Aspinity, Inc.

TransTech Conference

November 2016
Broad Applications for Aspinity

- IoT is big opportunity for semiconductors
- Need solutions to data and power challenge

Audio
$2B+

Touch/Proximity/Gesture
$2.8B+

Wearables/Biosensing

Industrial/Vib Monitoring
$1.4B+

Low-Power Analog Processor
Analog Solution to Power/Data Challenges

Voice Commands

Digitizing non-speech burns most “always-on” power (up to 90%)

- Why digitize **ALL** sensor data?
  - Inefficient!
- Competition stuck in digital paradigm!

Aspinity “RAMP” Development Platform

- Solution: Analyze/reduce sensor data in analog
  - Nonlinear analog replicates digital tasks
  - Drop system power by ~10X!
- Afraid of analog processing? We take care of it!
  - Precise programmable analog with on-chip calibration/biasing
  - Easy-to-program analog (similar to DSP/MCU)
Lead Product: Voice Detector
Aspinity voice detector fits in existing microphone package!

- Digitizing non-speech burns most “always-on” power (up to 90%)
- Aspinity’s analog voice detector wakes downstream ADC/DSP
  – Just 10µA current draw

<table>
<thead>
<tr>
<th></th>
<th>Voice Detection Total</th>
<th>Keyword Total (5% voice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>360µA – 1.8mA</td>
<td>400µA – 1.9mA</td>
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<tr>
<td>Aspinity</td>
<td>26µA</td>
<td>47µA</td>
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</table>

• “Drop in” solution to create “smart microphones”
Aspinity Factsheet

WVU spin out

Strong Team
- 3 PhD designers
- Industry veteran in sales/management

Innovative, Protected Technology
2 patents awarded, 4 pending

Low Burn
- Programmable prototype
- Fabless business model

“Hot startup to watch”

Broad market opportunities
Thank You!

Contact:
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www.aspinity.com

Applications:

- **Voice/Audio**
  - 10x power reduction
  - $1.81B Mkt by 2020

- **Cap Touch**
  - 10x power reduction
  - $2.8B Mkt by 2017

- **Vibration Monitoring**
  - 100x analog data compression
  - $1.4B Mkt by 2020

- **Sensor Interface & Conditioning**
  - Programmability!
  - Many ICs to replace with 1!