

MAY 2020

# FIRST QUARTER 2020 INVESTOR CALL



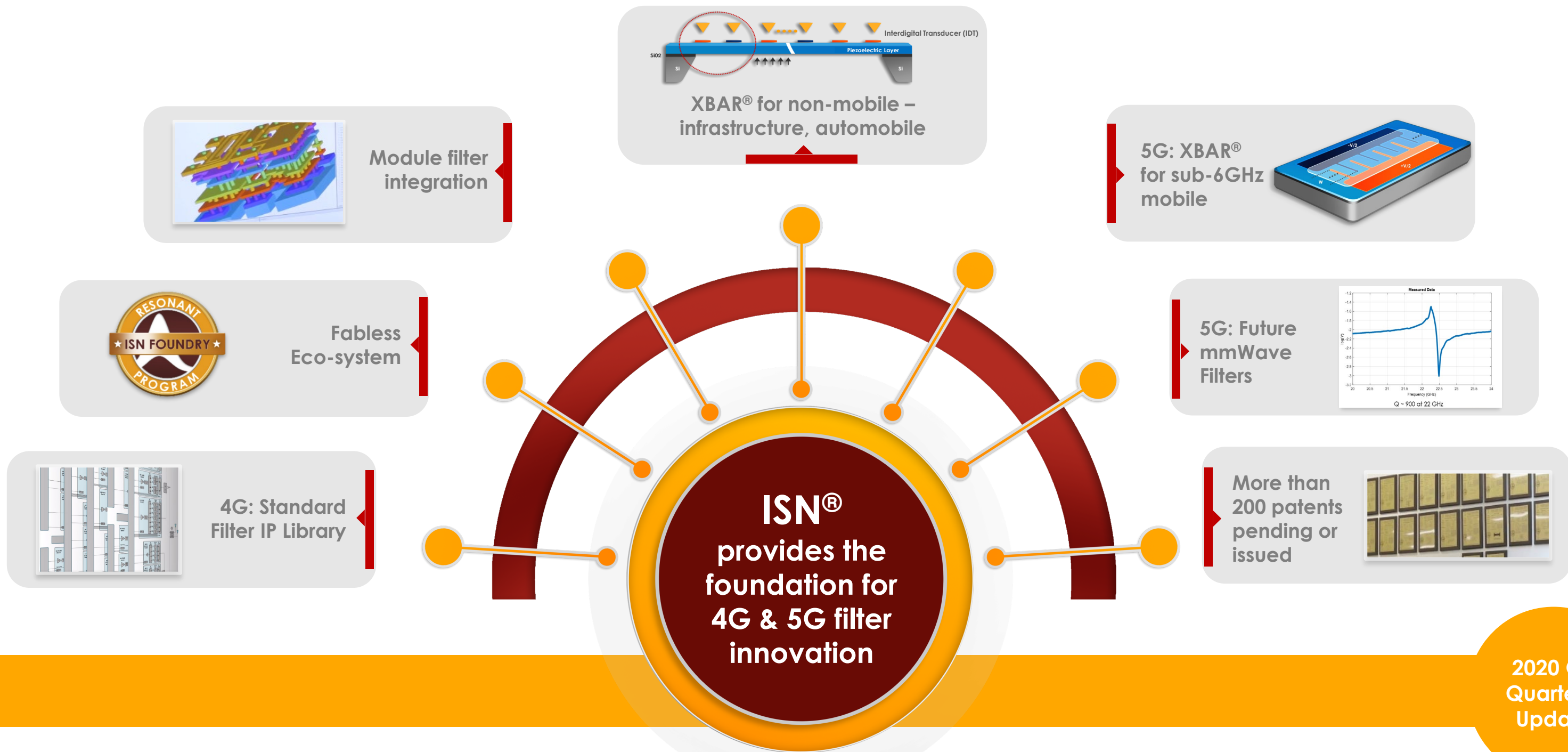
# SAFE HARBOR STATEMENT

This document contains forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. Forward-looking statements may address the following subjects among others: the status of filter designs under development, the prospects for licensing filter designs upon completion of development, plans for other filter designs not currently in development, potential customers for our designs, the timing and amount of future royalty streams, the expected duration of our capital resources, our hiring plans, the impact of our designs on the mobile device market, and our business strategy. Forward-looking statements are inherently subject to risks and uncertainties which could cause actual results to differ materially from those in the forward-looking statements, including, without limitation, the following: our limited operating history; our ability to complete designs that meet customer specifications; the ability of our customers (or their manufacturers) to fabricate our designs in commercial quantities; the ability of our customers to sell products incorporating our designs to OEMs; our dependence on a small number of customers; the ability of our designs to significantly lower costs as compared to other designs and solutions; the risk that the intense competition and rapid technological change in our industry renders our designs less useful or obsolete; our ability to find, recruit and retain the highly skilled personnel required for our design process in sufficient numbers to support our growth; our ability to manage growth; and general