# SPECTR/7®

### **Corporate Overview**



TICKER: **SEV** TSX VENTURE EXCHANGE -C+1

01111



TICKER: **SPVNF** otcqb venture market

As Of March 1, 2023

### **Cautionary Notes**

## SPECTRA7

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#### CURRENCY

All dollar amounts in this presentation are presented in US Dollars unless otherwise stated.

## Spectra7 at a Glance

#### What We Do

Spectra7 Microsystems Inc. is the leader in highperformance analog semiconductor products for broadband connectivity markets

The Company headquarters is in San Jose, CA, with sales and operations support in Dongguan, China

Tickers: SEV (TSX-V), SPVNF (OTCQB) Corporate HQ: San Jose, CA Incorporated: 2010 Technology: Backed by 55 patents



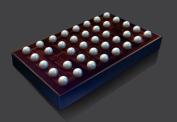


#### What We Do

Our high-performance analog semiconductors are embedded in the connector of a copper cable, or an active copper cable, enabling it to be ultra-thin with high-speed connectivity

#### **Blue-Chip Cable Partners**





- Spectra7 is the leader in the Active Copper Cable market
- Customers deploying our Active Copper Cable solutions benefit from both CapEx and OpEx savings

## Why Spectra7

#### Highly differentiated solution in fast growing market

- High-growth hyperscale data center connectivity market where our segment addressable market exceeds \$1 billion by 2026\*
- Fills a critical connectivity gap with a unique, high-speed, low-power solution
- Significant operating cost and capex savings for customers

#### Proven technology and first mover advantage

- 12 years in the industry with 55 U.S. issued patents
- AR/VR design-win in production for top global game console manufacturer
- Third generation Active Copper Cable technology with 2 years head start in the data center connectivity market

#### Rapidly scaling revenue

- Anticipate 2022 revenue to approximately double 2021
- Anticipating 2023 to be another record year
- Highly scalable, lean operating platform

2022 Revenue Preannounced: \$11.3 million, Up 106% Y-O-Y



\* Source: Spectra7 model based on 650Group silicon chipsets for Ethernet optical transceivers and active cable alternatives Q2 2022

\* 2022 Revenue Preannounced at \$11.3 million

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### **Addressed Markets**

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#### **Currently Serving**



Data Centers

Augmented/Virtual Reality

Consumer Connectivity

#### Significant growth in the near term will be driven by the data center connectivity market

**Future Growth Fueled by:** 



Automotive Market



Switching Systems



5G Infrastructure

## **Virtual Reality Solutions**

for Next-Generation 4k and 5k Headsets



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### **DreamWeVR™**

Spectra7's new chips allow VR and AR devices to drive resolutions of 4K UHD and 5k with very low-latency over an ultra-thin all-in-one interconnect.



## Hyperscale Cloud Infrastructure

A Large and Growing Market

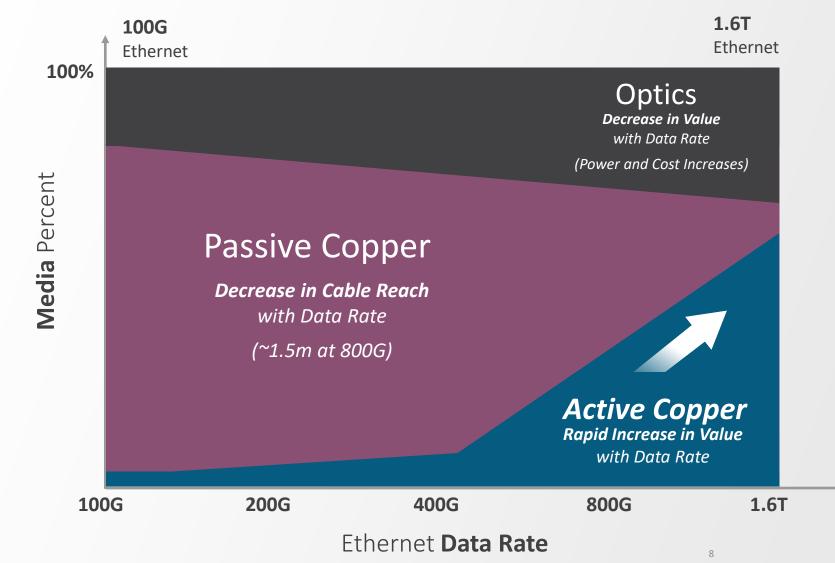
## "Hyperscalers to lift data center capex to \$377 Billion in 2026"

- Dell'Oro, August 2022



## **The Opportunity**

### Passive Copper Cables Cannot Meet Connectivity Requirements as Data Rates Increase in the Data Center



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## **Active Copper Cable Competitive Advantage**

High Performing and Cost Efficient

#### **Passive Copper Cable**

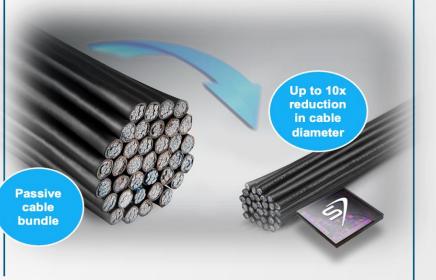
- Lengths up to 3 meters
- Lowest cost
- Lowest power consumption
- Plug and Play

