

SPECTRA7[®]

Corporate Overview



TICKER: **SEV**
TSX VENTURE EXCHANGE



TICKER: **SPVNF**
OTCQB VENTURE MARKET

As of July 18, 2023



Cautionary Notes

This management presentation is intended to provide an overview of the business of Spectra7 Microsystems Inc. (“Spectra7,” “we,” “us,” “our,” and together with our subsidiaries and variable interest entities, the “Company”). It has been prepared for information purposes only and does not purport to be complete. It is not intended to be relied upon as advice to or as a solicitation from investors or potential investors in connection with a distribution of securities of the Company and does not take into account the investment objectives, financial situation or needs of any particular investor.

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CURRENCY

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

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 2027*
- 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

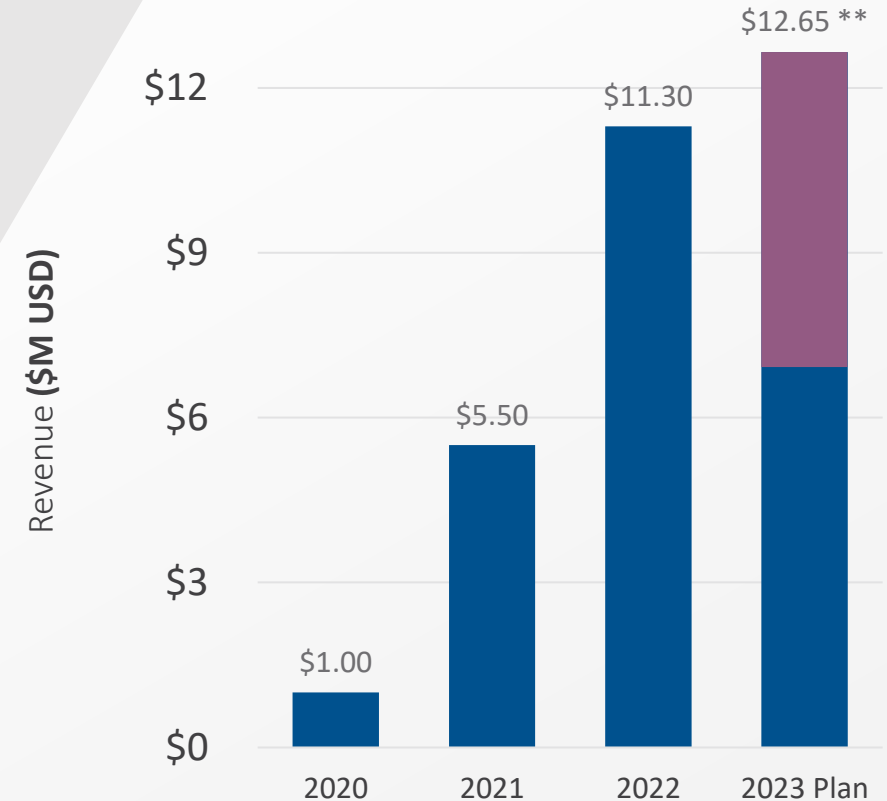
- 12 years in the industry with 55 U.S. issued patents
- AR/VR design-win in production for top global game console manufacturer
- Third generation Active Copper Cable technology with 2 years head start in the data center connectivity market

▲ Rapidly scaling revenue

- 2022 revenue \$11.3 million, doubled 2021 of \$5.5 million
- Anticipate 2023 to be another record year
- Highly scalable, lean operating platform

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Revenue Trend



H1 2023 Revenue of \$6.4 million, a Spectra7 Record

* Source: 650Group Active Copper Cable Report July 2023

** Assumed midpoint of H2 2023 revenue guidance of \$5.5 and \$7.0 million

Spectra7 at a Glance

What We Do

Spectra7 Microsystems Inc. is the leader in high-performance 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)

