Overview

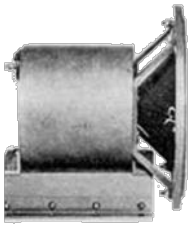
Merriman Capital Investor Summit 2012

Founded:	July 2006, Israel
Employees:	10
Management:	Chairman – Fred Bart CEO - Danny Lewin CTO – Yuval Cohen Chief Scientist – Shay Kaplan
Mission:	Revolutionize Sound Reproduction
Financial:	ASX: AKP OTC: ADPXY

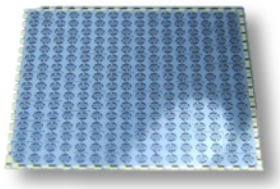
www.audiopixels.com.au

Speakers

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



1920's *2012*



AudioPixels. the world's first (and only) digital speaker chip

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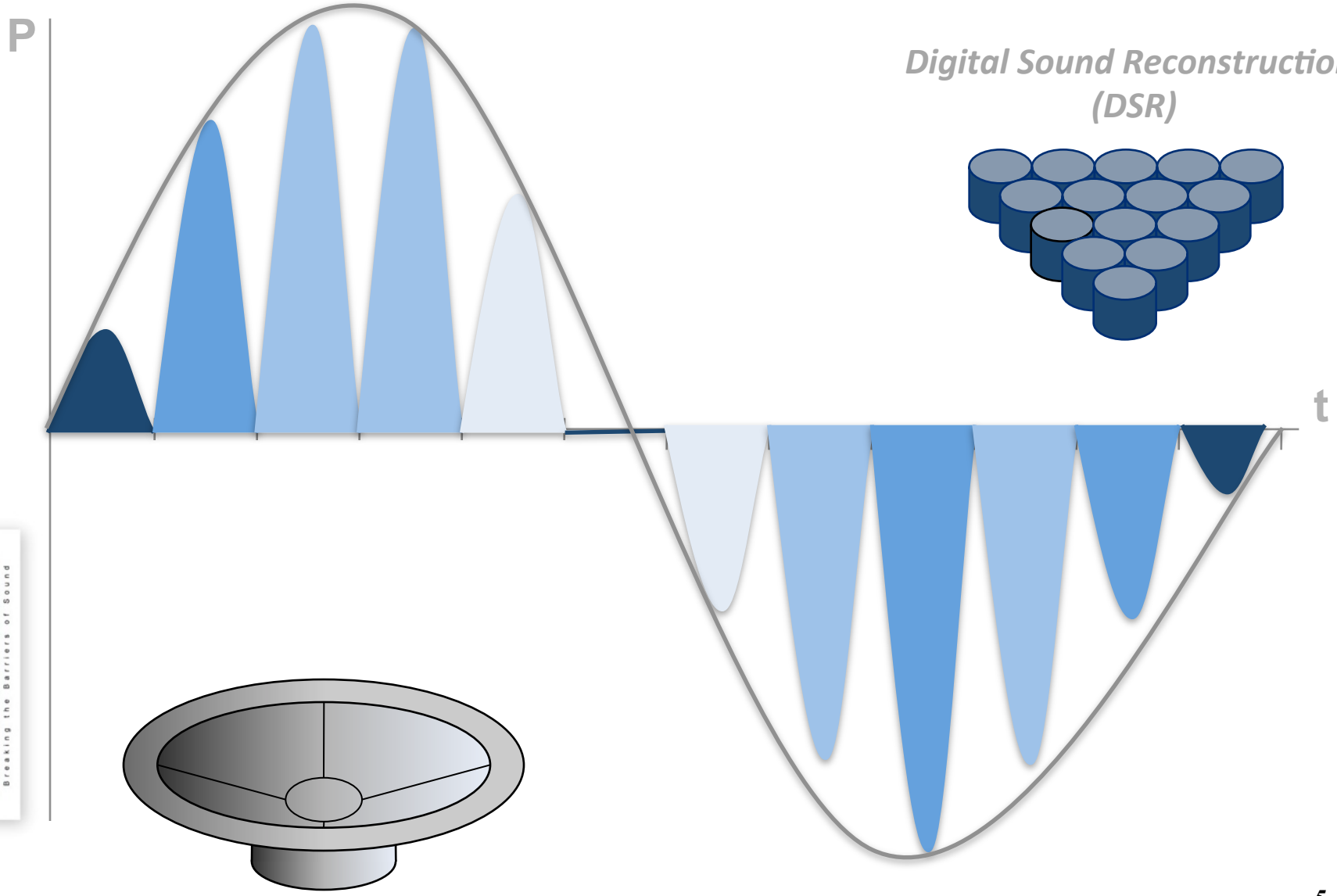
Breaking the Barriers of Sound

