EFFECT PHOTONICS

INVESTMENT OPPORTUNITY IN THE MOST DISRUPTIVE PHOTONICS SOLUTION IN THE MARKET

OCTOBER 2023

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EFFECT PHOTONICS AT A GLANCE

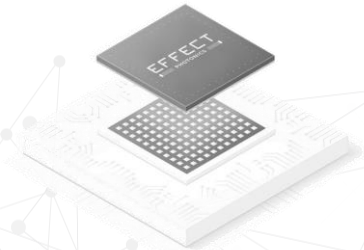
Global player with key technology for success

Where Light Meets Digital

Developing- high-performance, future-proof products that are fast, affordable, and sustainable

130+
employees in locations worldwide

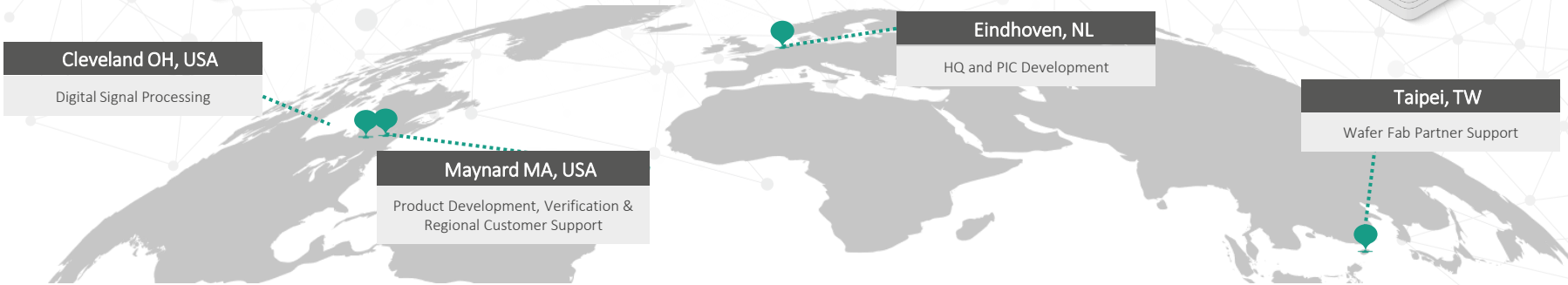
>2/3
employees in R&D



c €375MM(1)
Revenue FY28E

50%+(1,2)
Gross Margin(4) FY28E

30%+(1)
EBITDA Margin FY28E



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Source: Company Information
1. Financial forecast does not include the upside from adjacent markets
2. Gross Margin = (Revenue – COGS – Direct Labour) / Revenue

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BANDWIDTH GROWTH IS INCREASING AT THE SPEED OF LIGHT

Telecommunication and data providers need innovative solutions to help them cater to the ever-increasing demand for affordable bandwidth

	Yearly bandwidth increase	% of system costs ($) is optics	% of system power (W) is optics
1960 until now	**x1.5** Moore's law	**<3%**	**<1%**
2028	**x10** with AI/ML applications	**~50%**	**~20%**

Bandwidth demand will continue to increase, there is a need for innovation to solve the power and cost problem.

Source: NVIDIA presentation at OCP Summit 2022 - San Jose

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MOST DISRUPTIVE INTEGRATED PHOTONICS SOLUTIONS

Ownership and Control of Key Technologies

Digital Signal Processor

A coherent DSP is the electronic heart of coherent transmission systems

Ultra-Pure Light Sources

InP is the ideal material to generate and amplify light and enable full photonic integration

Leveraging Existing Electronics Ecosystem

Leveraging design, wafer manufacturing, packaging and test infrastructure

Addressing Key Pain Points

Power-Per-Bit

- Integration of **all** discrete photonic functions
- Highly optimized DSP/FEC functions

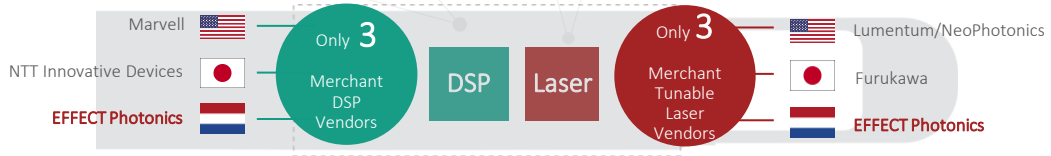
Cost-Per-Bit

- Higher yields through integration
- Ownership of all key components

Scale

- Economies of Scale
- Sustainable Practices

EFFECT Photonics is the only provider of key technologies



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PHOTONICS ENABLING ENERGY TRANSITION