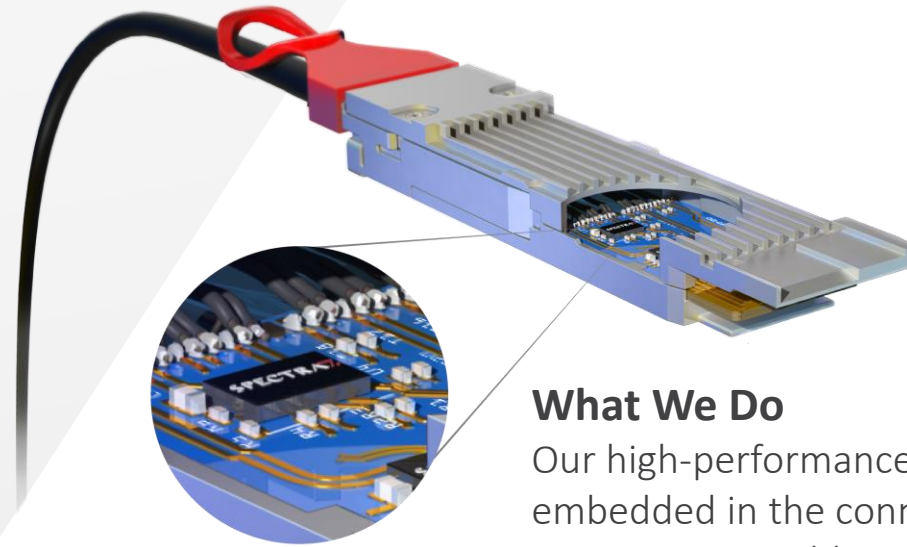
Corporate HQ: San Jose, CA

Incorporated: 2010

Technology: Backed by 55 patents



SPECTRA7[®]



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 Partners

ACES

Amphenol

BizLink

BROADEX TECHNOLOGIES

FOXCONN[®]

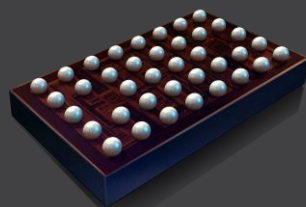
LUXSHARE ICT

molex[®]

Sumitomo Corporation

Tencent 腾讯

Volex



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

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



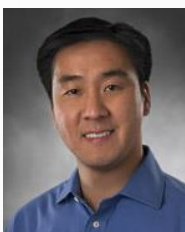
- Bonnie Tomei is the CFO at Spectra7 and has more than 20 years of business and financial experience including 17 plus years of experience in the semiconductor industry, and has been instrumental in two IPOs and handled over 20 M&A transactions
- Prior to joining Spectra7, she was the Head of Finance 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

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



SPECTRA7[®]



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.



VR8181

VR8050

VR8200

VR8300

Hyperscale Cloud Infrastructure

A Large and Growing Market

“Hyperscalers to lift data center capex to \$400 Billion in 2027”

- Dell’Oro, Feb. 2023

NORTH AMERICA

Alphabet

Google



aws

∞ Meta

Microsoft Azure



Market Drivers

- ▼ Cloud Services
- ▼ Artificial Intelligence
- ▼ Deep Learning
- ▼ 5G Roll-out
- ▼ Big Data Growth
- ▼ Metaverse

ASIA



Alibaba Group

Baidu 百度

ByteDance

Tencent 腾讯

Spectra7 is ideally positioned to benefit from massive demand for AI Server Interconnect.

