

SEPTEMBER 2020

INVESTOR PRESENTATION



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.



SOLVING CRITICAL RF
PROBLEMS BY PROVIDING
DIFFERENTIATED SOLUTIONS
FOR THE LARGEST SEGMENT¹
OF THE RFFE (RF FRONT-END)
MARKET



GROWTH DRIVEN BY PROVEN INDUSTRY-LEADING TECHNOLOGY

UNPARALLELED DISRUPTIVE TECHNOLOGY

- **ISN®**: proprietary software platform revolutionizes filter design
 - Enables high-performance, low-cost and fast time-to-market
- **XBAR®**: revolutionary BAW (bulk acoustic wave) resonator
 - Critical for 5G filters

DIVERSIFIED GROWTH PLATFORM

- **Multiple revenue streams**
 - ISN-enabled 4G filter solutions, standard IP library, **break-out royalty growth** from XBAR and other high frequency-enabled 5G products
- **Foundry Program**
 - ISN-generated filter designs from stable, low-cost supply chain

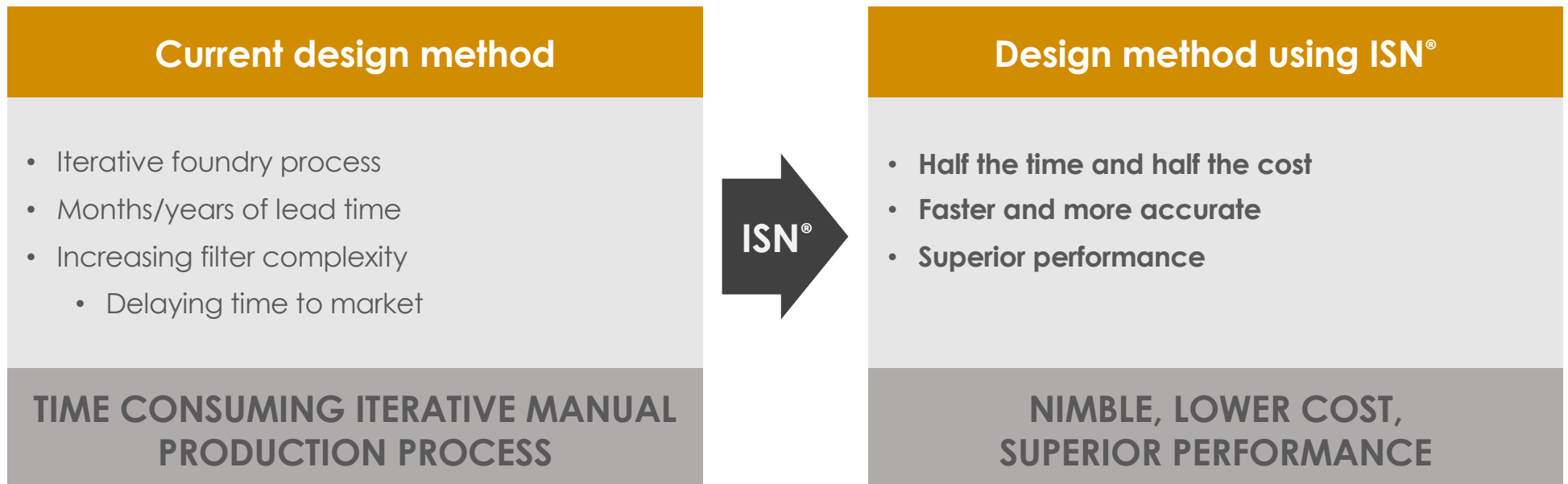


TECHNOLOGY ADDRESSES FASTEST GROWING FILTER MARKETS

THE CORNERSTONE FOR RESN TECHNOLOGY

RESONANT'S ISN[®]

- **ISN** revolutionizes filter design
- Enables **low-cost** SAW fabrication with **superior performance** and **faster time-to-market**
- No comparable acoustic wave filter design tool exists



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

- >250 patents pending or issued
- >85 patents pending covering XBAR® and related high frequency technologies
 - First 4 XBAR® patents issued