market, economic and business conditions. Additional factors that could cause actual results to differ materially from those anticipated by our forward-looking statements are under the captions “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our most recent Annual Report (Form 10-K) or Quarterly Report (Form 10-Q) filed with the Securities and Exchange Commission. Forward-looking statements are made as of the date of this document, and we expressly disclaim any obligation or undertaking to update forward-looking statements.

We may refer to information regarding potential markets for products and other industry data. We believe that all such information has been obtained from reliable sources that are customarily relied upon by companies in our industry. However, we have not independently verified any such information.

# ISN<sup>®</sup> DIFFERENTIATES RESN AS A PURE PLAY SOLUTIONS SUPPLIER

PROVIDING DESIGNS, IP, AND SOFTWARE TO THE RFFE MARKET



2020 Q1  
Quarterly  
Update



# BUILDING MOMENTUM IN 2020

## XBAR® EXECUTION ACCELERATES AND REVENUES GROW

### CUTTING EDGE XBAR® 5G FILTER TECHNOLOGY VALIDATED FOR NON-MOBILE

- Technology validated by worlds largest filter manufacturer
- 2020Q1 demonstrated enhanced performance
- 1.1 GHz of protected bandwidth at 6.5 GHz, delivering the full promise of broadband video to phones
- On track to deliver non-mobile 5G samples in the first half of 2020

### ISN® TECHNOLOGY PLATFORM AND BUSINESS MODEL VALIDATED

- PMTx is ready to deploy to two customers once travel restrictions are lifted, expect late 2020Q2 installation
- CEMx is expected to be integrated into design flow in 2020Q2