Spectra7's Linear Analog Technology:

- Enables longer cable lengths at 112G PAM4 that are required for AI
- Lowest Power
- Lowest Latency
- Lowest Cost
- Plug-n-Play Interoperability

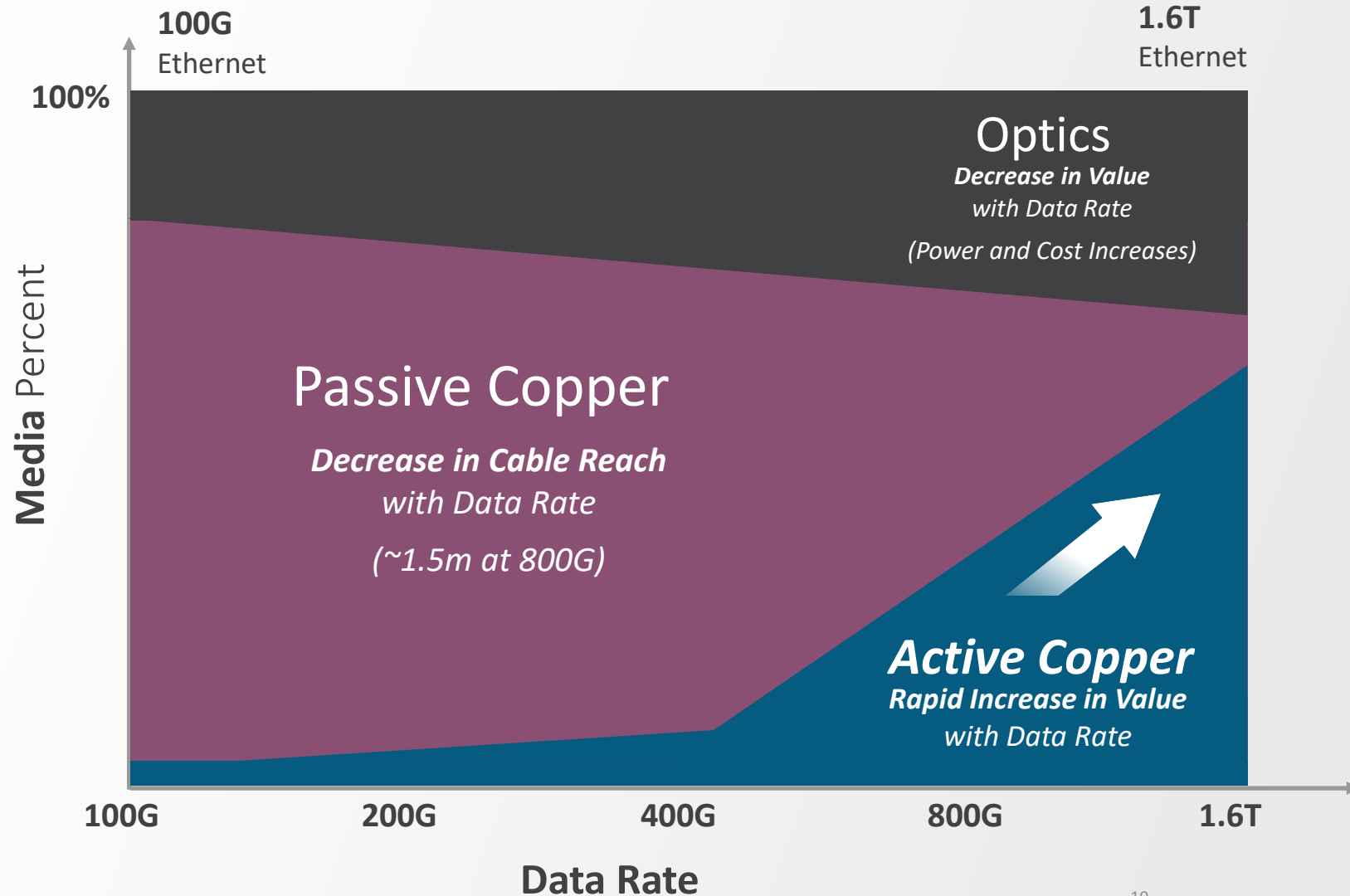


AI requires Active Interconnect solutions

“Spectra7’s low power, low latency and low-cost approach to active copper interconnects is ideal for AI server connectivity applications,” said Alan Weckel, Founder and Technology Analyst with 650 Group. “We see by 2026 the revenue from active copper cables in the data center market should hit USD 3 billion. The bulk of this will come from connections to these high-performance AI servers.”

