



Overview April 2019

# Safe Harbor

## **Forward-Looking Statements**

This presentation may contain forward-looking statements (including market opportunities and TAM; our growth; future financial results, estimates and forecasts; the performance and benefits of our products and technologies potential market and revenue opportunities, expected company product introductions and future trends in macroeconomic and industry conditions) that are based on company's estimates, theories, assumptions, expectations of current and future events that are subject to any number of risks and uncertainties. Actual results may differ materially from those projected in the presentation. Recipients of the document should make their own independent investigations, consideration and evaluations prior to making any decisions in respect to the Company.

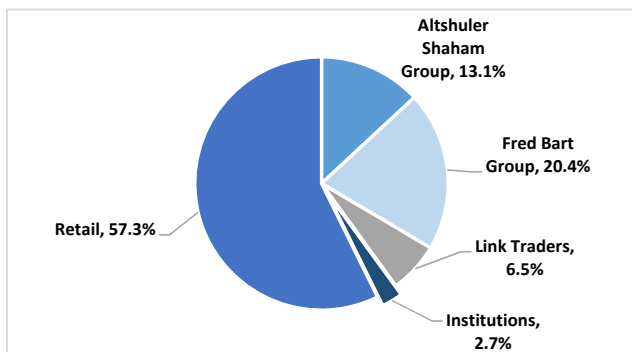
Except as required by law, Audio Pixels disclaims any obligation to update forward-looking statements to reflect future events or circumstances.



Listed Australia:	ASX: AKP
Listed USA:	OTCQN: ADPXY
Issued Capital:	28.3m
Share Price:	\$19.00
Market Cap:	\$537.7m
End Dec'18 Cash:	\$11.0m
EV:	\$526.7m

**Shareholder Information**

Fred Bart Group:	20.4%
Altshuler Shaham Group:	13.1%
Link Traders:	6.5%
Institutions:	2.7%
Top 20:	65.5%



**Corporate Information**

Founded in July 2006 – Israel

**Directors**

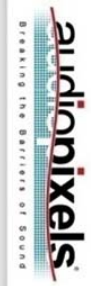
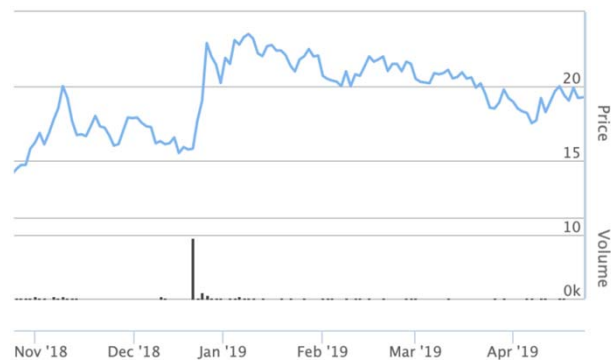
Fred Bart (Chairman / Chief Executive Officer)  
 Ian Dennis (Non-Executive Director / Company Secretary)  
 Cheryl Bart (Non-Executive Director)

**Senior Management**

Danny Lewin (CEO & Director Audio Pixels Limited)  
 Yuval Cohen (Chief Technical Officer of Audio Pixels Holdings Limited)  
 Raphael Halachmy (Director of Engineering)

**Registered Office**

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 75 Elizabeth Street  
 Sydney NSW 2000  
 Tel: +61 2 9233 3915  
 Email: [IanDennis@audiopixels.onmicrosoft.com](mailto:IanDennis@audiopixels.onmicrosoft.com)