### FIRST QUARTER 2020 BUSINESS HIGHLIGHTS

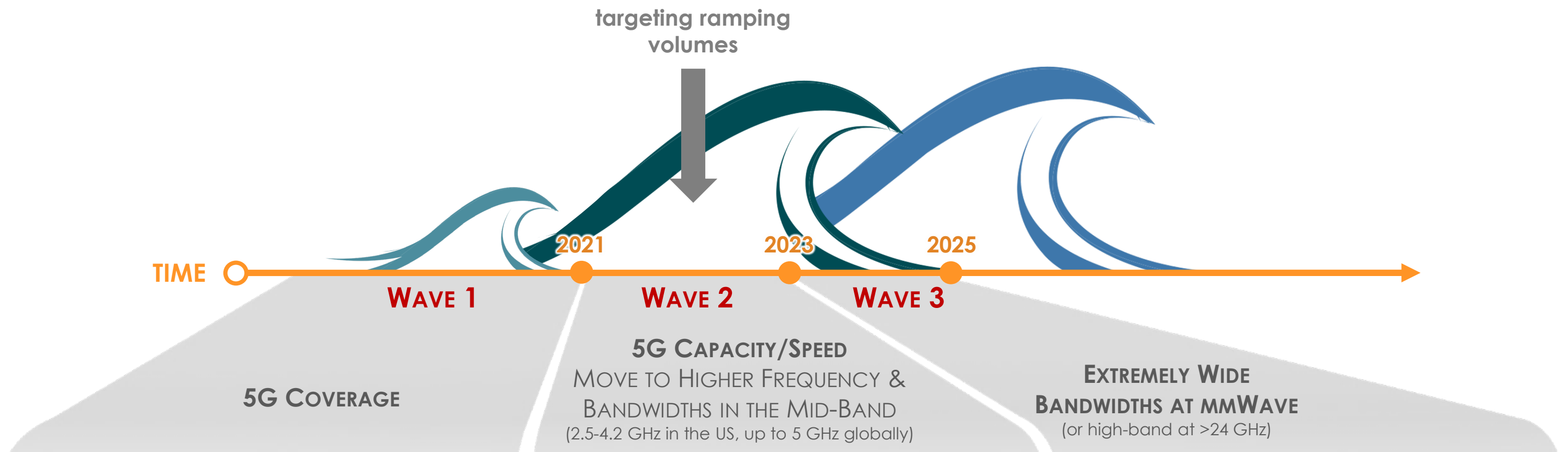
- Agreement with new Tier 1 Chinese foundry - high volume, lower cost focused on Chinese handset market
- Focus on high performing customers, cutting ~\$5M of costs out of annualized run rate and transitioning current fabless customers to new Chinese high-volume foundries
- Sequential revenue growth demonstrates momentum in business
- 2020Q1 institutionally dominated public offering yielded \$26.3M in net proceeds – and no debt

## BUSINESS VALIDATION SETS FOUNDATION FOR GROWTH

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# 5G FIRST WAVE IS HERE

## EXPANSION TARGETED FOR 2021/2022



**Mobile:** World's largest filter manufacturer poised to intercept Wave 2

**Non-Mobile:** 5 GHz and 6 GHz WiFi filters poised for new Tier One engagements

**BREAKTHROUGH TECHNOLOGY POISED TO DISRUPT THE INDUSTRY**

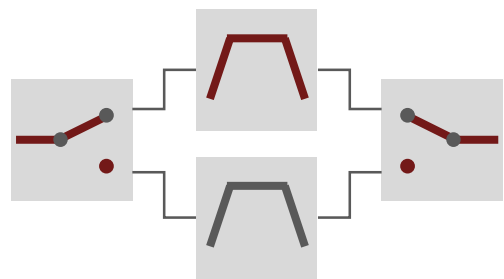
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# CHALLENGE WITH EXISTING BAW SOLUTIONS