How does it work?



Digital Sound Reconstruction (DSR)

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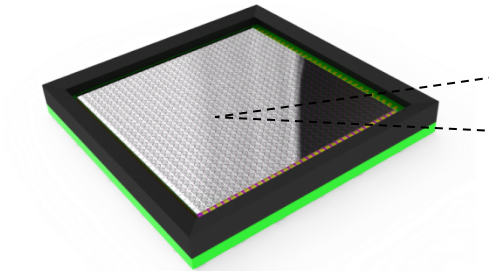
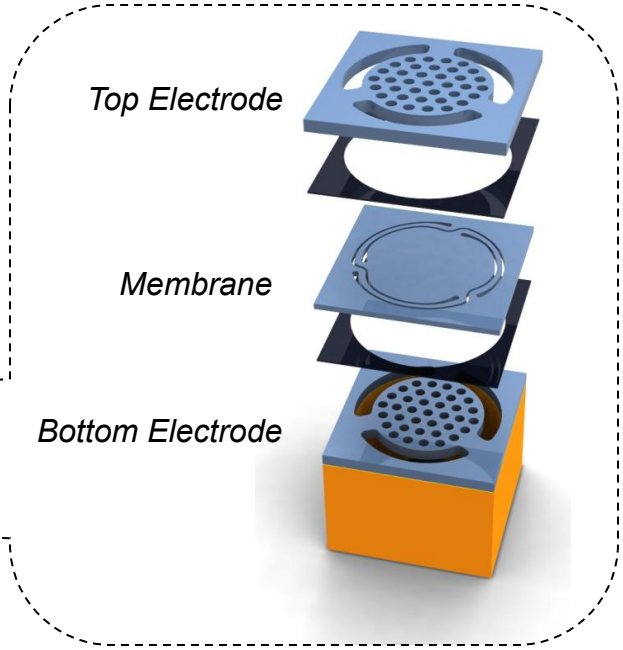
MEMS Structure

Pixel SPL is ±20dB higher than "vibrating piston" model





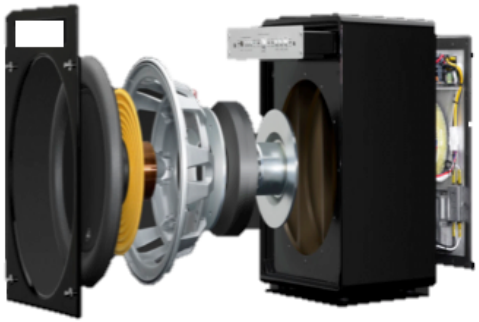
Uniform Array

- *Single moving part*
- *All the elements are identical*
- *Unique addressing scheme (Each element can be driven separately)*
- *Electrostatic Drive (No magnets)*