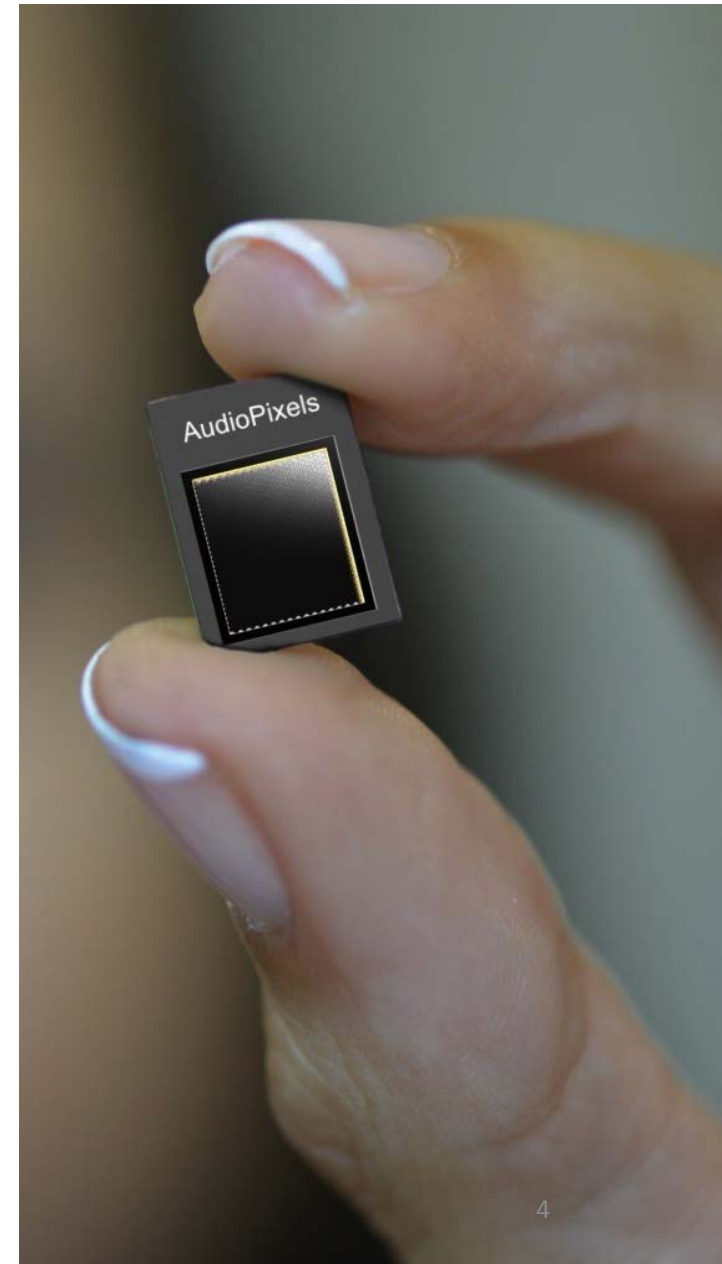


poised to revolutionize the loudspeaker market

Mobility, accessibility, design aesthetics, and environmental concerns are driving demand for smaller, higher-quality, lighter, less power-consuming sound systems, creating huge opportunities for companies producing next-generation loudspeaker technologies.

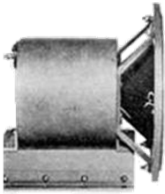
Combined with recent advances micro and nano fabrication technologies - Audio Pixels' has developed ground-breaking innovations for generating and controlling sound pressure that have made the promise of Digital Sound Reconstruction (DSR) a reality.

To help stakeholders assess existing and future opportunities, this presentation draws certain parallels from other companies and industries.



## loudspeakers

perhaps the most pervasive electronic component  
remains fundamentally unchanged for nearly 100 years!



1920s



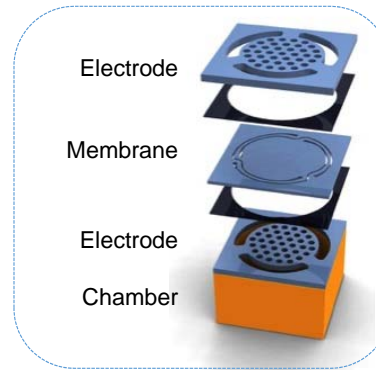
2019

Until now....