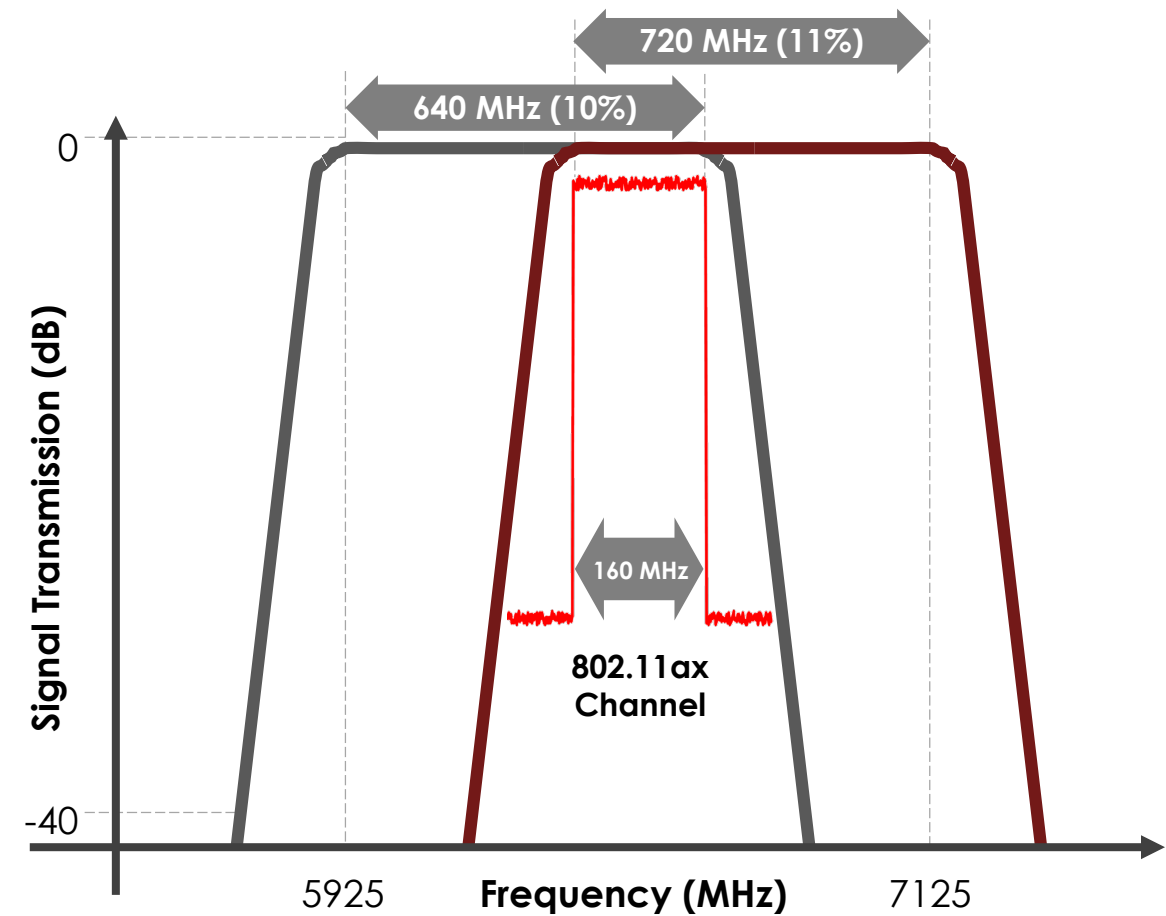
## INSUFFICIENT BANDWIDTH FOR 3-7 GHz BANDS