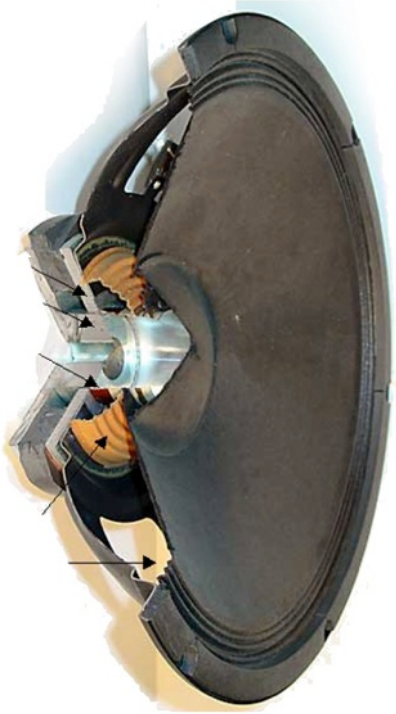
Pixels Structure

- *Element Diameter ±150um*
- *Small Amplitude (6um)*
- *Resonance frequency > 100KHz*
- *Direct Digital Stream (No DAC or Amplifier)*

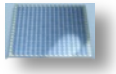
What is an Audio Pixels Speaker?



	Conventional Speaker	AudioPixels Speaker
	Electromechanical Assembly	Semiconductor Chip
Magnet	✔	✗
Voice Coil	✔	✗
Cone	✔	✗
Additional components	4-15	none
Drive Circuitry	✔	integrated
Enclosure or Chamber	✔	✗



Why?



Improve: Performance. Design Flexibility. Manufacturing Efficiency.

Reduce: Size. Power Consumption. Complexity.

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Increase performance

3

AudioPixels. hear more

Average increase in frequency range for same surface area

Increase performance

Application	Size [mm]	Volume [dB]	Frequency Range [Hz]	
			Conventional	**AudioPixels**
Mobile phone	Ø16	68	1,000 – 15,000	**100** - 35,000
LCD TV	50x150	80	100 - 16,000	**10** - 35,000
Soundbar	Ø100x2 + Ø41x21	96	100 - 20,000	**11** - 35,000
Subwoofer	Ø300	96	30 - 125	**6** - 35,000

AudioPixels. hear more

Average increase in frequency range for same surface area

Increase performance

20%
distortion level

0.01%
AudioPixels distortion

what if visual distortion levels were equivalent
to current sound distortion levels