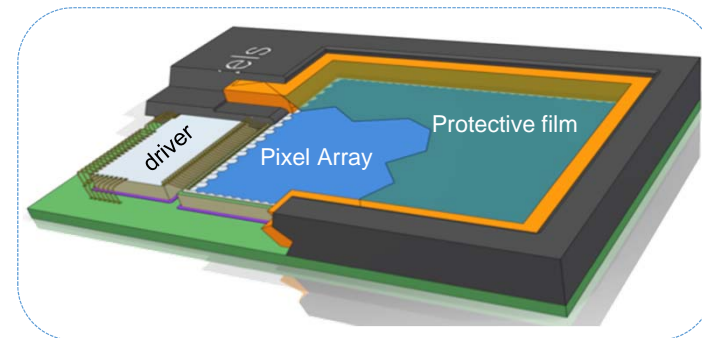
# Audio Pixels Speakers

Conventional Speaker	Audio Pixels Speaker
Electromechanical Assembly	Semiconductor Chip
Magnet	
Voice Coil	
Cone	
4-15 additional components	
DAC + Amplifier	
Enclosure or Chamber	
	<b>Surface mount</b>

## Sound Emitting Pixel

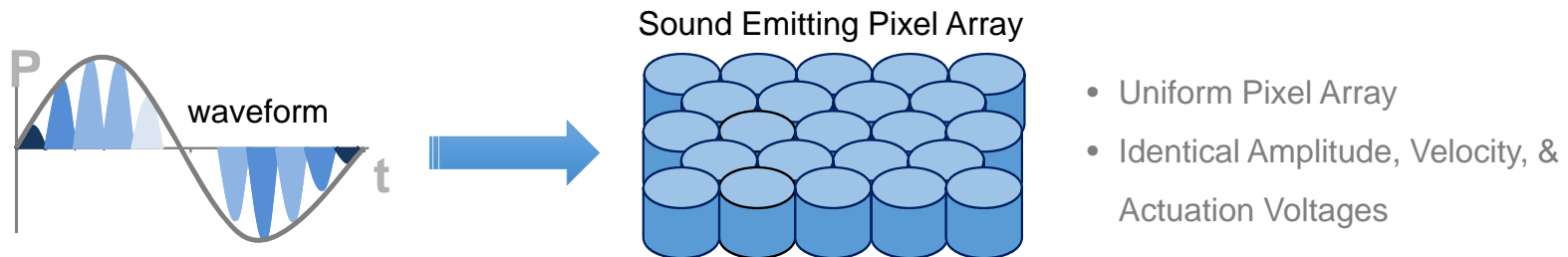


## Packaged Pixel Array

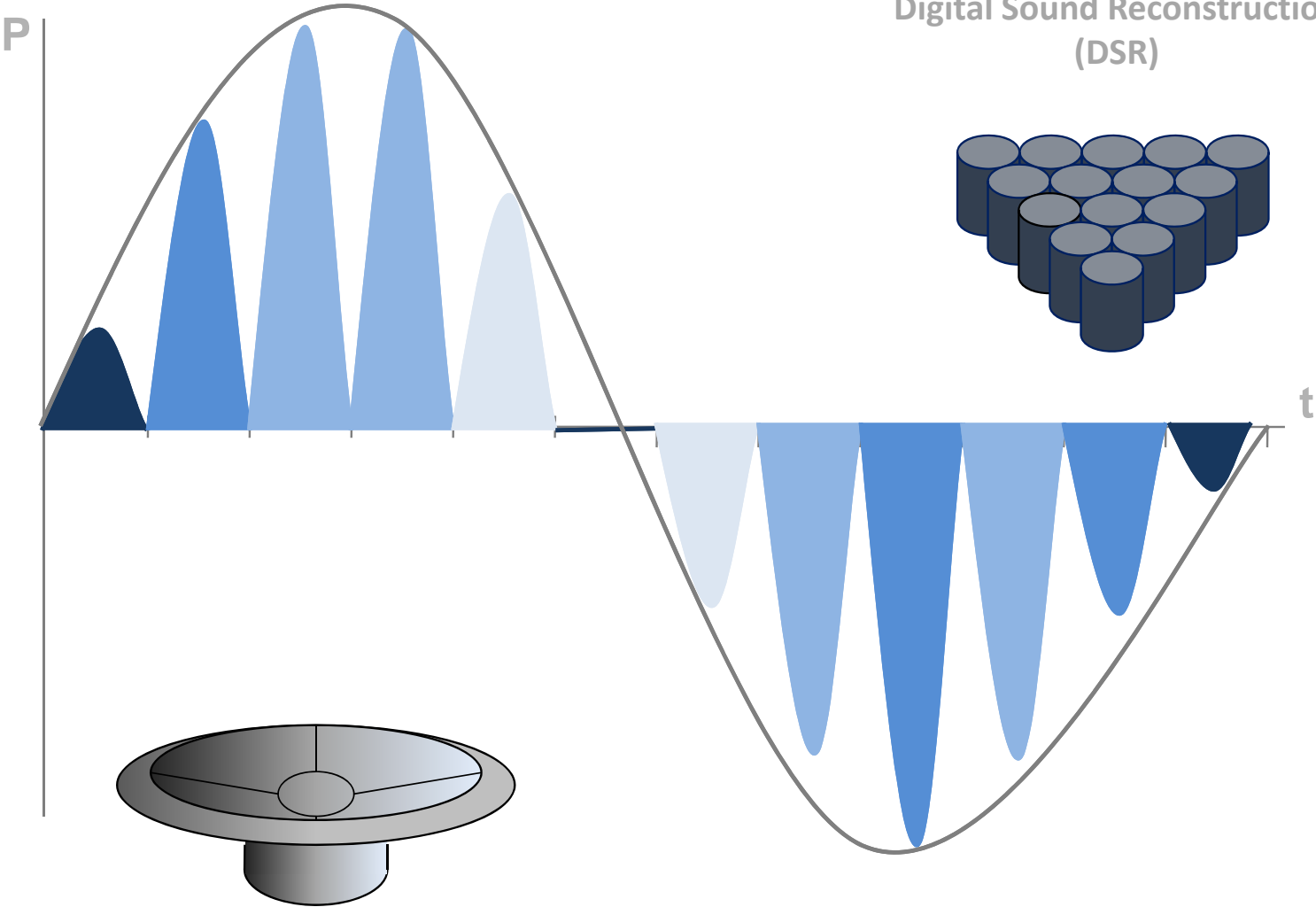


# How does it work?

Precision reconstruction of any frequency or waveform made possible by digitally controlling which Pixels actuate (or don't actuate) and any given moment