### ScAIN BAW SOLUTION

\$\$\$ Requires sub-banding, increasing cost, area, and loss

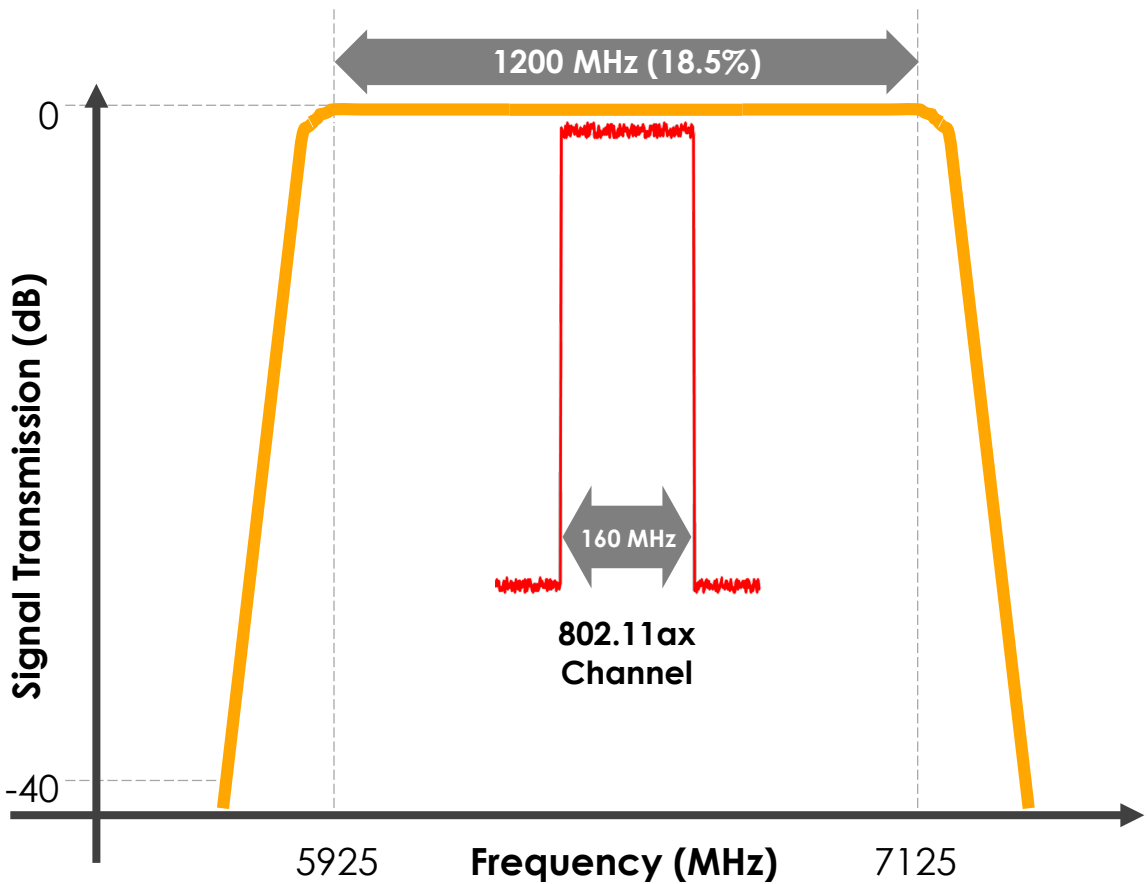


Vendor	DPX Share*
AVGO	20%
QCOM	12%
SWKS	11%
QRVO	6%
AKTS	~0%
Total	49%



### XBAR® SOLUTION

\$ Native wide-band capability easily covers full Wi-Fi 6E band.  
Embraced by world's largest RF filter manufacturer with 35% market share\*



# XBAR® MEETS 5G AND WIFI REQUIREMENTS

## RESONANT'S XBAR® AND DEEP IP PORTFOLIO

### XBAR®: RESN's revolutionary BAW resonator structure developed using ISN®

- Manufactured using standard SAW processes
- Higher native operating frequency (3-7 GHz)
- 4x wider operating bandwidth, up to 24%
- Delivering bandwidth and throughput (HD video)
- Enables more network capacity
- Delivers the 5G consumer experience



### IP Portfolio

- >220 patents pending or issued
- >60 patents pending covering XBAR® and related high frequency technologies
  - First XBAR® patents issued