AudioPixels. crystal clarity

immeasurable distortion

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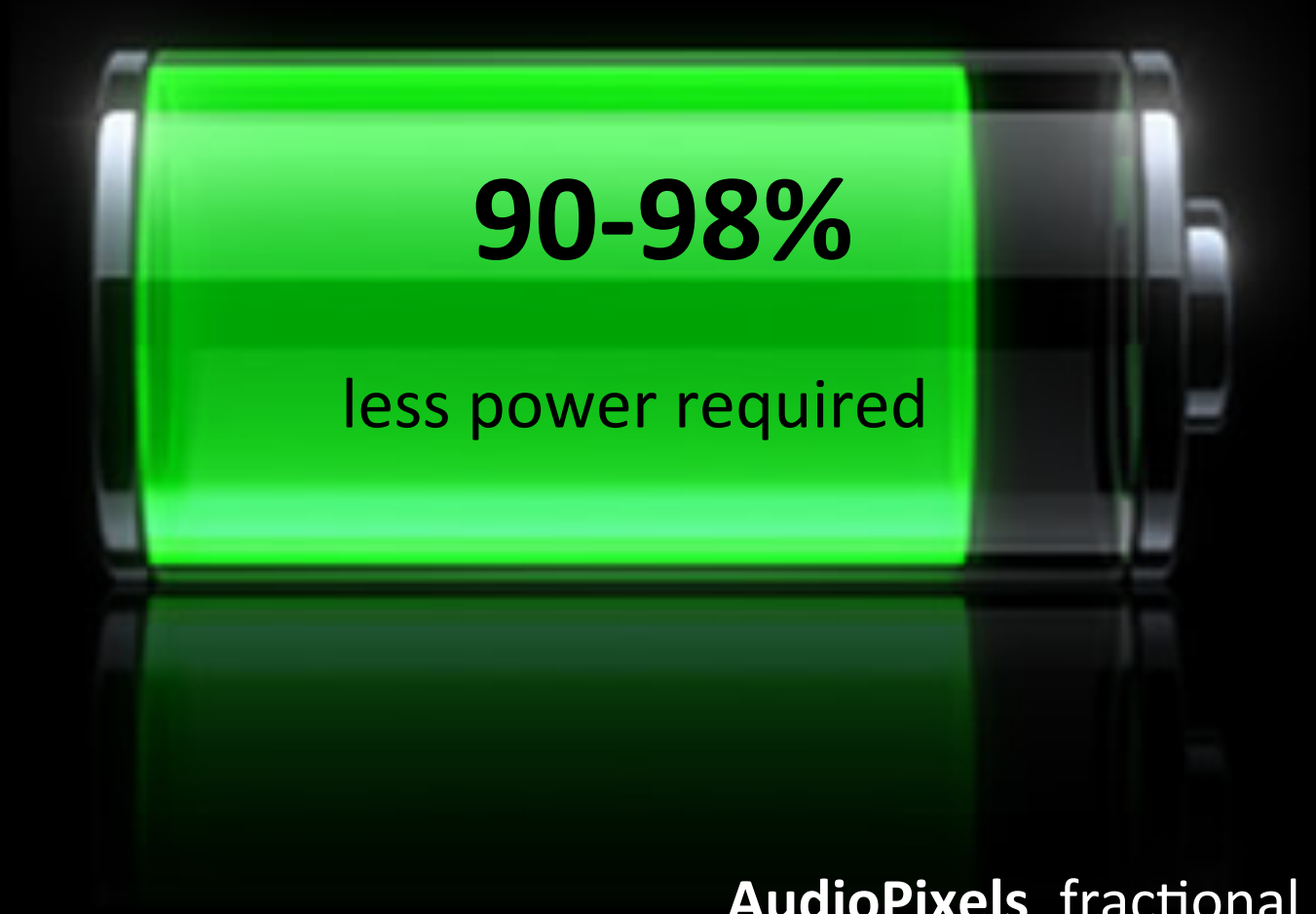
Reduced Power Consumption



AudioPixels. fractional power

A speaker with roughly the power requirements of headphone

Reduce Complexity

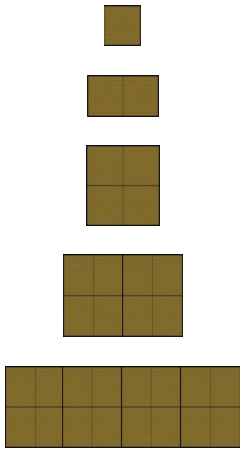
AudioPixels. simply sound

No enclosure, No crossover, No analog circuitry, surface mount

Reduce Complexity

Doubling the Number of Chips Improves Performance by:

1 Octave or 6dB

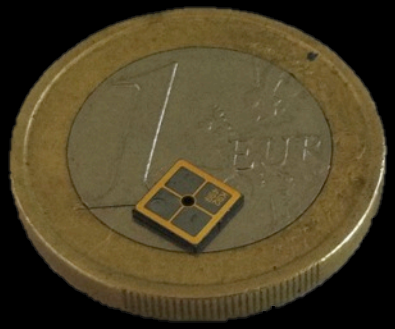


Number of Chips	70 dB	76 dB
1	400Hz – 33KHz	800Hz – 33KHz
2	200Hz – 33KHz	400Hz - 33KHz
4	100Hz – 33KHz	200Hz - 33KHz
8	50Hz – 33KHz	100Hz – 33KHz
16	25Hz – 33KHz	50Hz – 33KHz

