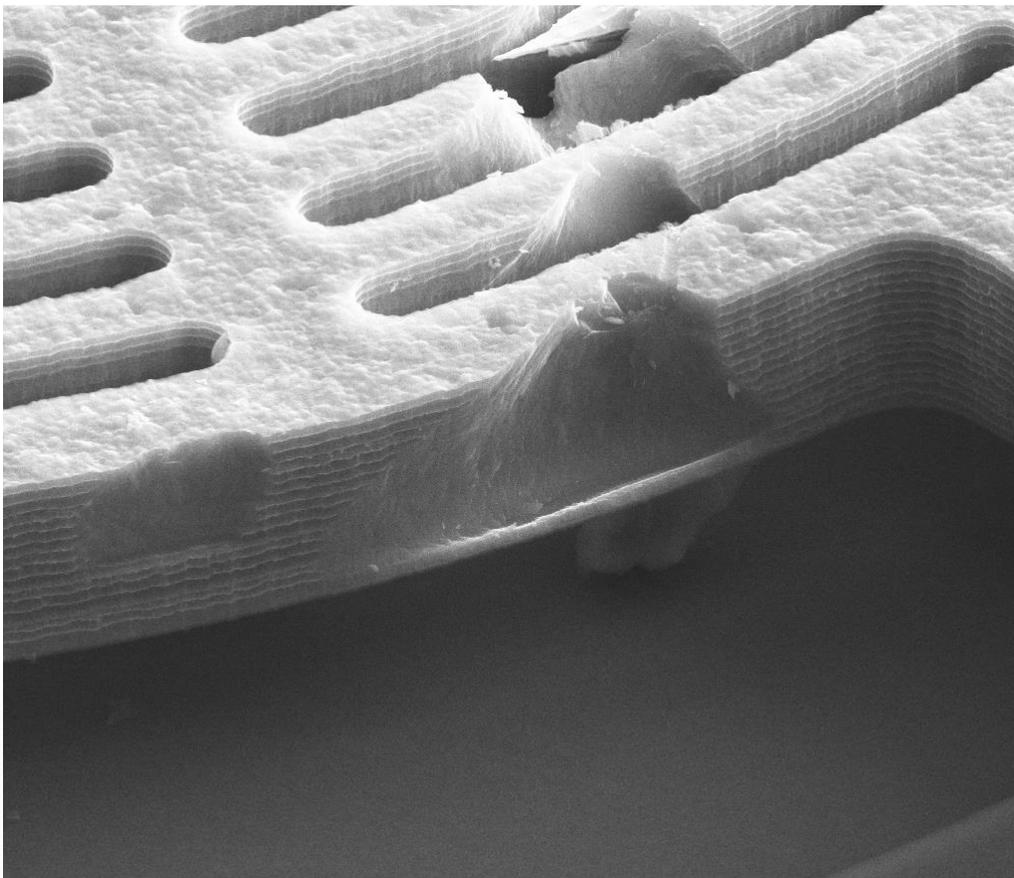
Passive matrix (2019)



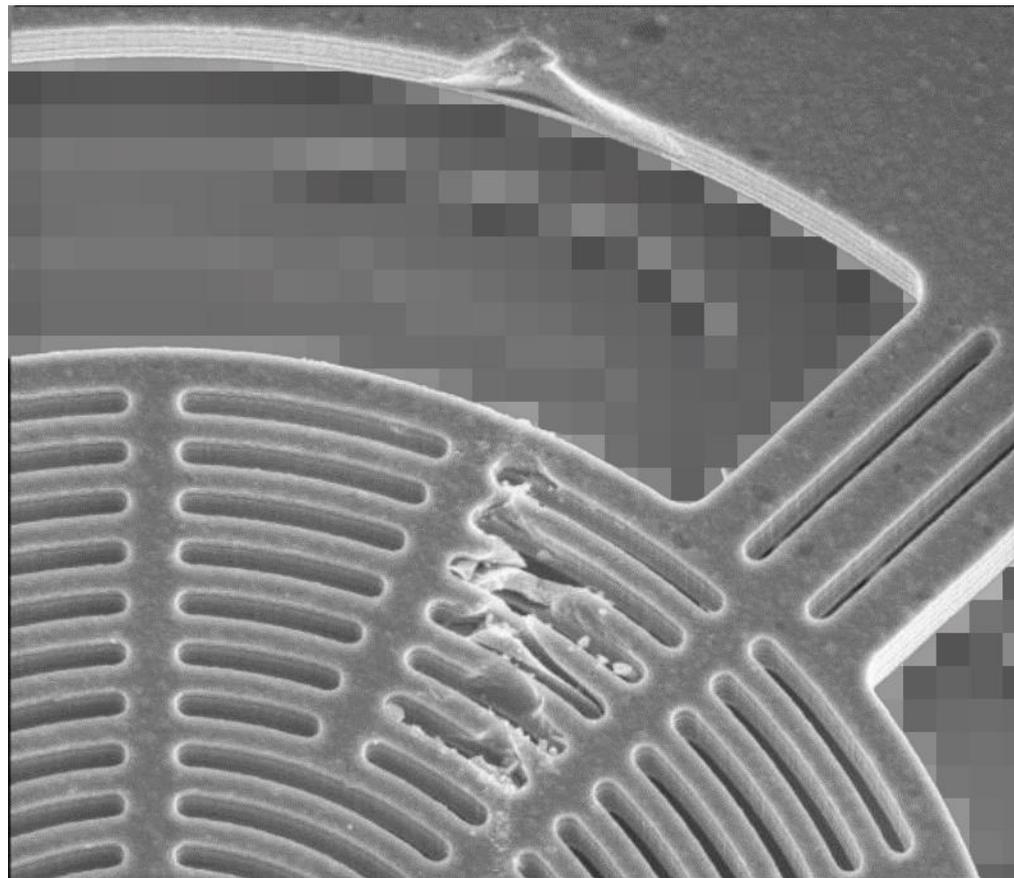
Status of MEMS fabrication Process Development