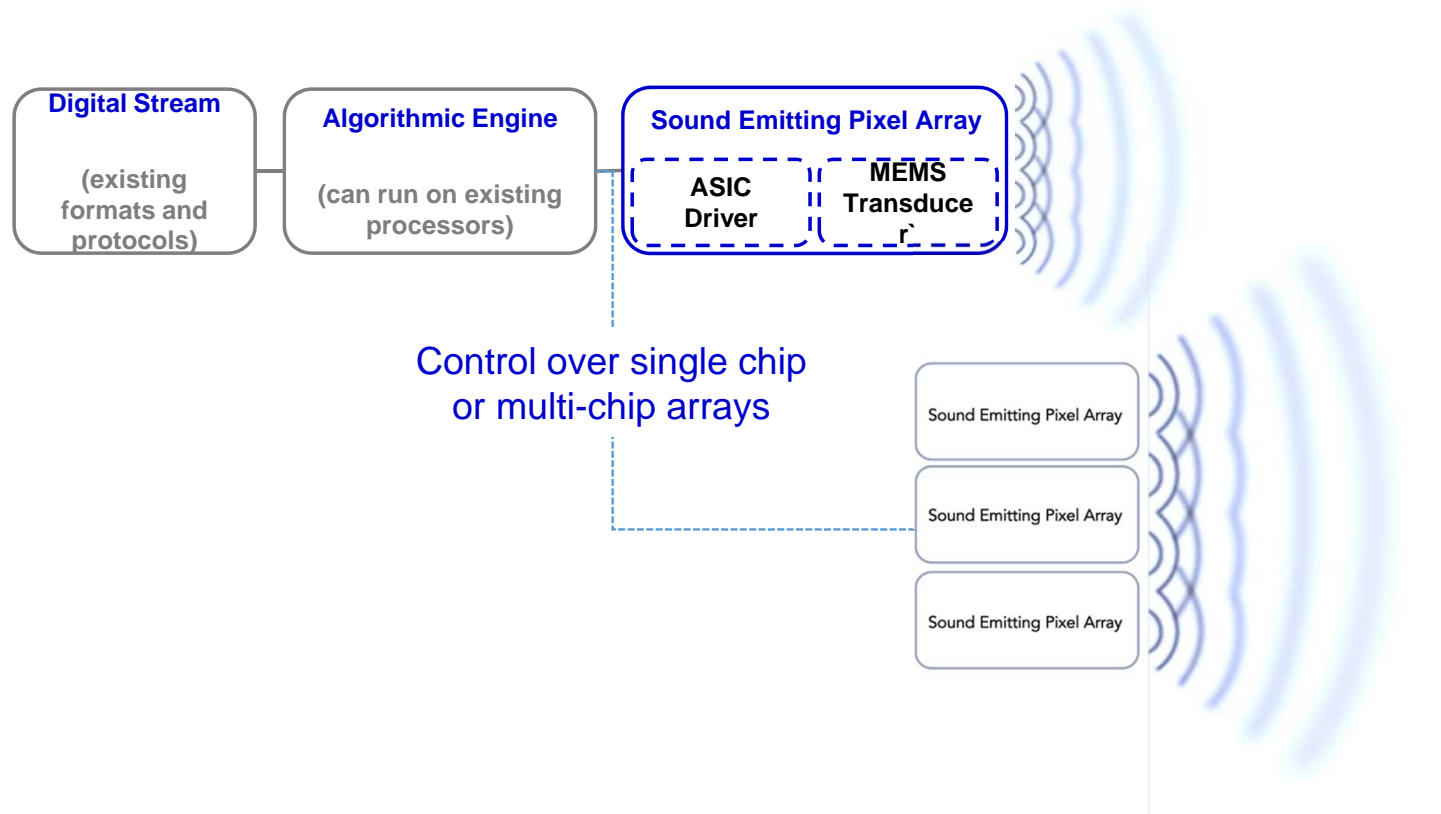


# How does it work?






# How does it work?



# Core Value Propositions

bandwidth



Additional octaves

distortion



20.0% Distortion Level    0.01% AudioPixels Distortion

What if visual distortion levels were equivalent to current sound distortion levels?