Forecasted sales of the current product portfolio will result in 1.7M metric tons of CO_2 emissions savings

2,387 GWh

total savings[1]

±1.7 M

metric tons of CO_2 emissions saved[2]

3.9 M

barrels of oil consumed

213,191

homes' energy use for one year

206 B

number of smartphones charged

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1. Calculated savings from the forecasted sales of the SFP+, FB SFP28, pITLA and Coherent 100G from 2024 – 2028 plus the power grid savings with an estimated transceiver lifespan of 10 years compared to products currently in market with similar functionality
2. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results

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FOCUSED ON A DIVERSE AND GROWING TARGET MARKET

Key market drivers and total addressable market opportunity

DATACOM

Cloud Providers

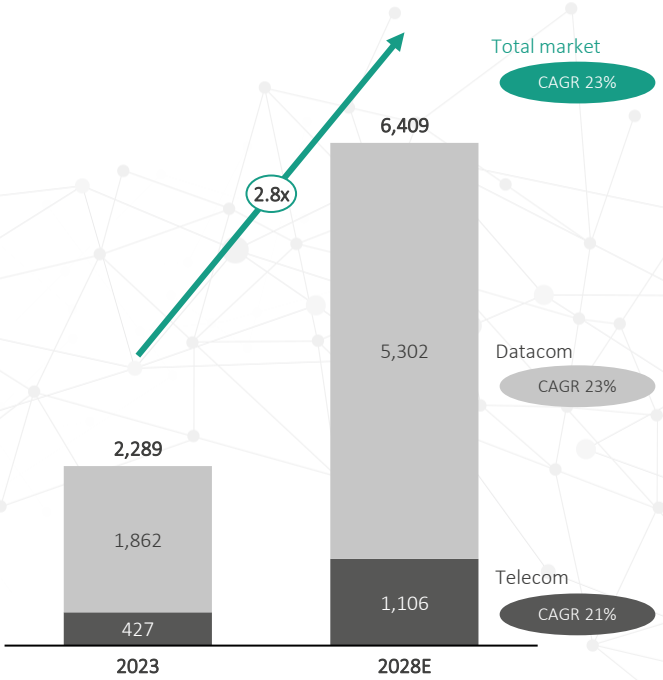
- Cloud infrastructure
- AI/ML bandwidth

TELECOM

Service Providers

- 5G/6G rollout
- Edge compute
- Satcom integration

TAM – Telecom and Datacom Markets ($MM)



Source: LightCounting (data originating from various reports published in Nov-21, Feb-22, Apr-22 and Jun-22, Nov-22, incl. company assumptions)

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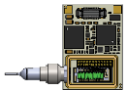
THE BACKBONE OF OUR SOLUTIONS – INTEGRATED LASERS & DSP

Product portfolio for diversified revenue streams

SUB-ASSEMBLIES / ASICS

ITLA (Laser)

- Ultra-pure InP light sources based on InP lasers
- Temperature and environment-hardened
- Developing the **world's smallest digital coherent integrated tunable laser assembly* - pico Integrated Tunable Laser Assembly (pITLA)**



DSP

- DSP is the electronic heart of coherent transmission systems
- DSPs enable efficient transmission over optical networks
- Field-proven DSP and multiple FEC designs up to 800G solutions (including oFEC)

TRANSCEIVERS

Transceivers incorporate the coherent DSP and integrated InP tunable lasers for a cost-effective and low-power high-speed connectivity

- **Coherent** Transceivers for higher bit rates of 100Gbps to 800 Gbps and beyond
- **Direct Detect** Transceivers for small form factors up to 25 Gbps

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* EFFECT Photonics pico ITLA is 5 times smaller than nano ITLA currently available on the market