AudioPixels. simply sound

The number of chips used determines quality and performance

Reduce Form Factor

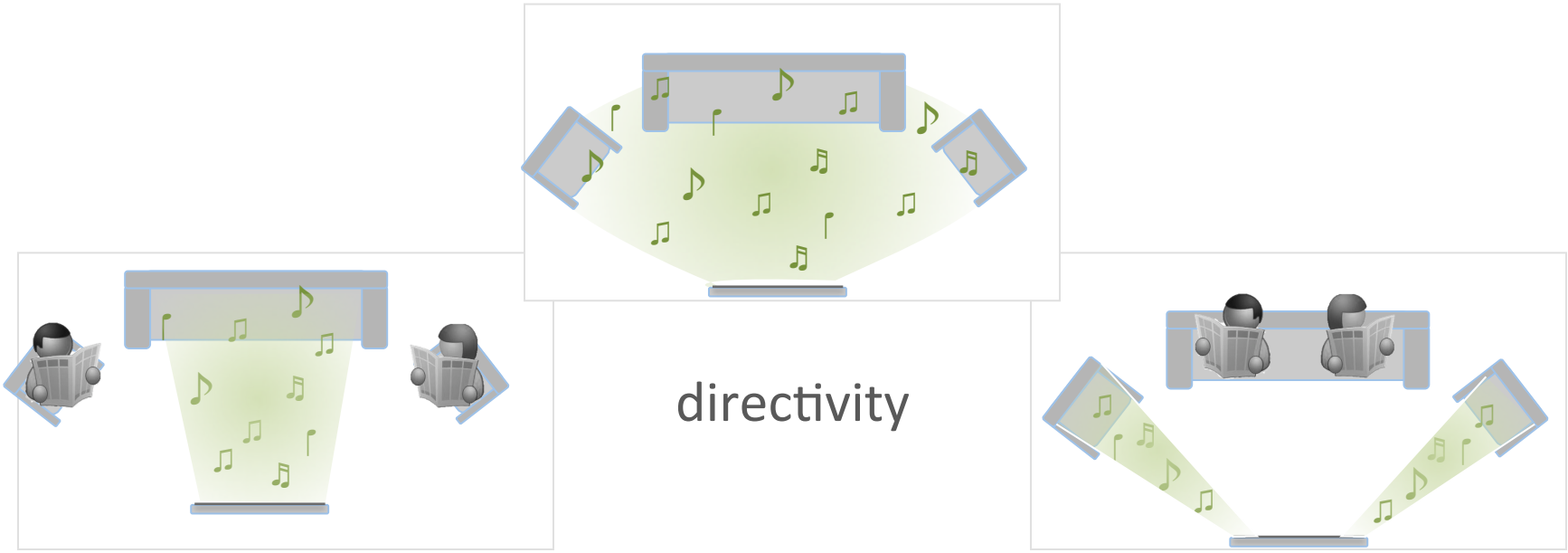


fraction of the size

AudioPixels. wafer thin – literally!

remove barriers of device design imposed by conventional speakers

Increase Design Flexibility



AudioPixels. programmable sound

A novel platform for innovation and differentiation

Audio Clustering

networking audiopixels chips in near field makes it possible to increase volume and/or bandwidth, improve position and direction of the sound

Audio Clustering example

Social Audioing

linking speakers in discrete devices to increase volume or bandwidth

72dB 78dB 84dB 90dB

AudioPixels. programmable sound

A novel platform for innovation and differentiation

The speaker market

- Colossal ever-growing market
- Speakers are used in a myriad applications
- Billions of speaker units are purchased worldwide annually
- All fidelity speakers are applicable for AudioPixels technologies.

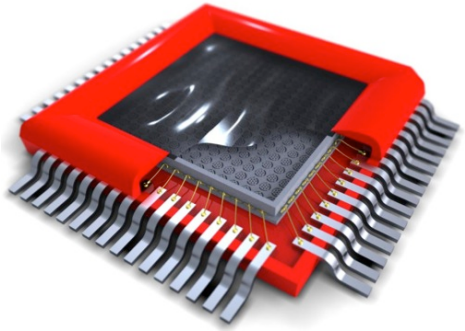




Intellectual Property

Comprehensive IP Portfolio in Multiple Fields of Application

- Geometries
- Structure
- Methods of actuation
- Actuation timing and control
- Package
- Volume control
- Signal processing
- Audio Clustering
- Additional applications in process