#### LIMITATIONS

- Limited to 2 meters at higher data rates
- Bulky
- Difficult to route
- Blocks air-flow

#### Active Copper Cable

- Lengths up to 7 meters
- Lower cost than active optical cables
- Lower power consumption
- Thin, light and flexible
- High quality data transmission
- Plug and Play



#### **Substitute Products**

#### **Active Optical Cables**

- Up to kilometers in length
- High quality data transmission

#### **Active Electrical Cables**

- Up to 10 meters in length
- High quality data transmission

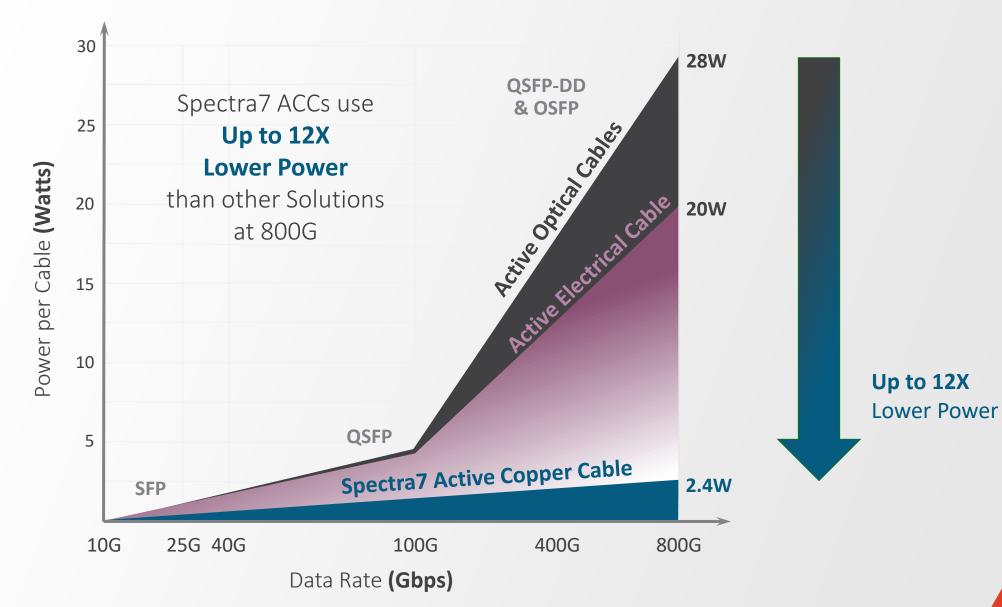
#### LIMITATIONS

- Highest cost
- Highest power consumption
- Higher latency
- Requires host configuration (not plug and play)

### Spectra7 GaugeChanger<sup>™</sup> Active Copper Cable Solution

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Dramatically Improves Power Consumption



10

## GaugeChanger™ Dramatically Improves Bend Space

Improved Cable Routing















### Dramatically Improved Bend Space with ACC

### 11

### Spectra7 GaugeChanger™

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### Comparison of Active Copper Solutions at 800G

	Active Electrical Cable	Active Copper Cable
Application to 4 meters	Yes	Yes
Application to >4 meters	Yes	No
Power (Watts per cable)	~20 Watts	2.4 Watts
Latency	~250ns (w/ RS FEC)	<1ns
CapEx Cost	High Cost (2x)	Low Cost (1x)



DSP (Digital Signal Processor) Enabled AEC

Up to 8x the Power Needed



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Analog Redriver Enabled Active Copper Cable

### Power Savings at 800Gbps Add Up

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- Spectra7 can save over 530W per Switch with GaugeChanger™ Technology vs. DSP AEC
- For Hyperscale Data Center with 100k servers, this can add up to 3.5 Megawatts!
- Translates to Electrical savings of up to \$17.6M per year

	AEC	ACC	Savings
Cable	20W	2.4W	17.6W
Switch	640W	76.8W	536W
Data Center	4MW	0.5MW	3.5MW

## A \$3 Billion Market by 2026

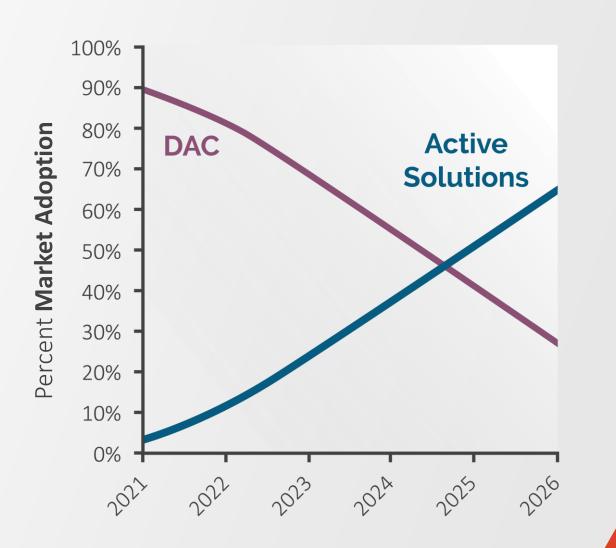
Excerpt From 650Group's Blog JUNE 3, 2022:

"The current DAC technology [passive copper cable] can't scale with the speed coming from nextgeneration server designs..."