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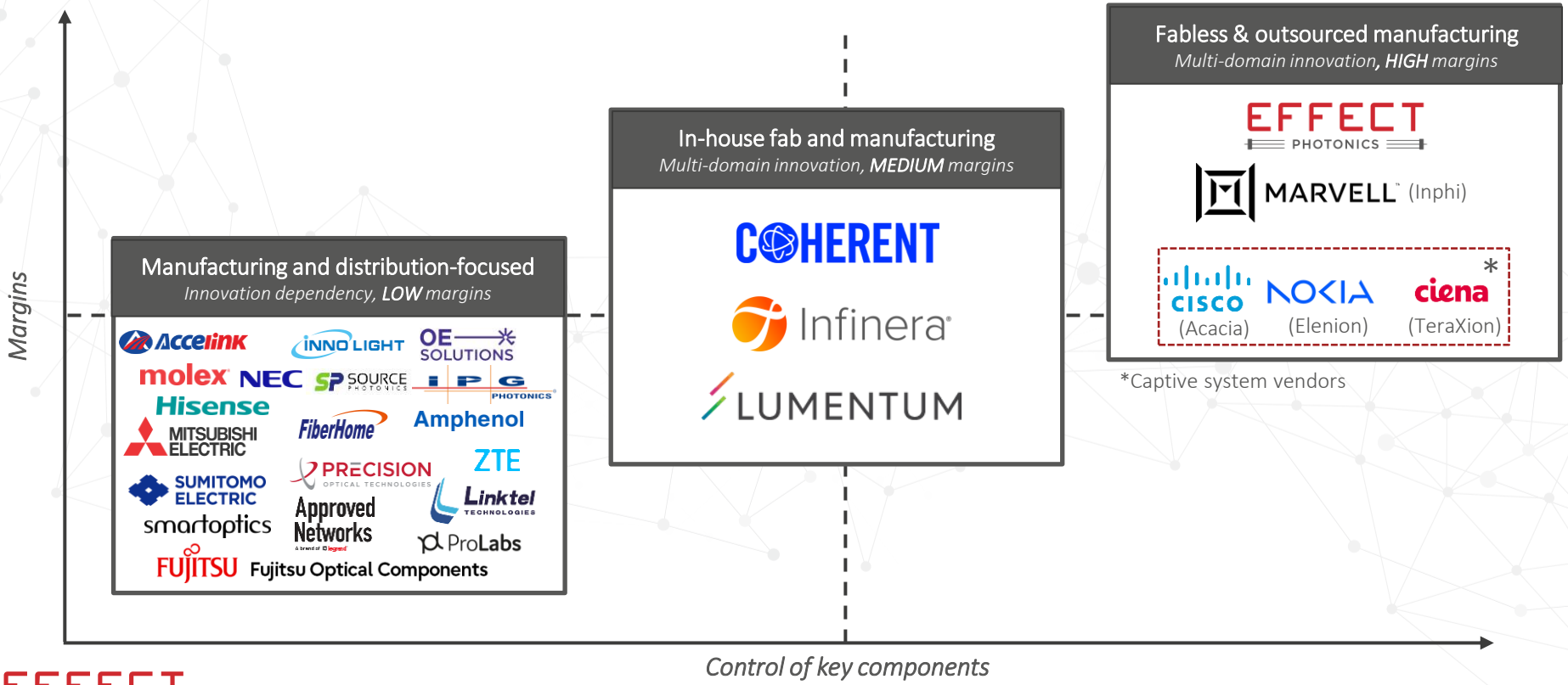
OPTICAL COMMUNICATIONS AND NETWORKING OVERVIEW