complexity

NO enclosure  
crossover  
analog circuitry  
Manual mount




programmability




Controlling acoustic output such as Directivity

form factor



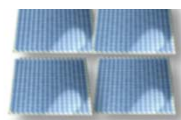
Fraction of size and weight

Power Consumption



90-98%  
less power required

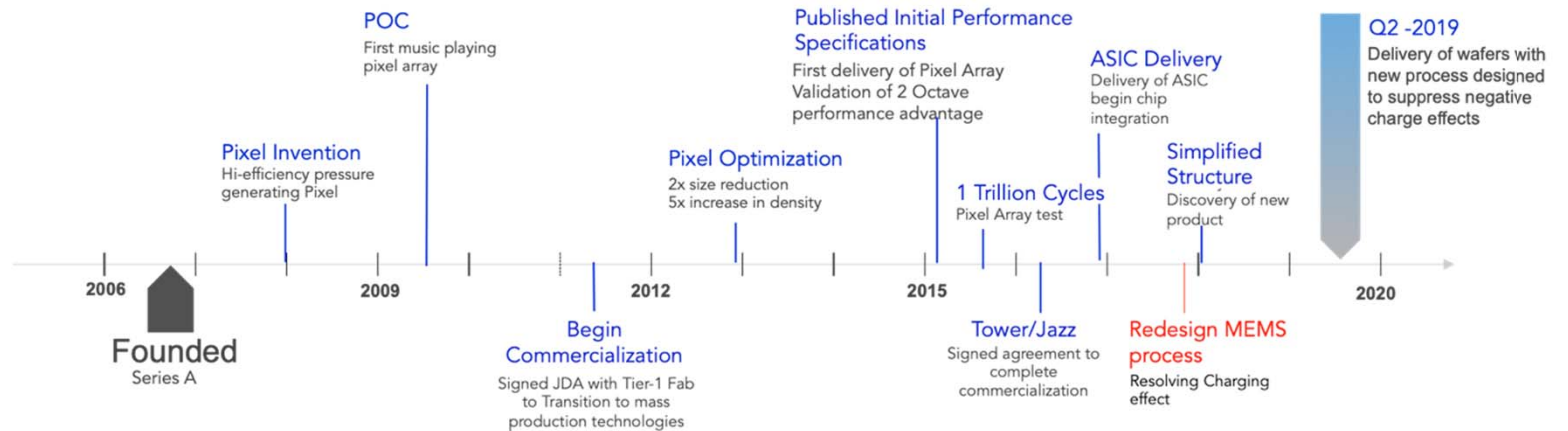
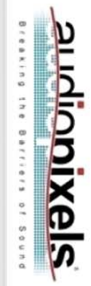
modularity



improve performance by increasing number of chips

Accumulated breath and depth of experience,  
 knowledge, knowhow, and over 130 granted patents)

- Geometric Structures
- micro-aero/fluid dynamics
- MEMS Processing
- MEMS Packaging
- Methods of actuation
- Digital timing and control
- Volume control
- Algorithms
- Audio signal processing
- Mixed signal design
- Audio Clustering



Imagine having the foresight and opportunity to realize that the red-only Light Emitting Diode (LED) invented by Nick Holonyak in 1961 would lead to \$130+ Billion annual market for displays by 2019



# Pixels

## SIGHT

### Light Emitting Pixel

PLASMA, LCD, LED, OLED, OMLED, ...

electrochemical

pixel size  $\pm 200\mu\text{m}$



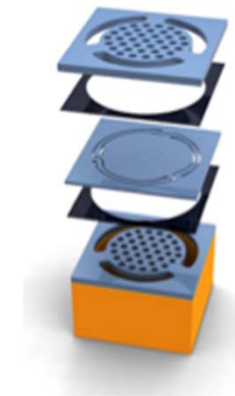
## SOUND

### Sound Emitting Pixel

SILICON MEMS

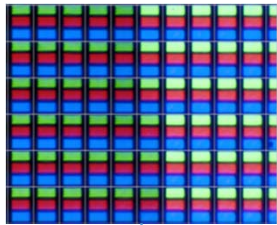
electromechanical

pixel size  $\pm 250\mu\text{m}$

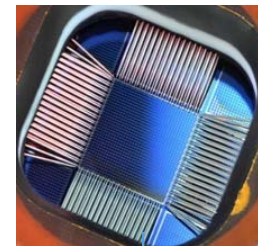


# Pixel Array

DISPLAY



SOUND



uniform pixel arrays  
semiconductor fabrication methods

PRIMARY VALUE PROPOSITIONS

performance

form factor

low power

lightweight

other

# Pixels

have (and will) transform industries

## DISPLAY

Cathode Ray Tube  
(CRT)