"By 2026, we expect over two-thirds of the Cloud server market to be active copper."

*"From a revenue perspective, the market will quickly exceed \$1B and can exceed \$3B by 2026"* 

"Spectra7 is the leader in the ACC segment."



### **Data Center ACC Market Opportunity**

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## **Long-term Operating Model**

- Large, high-growth end markets
  - Even minimal market penetration enables
     Spectra7 to achieve significant revenue growth
- Attractive current and long-term gross margins
- Significant operating leverage
  - Current OpEx run-rate supports significant growth
- Capital light business model
  - Outsourced manufacturing
  - Nominal capex

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Spectra7 Target
Operating Model

Revenue Growth: >60% 4-year CAGR

**Gross Margin:** 60-65%

EBITDA Margin\*: 25-30%

\*EBITDA or earnings before interest, tax, depreciation, and amortization is a non-IFRS Measure. EBITDA excludes share-based compensation, amortization, depreciation, interest, and tax expenses.

## **Key Financial Highlights**

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TICKER: **SEV** tsx venture exchange



TICKER: SPVNF otcqb venture market

Share Price <sup>1</sup>	Ş
Market Capitalization	
TTM Revenue (12/31/2022)	Ş
TTM Gross Margin (12/31/2022)	5
Insider Ownership	~
Convertible Debt <sup>2,5</sup>	Ş

\$ 1.33 CAD \$ 33.1M USD<sup>2</sup> \$ 11.3M USD<sup>3</sup> 50%<sup>3</sup> ~12.6%<sup>4</sup> \$ 6.5M USD

Common shares issued 33.8M

<sup>1</sup> As of 2/28/2023

- <sup>2</sup> Based on CAD to USD exchange rate of 1.36
- <sup>3</sup> Based on preliminary financial results as of 1/18/2023
- $^4$  Insiders participated in capital raises and invested a total of \$1.6M in 2021 and \$0.4M in 2022
- <sup>5</sup> Matures December 31, 2024, Interest at 14%, Conversion price of \$1.02 CAD

### Management

#### Raouf Halim – Chief Executive Officer



- Raouf Halim joined Spectra7 in 2016 as CEO, after co-founding and serving as CEO of icClarity developing a disruptive 3D video capture solution for applications in AR/VR, mobile, and automotive markets since 2014
- Served for ten years as president, CEO, & board member of Mindspeed Technologies, where he rebuilt the executive team, repositioned their product portfolio, and executed a growth strategy for high-performance analog; and was previously with Conexant and Rockwell Semiconductor Systems
- Master's degree in electrical engineering from Georgia Institute of Technology and bachelor's degree in communications and electro physics from the University of Alexandria, Egypt and holds 14 patents

#### Bonnie Tomei - Chief Financial Officer



- Bonnie Tomei is the CFO at Spectra7 and has more than 20 years of business and financial experience including 17 plus years of experience in the semiconductor industry, and has been instrumental in two IPOs and handled over 20 M&A transactions
- Prior to joining Spectra7, she was the Head of Finance at Achronix Semiconductors Corporation and Corporate Controller for Aquantia Corp. where she served as a member of the management team responsible for its initial public offering and later its sale to Marvell and previously held various positions at 247.ai, Groq, Inc., Bitfury, Tessera Technologies, Techwell and Shutterfly
- B.S. in Accounting and B.S. in Finance from San Francisco State University and is a Certified Public Accountant in the state of California

#### John Mitchell – Co-Founder & Chief Marketing Officer



- John Mitchell was formerly Senior Director of Marketing at Quellan, a leading developer of high-performance Analog Semiconductors until it was acquired by Intersil Corporation in 2009
- Prior to his roles at Quellan and Intersil, John held senior management and strategic positions at several startups including LuxN and Scintera as well as Fortune 500 companies Unisys and Northrop Grumman
- With a B.S. in Engineering from Purdue University, John established himself in design with half a dozen patents before moving into management

#### Dr. Andrew Kim - Co-Founder, Vice President of Engineering & Chief Technology Officer



- Andrew Kim was a Senior Principal Systems Engineer at Intersil Corp. where he defined and modeled system architectures and new processing blocks for their high-speed wireline products
- Previously he was a Senior Engineer at Samsung Electro-Mechanics Co. Ltd. where he developed RF signal integrity solutions for spectrum sensing and interference cancellation and was a Senior Systems Architect at Quellan Inc. where he developed signal integrity solutions for both wired and wireless high-speed channels
- Ph.D. from the Massachusetts Institute of Technology for work in signal processing specialized for stochastic systems

# SPECTR/7®

## **Thank You**

Please contact IR@Spectra7.com for more information