Key suppliers in cloud and service provider industry



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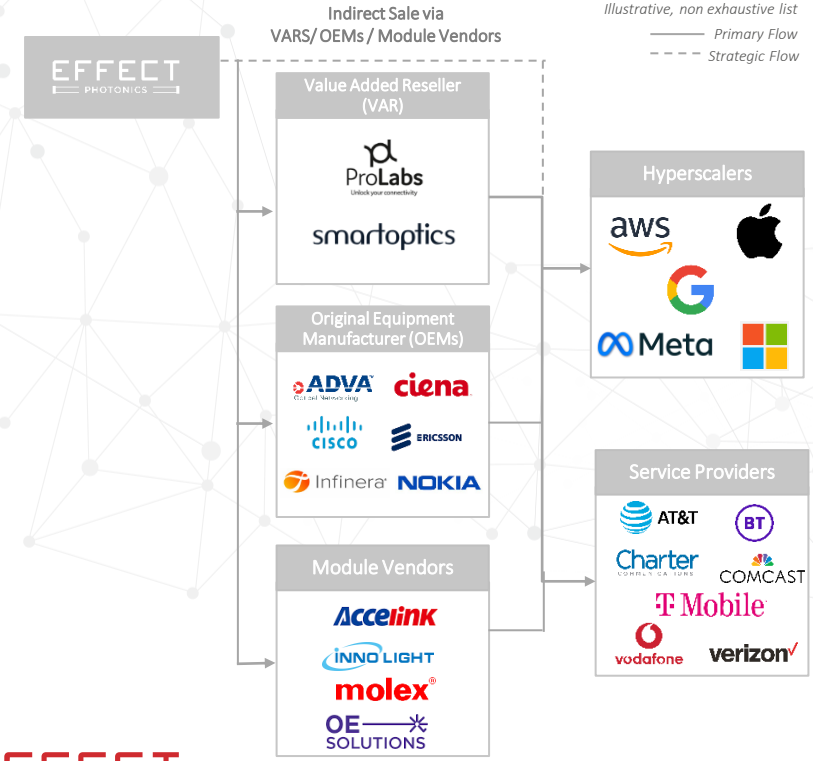
COMMERCIALS - TODAY

Business model overview and growing traction in the market

Business Model



Traction

Purchase Orders received from **ALL** largest US VARS for SFP-based products

Purchase Orders received from all **REGIONS** For SFP-based products

pITLA **ORDERS** from key US and Asian vendors

1st Purchase Order for coherent module received

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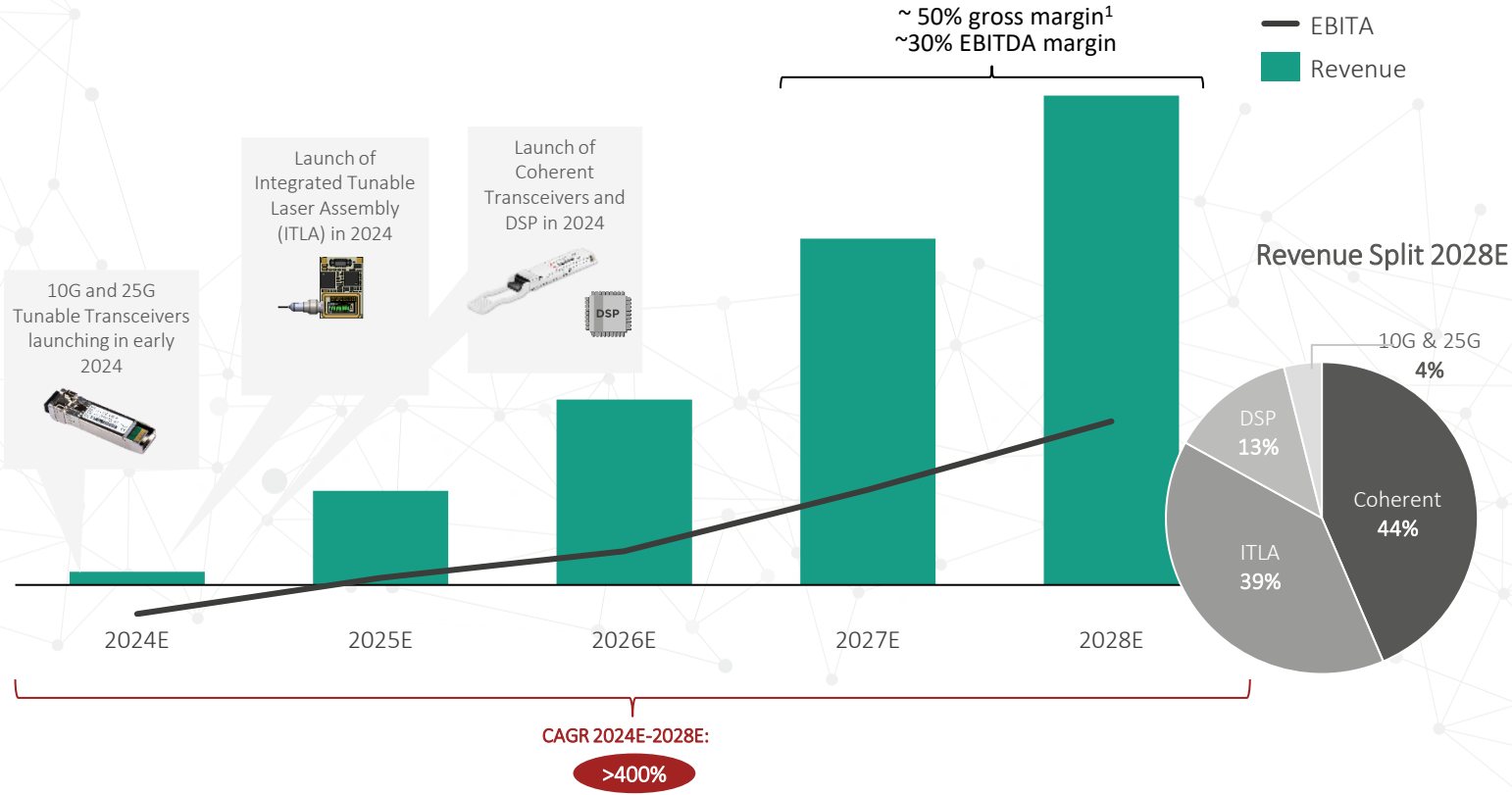
CLEAR GROWTH TRAJECTORY – PROFITABLE FROM 2025