BREAKTHROUGH TECHNOLOGY POISED TO DISRUPT THE INDUSTRY

DIVERSIFIED REVENUE STREAMS

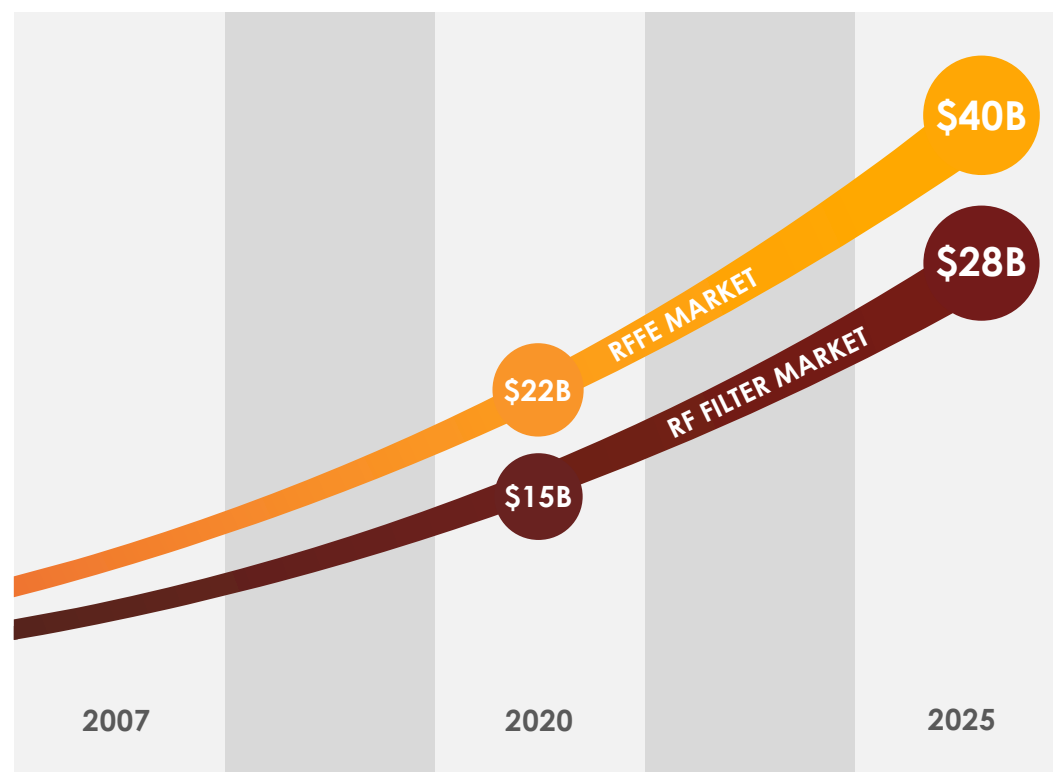
TARGETING HIGH-GROWTH MARKETS

COMPLEMENTARY REVENUE STREAMS:

- 1 Custom & library designs:**
Royalty per unit shipped
- 2 Cutting-edge, off-the-shelf designs:** Prepaid royalty
- 3 Foundry supply chain:**
Licensing revenue and white label sales

LEVERAGING DIVERSIFIED PRODUCT PORTFOLIO,
REVENUE STREAMS, AND ENGAGEMENTS

RFFE Components Market



RESONANT®

¹ Source: Yole Developpement.

NASDAQ: RESN | 7

DIVERSIFIED REVENUE STREAMS

HIGH-GROWTH MARKETS | 5G

XBAR®

- Filters in development with industry leader
- High-bandwidth, high-power needed for 5G applications
- Low-cost manufacturing techniques
- First non-mobile samples delivered in first half of 2020

5G

MARKET REALITY

- Increased number and more complex filters
 - More than 100 filters¹ per phone
 - Fastest growing segment of the RFFE market, \$15 billion today to \$28 billion in 2025²

SOLUTION

XBAR®

- Proprietary technology, >85 patents filed & issued
- Demonstrated industry-leading performance
- Solutions for mobile and infrastructure

DELIVERING DESIGNS THAT MEET THE EXACTING DEMANDS FOR ENTIRE WIRELESS SPECTRUM



R E S O N A N T®

¹ Sources: Projections based on Yole Developpement, Navian, Resonant Management estimates.