The Opportunity

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



Active Copper Cable Competitive Advantage

High Performing and Cost Efficient

Passive Copper Cable

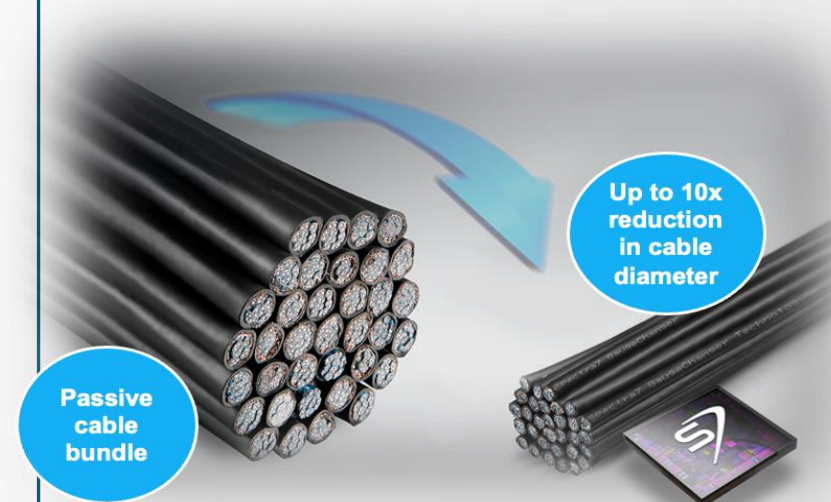
- Lengths up to 3 meters
- Lowest cost
- Lowest power consumption
- Plug and Play

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

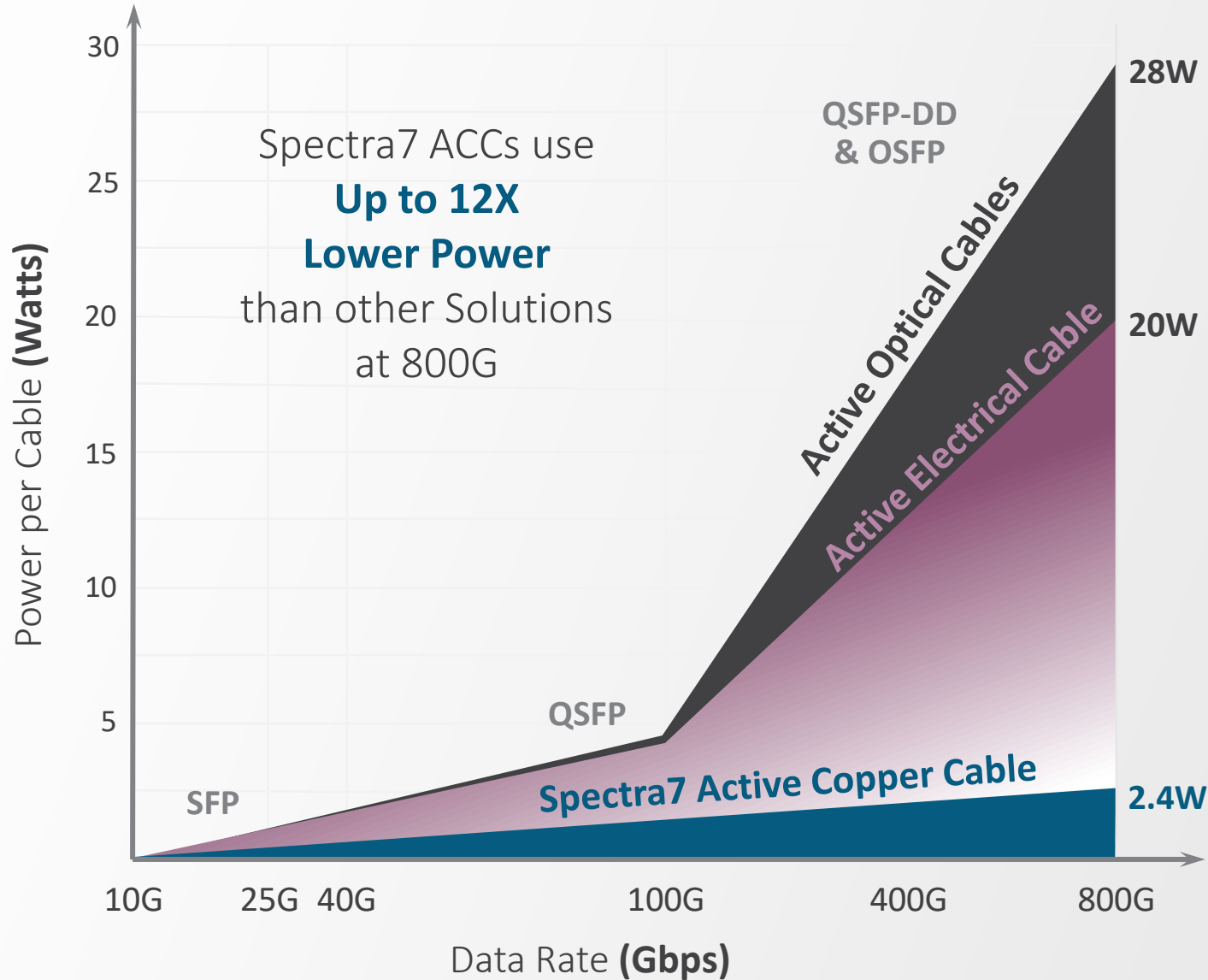
- Up to 10 meters in length
- High quality data transmission