Revenue evolution 2024 - 2028



1. Gross Margin = (Revenue – COGS – Direct Labour) / Revenue

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GUIDED BY A DIVERSE, EXPERIENCED MANAGEMENT

Executive Leadership Team

Roberto Marcoccia
CEO / CDSO

+25 years of leadership experience in optical communications across a range of large and small companies, both public and private.

Tim Koene
CTO – Co-founder

Deep technical expertise in PIC design, packaging, electronics and systems

Harry Graber
CCO

Deep expertise in technical sales, product management and marketing with extensive international experience

Sophie De Maesschalck (Dr.)
CFO

Highly experienced as Tech CFO, with PhD in optical networking and MBA in Corporate Finance

Veronique Gremmen-de Groot
Head of HR

Extensive background in Human Resources and organizational development in various industries

Ted Schmidt (Dr.)
Senior VP of Product Development

PhD in Physics with +20 years of fiber optic transceiver development experience

Tony Englese
VP of Operations

Seasoned senior manufacturing operations executive, expert in taking complex products from concept to volume production

Key Investors

matterwave ventures

Innovation Industries

Smile Invest
entrepreneurs for entrepreneurs

Brabantse Ontwikkelings Maatschappij
BOM

Viasat

INVESTNL

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Years of Relevant Experience Nationality

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ADDITIONAL FUNDING FOR DEVELOPMENT AND GROWTH

Key areas for investment

Product Development

- Product portfolio expansion
- Further technology developments

Ramp Up

- Working capital to support increased shipments

Expansion

- Expansion into select countries in APAC, EMEA and Latin America

Talent Acquisition

- Expand product development and go-to-market teams

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KEY INVESTMENT HIGHLIGHTS

- Able to solve industry problems: **only company owning both key technologies**
- **Energy transition positive effect** of using integrated photonics to reduce energy across end-markets
- Ideal positioning, targeting **high growth, supply-constrained telecom- and datacom** markets driven by the need for cost and power reduction
- Diversified product portfolio that drives **healthy, sustainable margins** with limited competition
- Global **traction in the market with leading customer** focused on monetizing product portfolio
- **Attractive financial profile** with high profitability and high cash flow generation at scale
- **Experienced, and well-connected** leadership

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ABBREVIATIONS

Abbreviation	Meaning
AI/ML	Artificial Intelligence/Machine Learning
ASICs	Application-Specific Integrated Circuits
CAGR	Compound Annual Growth Rate
COAX	Coaxial Cable
DSP	Digital Signal Processor
DWDM	Dense Wavelength Division Multiplexing
EBITA	Earnings Before Interest, Tax & Amortization
FEC	Forward Error Correction
GHG	Greenhouse Gasses
ICTROSA	Integrated Coherent Transmitter and Receiver Optical Sub-Assembly
InP	Indium Phosphide
IP	Intellectual Property

