

# Aspinity, Inc.

TransTech Conference

November 2016

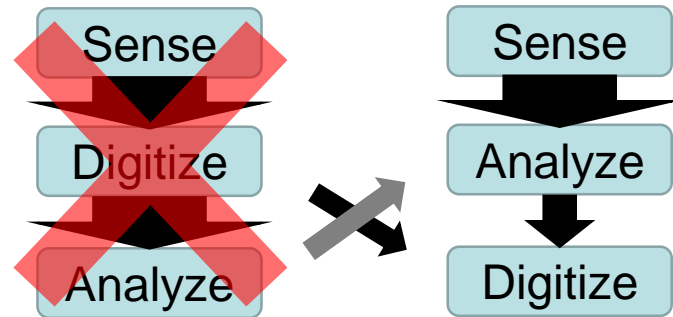


# Analog Solution to Power/Data Challenges

Voice  
Commands

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

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



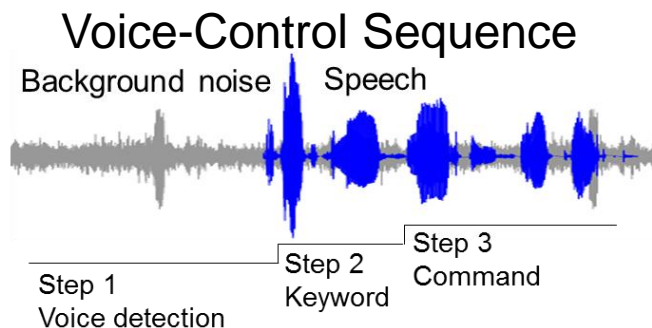
## Aspinity “RAMP” Development Platform



- 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!

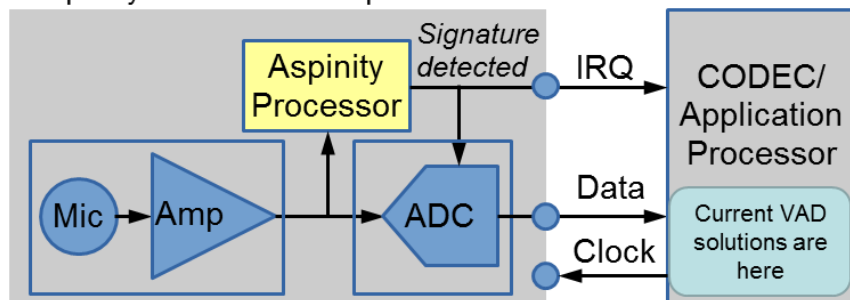


- Digitizing non-speech burns most “always-on” power (up to 90%)

- Aspinity’s analog voice detector wakes downstream ADC/DSP
  - Just 10 $\mu$ A current draw

	Voice Detection Total	Keyword Total (5% voice)
Industry	360 $\mu$ A – 1.8mA	400 $\mu$ A – 1.9mA
Aspinity	26 $\mu$ A	47 $\mu$ A

Aspinity-enabled microphone



- “Drop in” solution to create “smart microphones”

# Aspinity Factsheet



WVU spin out



## Strong Team

“Hot startup to watch”

- 3 PhD designers
- Industry veteran in sales/management

## Innovative, Protected Technology

2 patents awarded, 4 pending

## Low Burn

- Programmable prototype
- Fabless business model

Broad market opportunities

# Thank You!

Contact:

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Applications:



### Voice/Audio

10x power reduction  
\$1.81B Mkt by 2020



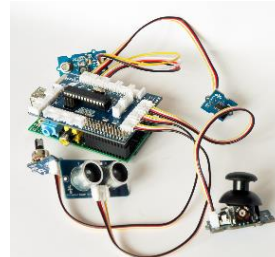
### Cap Touch

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!