LIMITATIONS

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

Spectra7 GaugeChanger™ Active Copper Cable Solution

Dramatically Improves Power Consumption



Spectra7 ACCs use
**Up to 12X
Lower Power**
than other Solutions
at 800G

**Up to 12X
Lower Power**

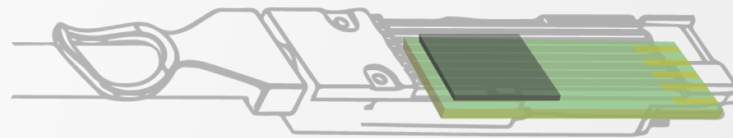
Spectra7 GaugeChanger™

Comparison of Active Copper Solutions at 800G

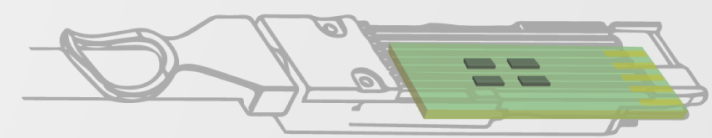
Active Electrical Cable

Active Copper Cable

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



DSP (Digital Signal Processor)
Enabled AEC
Up to 8x the Power Needed



SPECTRA7®

Analog Redriver Enabled
Active Copper Cable

Power Savings at 800Gbps Add Up

- 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

Source: www.datacenterknowledge.com (assumed annual cost of \$5,000 per KW)