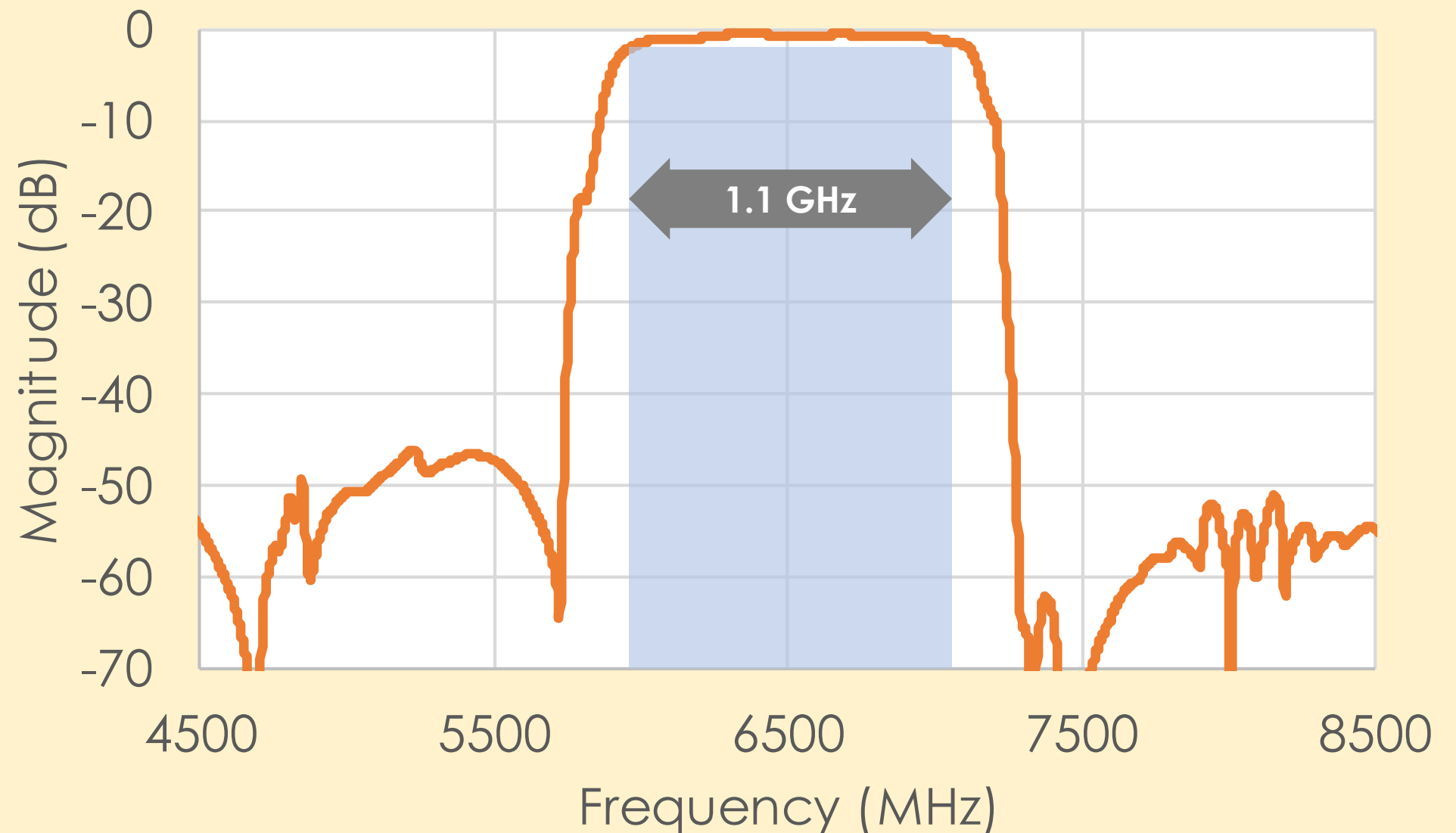
**BREAKTHROUGH TECHNOLOGY POISED TO DISRUPT THE INDUSTRY**

# XBAR® UPDATE: NON-MOBILE

February 2020

## LATEST RESULT

- Measured 1.1 GHz bandwidth centered at 6.5 GHz
  - 17% bandwidth
  - Nearly double 2019 results
- Minimum loss < 1.0 dB
- Rejection > 40 dB across neighboring Wi-Fi spectrum



FIRST ACOUSTIC WI-FI BANDPASS FILTER DEMONSTRATING GREATER THAN 1 GHz BANDWIDTH

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# 4G SEES FURTHER COMMODITIZATION, REMAINS HUGE PART OF DEMAND

## RESONANT'S ISN<sup>®</sup> AND FOUNDRY PROGRAM

### FOUNDRIES & STANDARD PRODUCTS DOMINATE 4G ROADMAP

- Standard RF filter designs from ISN<sup>®</sup> platform
  - Lower costs and reduce time to market
  - Efficient supply chain
- Agreement signed with Tier 1 foundry, complimenting existing contracts with other Tier 1 IDMs in China
- Pre-paid royalty improves predictability of revenue

### EARLY CUSTOMER ENGAGEMENTS CONTINUE TO CONVERT

- Existing custom designs continue with existing customers
- Volumes continue and new devices are expected to start shipping in the second and third quarters
- ASP's continue to decline, shift to standard products