- Implementation of anti-stiction solution in full structure completed (required not insignificant changes to the structure and the fabrication process).
- Finished wafers started arriving a few weeks ago.
- The few minor fabrication issues associated with the full structure remain and are being addressed.
- Development plan devised and fabrication started for Modified simplified-structure.

Example of remaining minor fabrication issue (occasional defect)



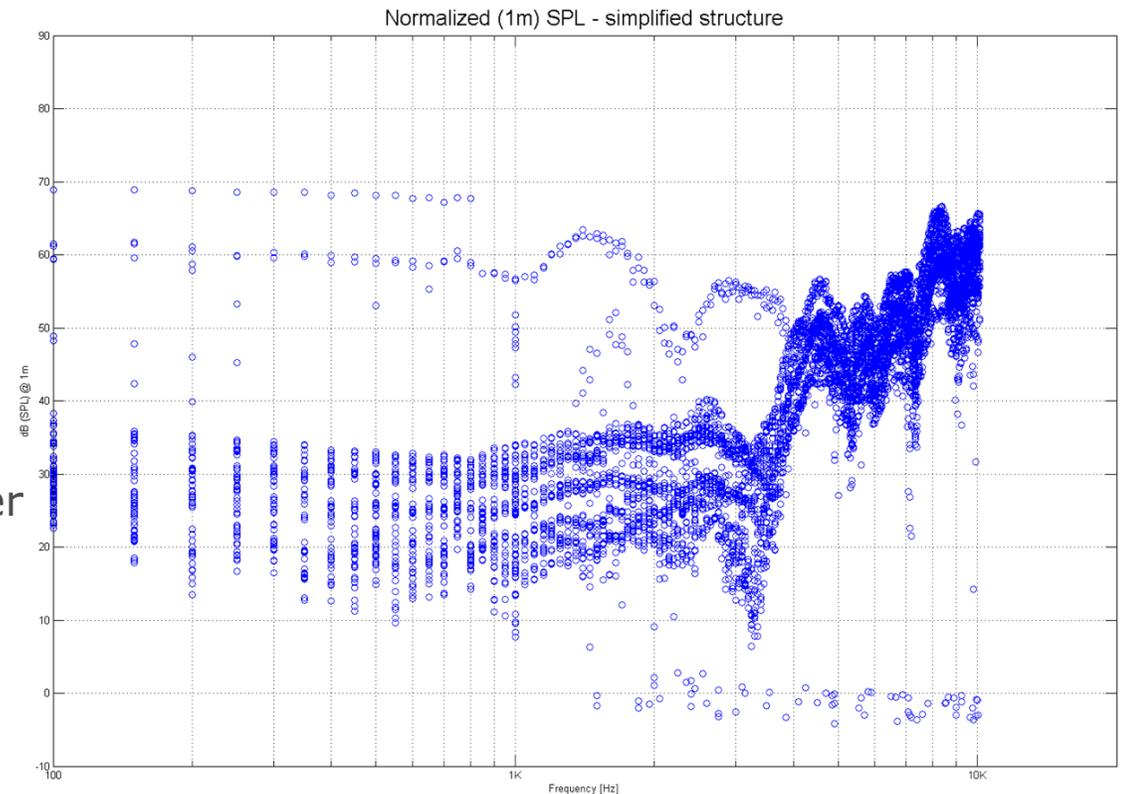
Mag	05/21/19	Tilt	E-Beam	10 µm
10.0 kX	13:28:30	52.0°	12.0 kV	N8O3287/#04



Mag	05/21/19	Tilt	E-Beam	20 µm
3.50 kX	13:25:59	25.0°	12.0 kV	N8O3287/#04



- Acoustic characterization began but was interrupted by prober crash that was a result of a PC freezing at the least opportune moment.
- Fabricator expediting immediate backup wafers to replace broken wafer, as well as advancing backup wafer batches.
- In the interim we continued acoustic characterization using other variants from that wafer batch.
- Modified simplified-structure wafers that have been produced and studied reveal new acoustic phenomena that requires further study and development.





Breaking the Barriers of Sound

Thank you
Any questions?