Abbreviation	Meaning
ITLA	Integrated Tunable Laser Assembly
OEM	Original Equipment Manufacturer
oFEC	Open Error Forward Correction
PIC	Photonic Integrated Circuit
PO	Purchase Order
QSFP	Quad Small Form-factor Pluggable
SFP	Small Form-factor Pluggable
SiPh	Silicon Photonics
TAM	Total Addressable Market
VAR	Value Added Reseller

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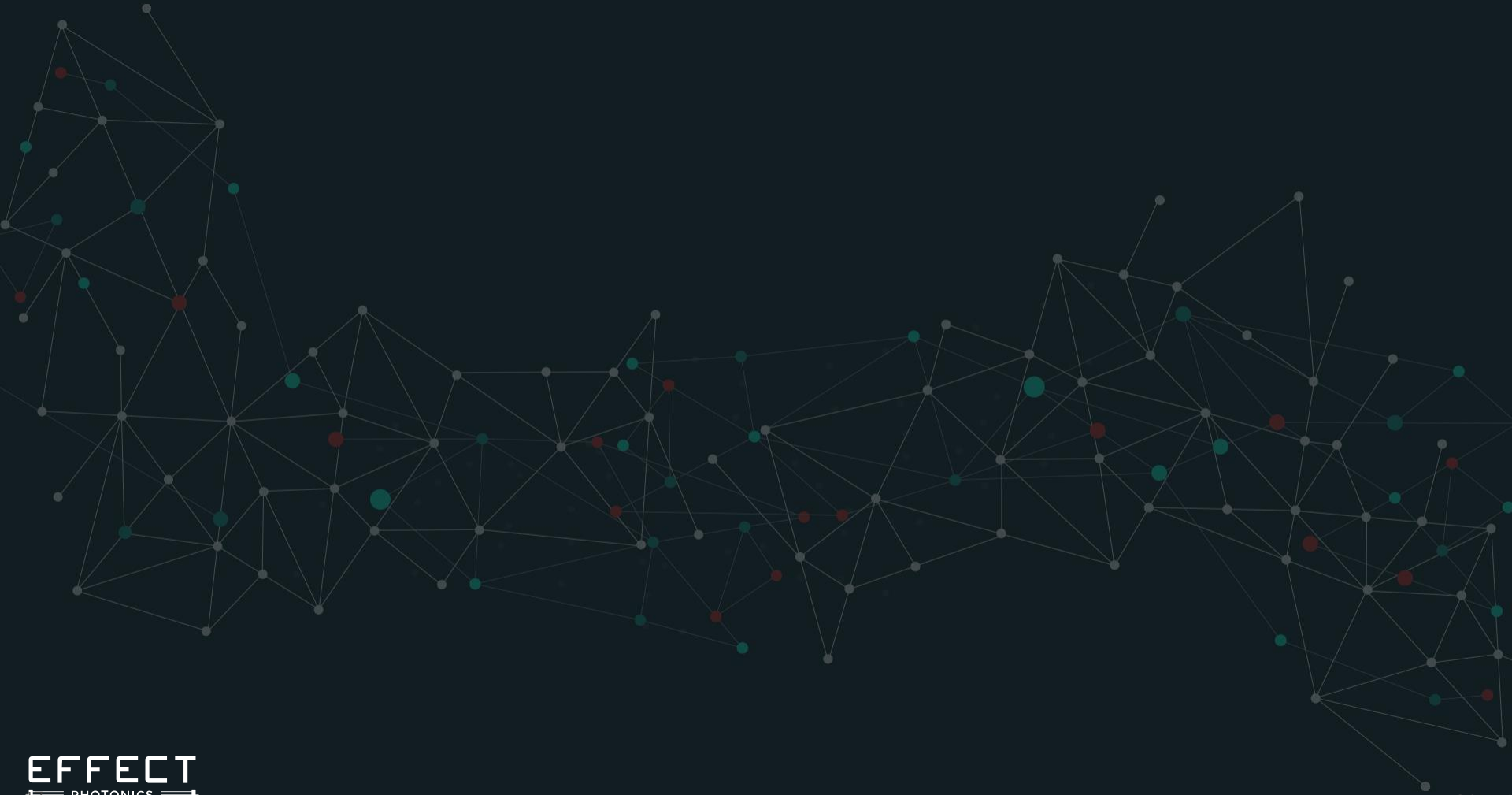

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