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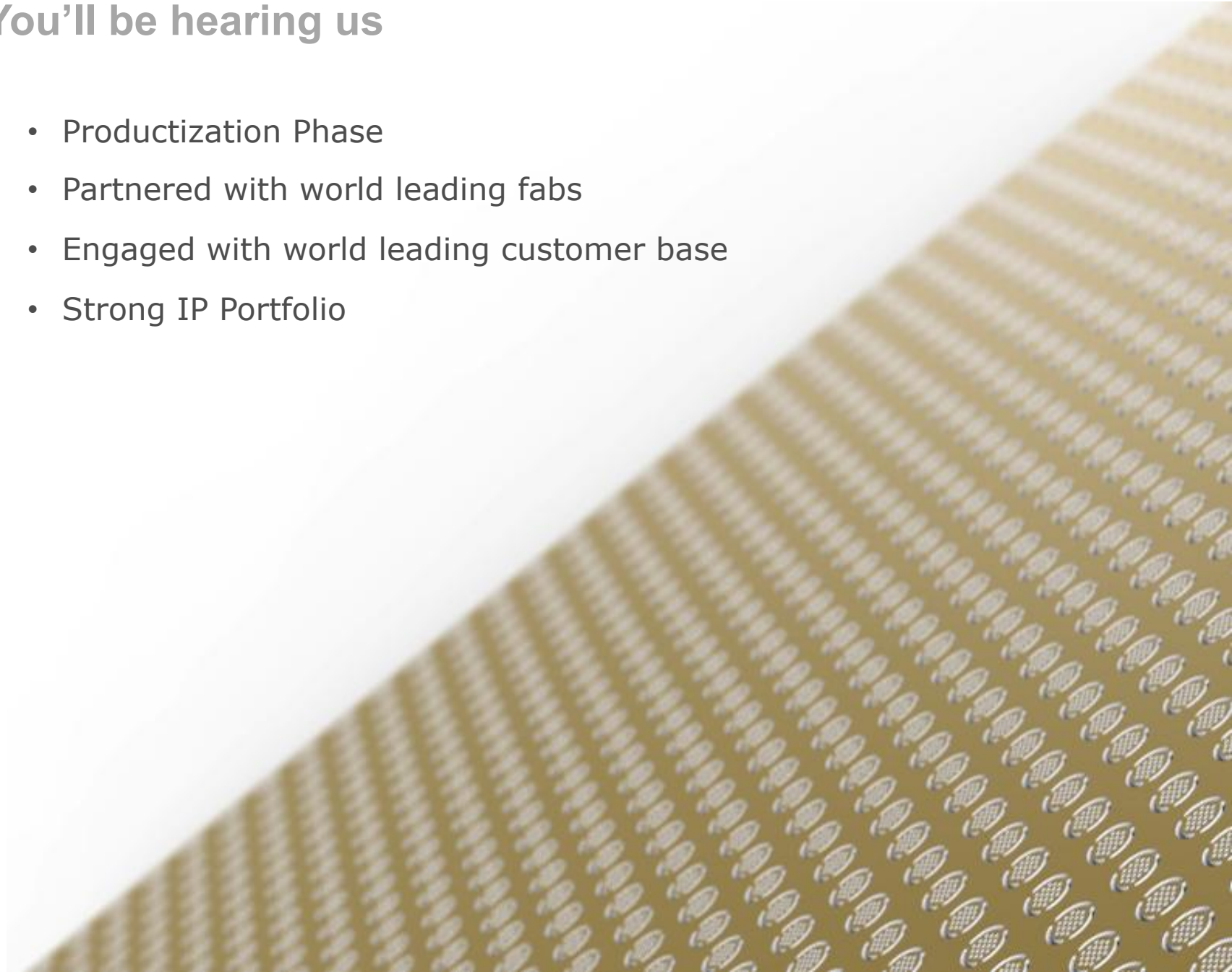
You'll be hearing us

- Productization Phase
- Partnered with world leading fabs
- Engaged with world leading customer base
- Strong IP Portfolio

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