A \$3 Billion Market by 2026

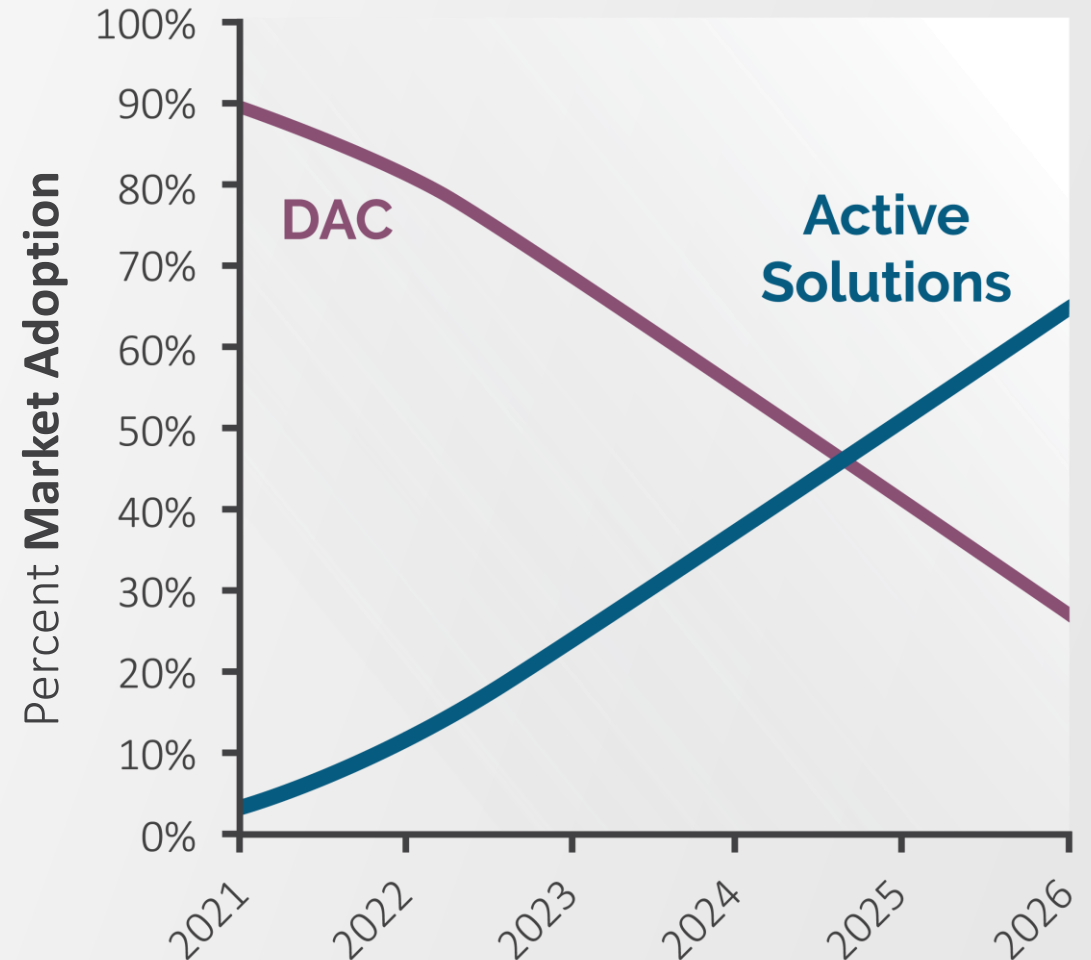
Excerpt From 650Group's Blog
JUNE 3, 2022:

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

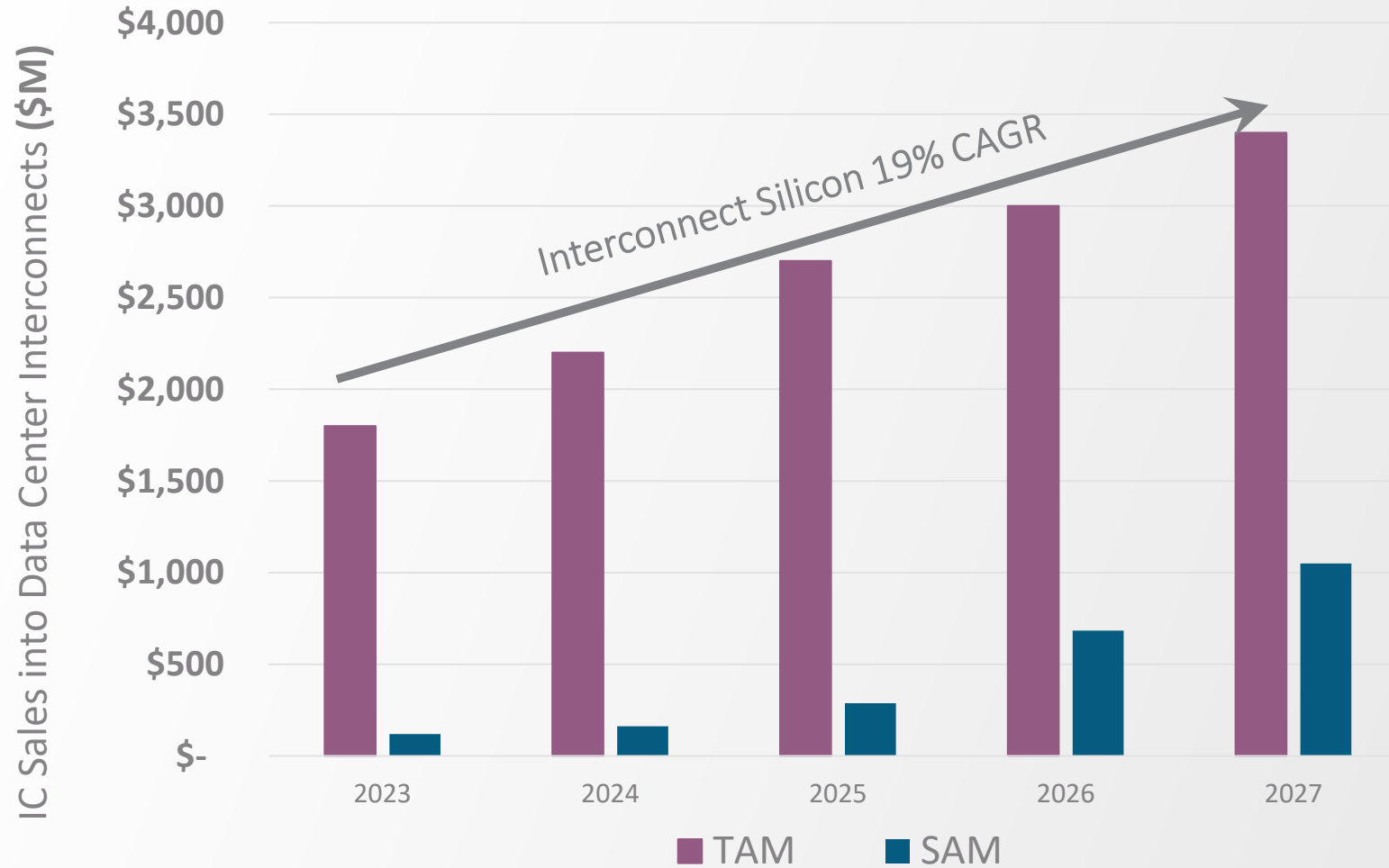
"By 2026, we expect over two-thirds of the Cloud server market to be active copper."

"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



**Active Copper
Cable Market \$1B
SAM in 2027
>70% CAGR**

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

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

SPECTRA7®



TICKER: **SEV**
TSX VENTURE EXCHANGE



TICKER: **SPVNF**
OTCQB VENTURE MARKET

Share Price ¹	\$ 0.81 CAD
Market Capitalization	\$ 24.3M USD ²
TTM Revenue (3/31/2023)	\$ 12.3M USD
TTM Gross Margin (3/31/2023)	54.3%
Insider Ownership	~12.6% ³
Convertible Debt ^{2,4}	\$ 6.7M USD

Common shares issued 39.8M

¹ As of 6/28/2023

² Based on CAD to USD exchange rate of 1.326

³ Insiders participated in capital raises and invested a total of \$2.3M from 2021 to 2023

⁴ Matures December 31, 2024, Interest at 14%, Conversion price of \$1.02 CAD

The logo for Spectra7, featuring the word "SPECTRA" in white uppercase letters, followed by a stylized "A" and "7" in orange, and a registered trademark symbol (®) to the right. The background is a dark purple gradient with glowing blue and pink light trails on the right side.

SPECTRA7®

Thank You

Please contact
IR@Spectra7.com for more information