**EARLY CUSTOMER VALIDATION OF ISN<sup>®</sup>, ENABLES PATH FOR FUTURE**

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# ADVISORY BOARD

**Clint Brown**  
Advisor



**Rubén Caballero**  
Advisor &  
Board Member



**Brian Crutcher**  
Advisor



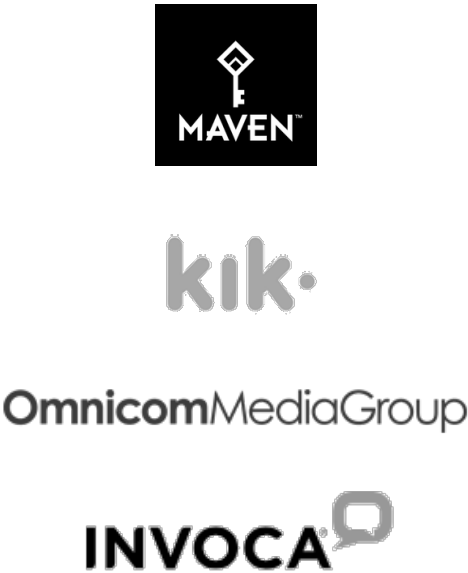
**Luis Pineda**  
Advisor



**Jeff Ball**  
Advisor



**Josh Jacobs**  
Advisor &  
Board Member



KEY INDUSTRY, FINANCIAL & STRATEGIC THOUGHT LEADERS

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# FINANCIALS

## RESONANT'S CAPITALIZED AND POSITIONED TO DELIVER FOR SHAREHOLDERS

	Three Months Ended	
	March 31, 2020	March 31, 2019
Billings	\$282 K	\$54 K
Deferred Revenues	\$1.5 M	\$204 K
<b>REVENUE</b>	<b>\$544 K</b>	<b>\$134 K</b>
<b>OPERATING EXPENSES</b>		
Research and development	\$5.5 M	\$4.4 M
Sales, marketing and administration	\$3.1 M	\$3.0 M
<b>OPERATING LOSS</b>	<b>(\$8.1 M)</b>	<b>(\$7.2 M)</b>
<b>NET LOSS</b>	<b>(\$8.0 M)</b>	<b>(\$7.1 M)</b>
NET LOSS PER SHARE – BASIC AND DILUTED	(\$0.18)	(\$0.26)
Weighted average shares outstanding - basic and diluted	43.8 M	27.5 M
Adjusted EBITDA (non-GAAP)	(\$6.4 M)	(\$5.6 M)
NET EBITDA PER SHARE – BASIC AND DILUTED (non-GAAP)	(\$0.15)	(\$0.20)
Cash and cash equivalents and investments	\$29.6 M	\$15.2 M

# SUMMARY

## INDUSTRY LEADING CAPABILITIES

Demonstrated first 5G filters to achieve bandwidths required by 5G.

## LARGE AND GROWING MARKET

Targeting largest segment of the RF Front-End market, filters are expected to nearly double to \$28B by 2025.

## ROBUST TECHNOLOGY AND IP

>220 patents filed or issued and >60 for high-frequency 5G-targeted devices.

## PROVEN MANAGEMENT TEAM

Leadership team that has a proven ability to deliver.

## VALIDATION OF TECHNOLOGY

Partnership with world's largest RF filter manufacturer and strong traction with additional existing customers.

## ESTABLISHED FOUNDRY PROGRAM

Designed to expand market by allowing component suppliers ease of entry at low cost; multiple foundry partners including China-focused partner.

## STRONG BALANCE SHEET

Well-positioned with a strong cash position.\* No debt.

**XBAR® AGREEMENT AND FINANCING POSITIONS RESONANT FOR SUCCESSFUL 2020**

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**RESONANT®**

\*assumes minimal disruption to Resonant and its customers by COVID-19 pandemic.

**NASDAQ: RESN | 12**



**THANK YOU**