± 30 years

**± 4 years**

preceding / incumbent technology

invention to commercialization

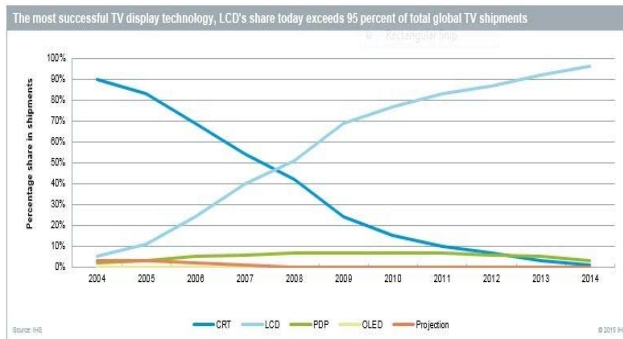
time to surpass incumbent technology

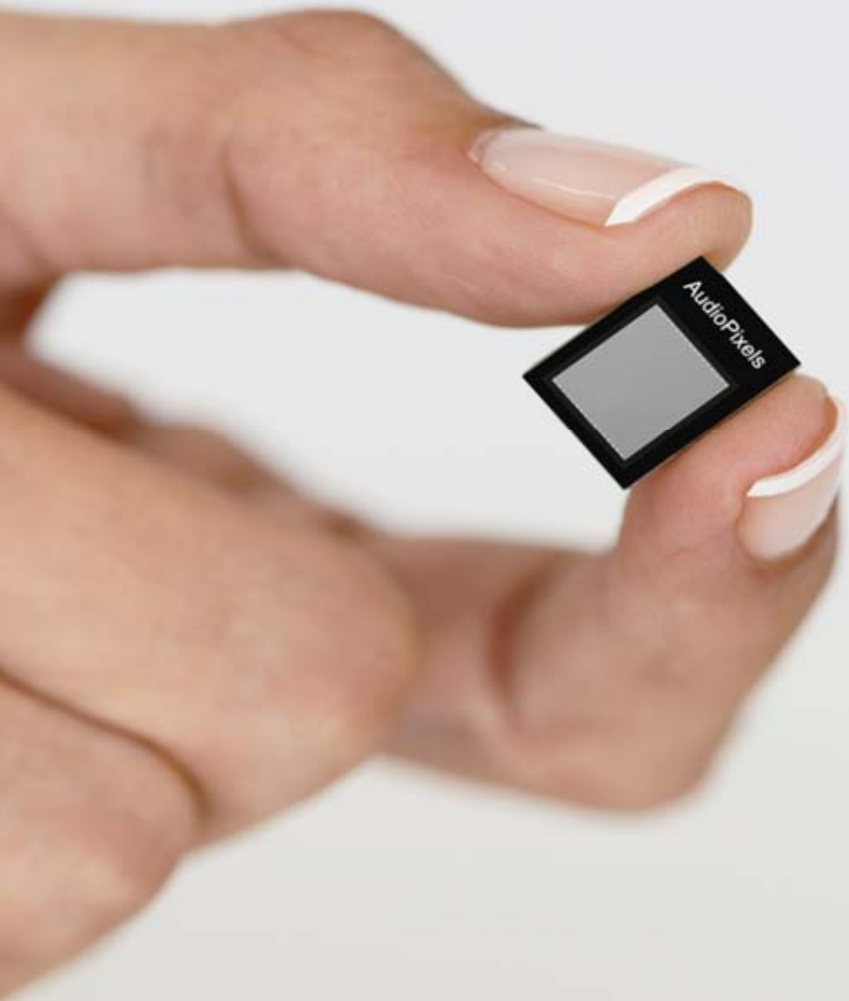
## SOUND

Electromagnetic  
Voice Coil

± 10 years

? years





# Key Takeaways

- 1 Propriety Game Changing Technology
- 2 No Direct Competition on the Horizon
- 3 Final Phase of Commercialization
- 4 Immense, Diverse and Stable Market Opportunities



# Perfect Pairing

for current and future applications and markets

Loudspeakers



DISPLAY

SOUND

Audio + Video

television & displays



mobile communications



portable computing



IoT & wearables



in-vehicle infotainment



man machine (MMI)



digital signage





Thank You