² Sources: Yole Developpement.

NASDAQ: RESN | 8

DIVERSIFIED REVENUE STREAMS

HIGH-GROWTH MARKETS | 4G

Disruptive supply chain – Foundry Program

- Low-cost solutions with high performance

Multiple revenue streams from existing players and new entrants

- Foundry partners leveraging Resonant's off-the-shelf designs, ISN tools, and services

4G

MARKET REALITY

Transition to 5G drives continued 4G RFFE market growth

- Majority of mobile filters remain 4G
 - Market will commoditize
 - Re-farming of 4G spectrum
 - 4G provides backstop for 5G coverage

SOLUTION

Infinite Synthesized Networks (ISN®)

- High volume of designs
- Off-the-shelf designs and foundry model
 - Low cost and high-quality

COMMODITIZING OF 4G FILTERS REQUIRES NEW SUPPLY CHAIN MODEL

FOUNDRY PROGRAM

TRANSFORMING THE MOBILE FILTER SUPPLY CHAIN

- Growing addressable market
 - Enables new market entrants access to high-quality, low-cost RF filters
- Stable and experienced supply chain
 - 5 filter companies currently comprise 80% of fab market¹
- Leverage Resonant's design portfolio
 - Complex duplexers and quadplexers
 - Fast and predictable delivery times



SAWNICS



wave^{te}tek



MOMENTUM ACCELERATES

NOTABLE TRACTION IN THE MARKET

WORLD'S LEADING RF FILTER MANUFACTURER

- In 2019, the world's leading RF filter provider entered into a \$9M commercial agreement with Resonant for the rights to develop multiple designs using Resonant's XBAR technology
- Upon signing the agreement, the customer completed a \$7M investment in Resonant

“ **XBAR technology** is expected to achieve **higher frequency and superior performance** to other filter technologies, in **particular for new 5G filter requirements**

SVP of Customer

RESONANT CONTINUES TO TARGET
WIFI/CPE AND INFRASTRUCTURE (SMALL
CELL) APPLICATIONS FOR XBAR

TIER 1 CHINESE FOUNDRY

- In January 2020, Resonant signed multiple license agreements for prepaid royalties and upfront payments with a new China-focused filter foundry partner
- Customer licensing Resonant's Process Monitoring Tool (PMTx) module of ISN

“ Resonant's **technology and expertise** will help us build our complete technology **foundation** for providing full filter technology foundry service to global fabless and OEM customers

CEO of Foundry Partner



RESONANT®

Sources: Resonant press releases.

WHY RESONANT?

TRUE 5G COMPATIBILITY

XBAR technology is THE ONLY technology that has showcased the ability to innately meet the complex requirements of “True” 5G applications

ROBUST TECHNOLOGY AND IP

>250 patents filed or issued and >85 for high-frequency 5G-targeted devices

PROVEN MANAGEMENT TEAM

Leadership team that has a proven ability to deliver to shareholders, billions in transaction value

LARGE AND GROWING MARKET

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

TECHNOLOGY VALIDATED

Strategic partnership with world's largest RF filter manufacturer (bigger than the 2nd and 3rd players combined)

ESTABLISHED FOUNDRY PROGRAM

Business model that significantly expands the filter market by allowing component suppliers ease of entry at low cost (first of its kind program)

STRONG BALANCE SHEET

Strong cash balance, no debt

BETTER, CHEAPER & FASTER

Our ISN platform enables us to create filter designs that save money, resources & time, while solving complex challenges that are otherwise not possible

EXECUTIVE TEAM



George B. Holmes

**Chairman
& CEO**

30+ years leadership in sales & marketing and management



Marty McDermut

CFO

30+ years in financial and accounting management; CPA



Dylan Kelly

COO

20+ years in engineering, product marketing and manufacturing



Marybeth Carberry

**EVP of Business
Operations**

20+ years in sales operations and finance management



Neal Fenzi

**CTO
& Co-Founder**

20+ years in engineering, operations and marketing positions at STI; BSEE



THANK YOU

