

INVESTOR DAY 2021

WELCOME

# Welcome

**Amitabh Passi**

Head of Investor Relations



# Safe Harbor

## Forward-Looking Statements

This presentation contains forward-looking statements, including those related to Infinera's expectations regarding its business model, market opportunities, competition and customers, including as it continues to manage industry-wide supply chain challenges and ongoing pandemic impact; and its financial outlook for the second quarter of 2021. All statements other than statements of historical fact could be deemed forward-looking, including, but not limited to, statements made about future market, financial and operating performance; statements regarding future products or technology, as well as the timing to market of any such products or technology; any statements about historical results that may suggest trends for Infinera's business; and any statements of assumptions underlying any of the items mentioned.

These statements are based on estimates and information available to Infinera at the time of this presentation and are not guarantees of future performance; actual results could differ materially from those stated or implied due to risks and uncertainties. The risks and uncertainties that could cause Infinera's results to differ materially from those expressed or implied by such forward-looking statements include the effect of the COVID-19 pandemic on Infinera's business, results of operations, financial condition, stock price and personnel; the effect of global and regional economic conditions on Infinera's business, including effects on purchasing decisions by customers; Infinera's future capital needs and its ability to generate the cash flow or otherwise secure the capital necessary to make anticipated capital expenditures; Infinera's ability to service its debt obligations and pursue its strategic plan; delays in the development and introduction of new products or updates to existing products; market acceptance of Infinera's end-to-end portfolio; Infinera's reliance on single and limited source suppliers; fluctuations in demand, sales cycles and prices for products and services, including discounts given in response to competitive pricing pressures, as well as the timing of purchases by Infinera's key customers; the effect that changes in product pricing or mix, and/or increases in component costs, could have on Infinera's gross margin; Infinera's ability to respond to rapid technological changes; aggressive business tactics by Infinera's competitors; the effects of customer consolidation; the impacts of foreign currency fluctuations; Infinera's ability to protect its intellectual property; claims by others that Infinera infringes their intellectual property; Infinera's ability to successfully integrate its enterprise resource planning system and other management systems; impacts of the recent change in presidential administration in the United States; war, terrorism, public health issues, natural disasters and other circumstances that could disrupt the supply, delivery or demand of Infinera's products; and other risks and uncertainties detailed in Infinera's SEC filings from time to time. More information on potential factors that may impact Infinera's business are set forth in its Annual Report on Form 10-K for the year ended on December 26, 2020 as filed with the SEC on March 3, 2021, its Quarterly Report on Form 10-Q for the quarter ended on March 26, 2021 as filed with the SEC on May 4, 2021 as well as subsequent reports filed with or furnished to the SEC from time to time. These reports are available on Infinera's website at [www.infinera.com](http://www.infinera.com) and the SEC's website at [www.sec.gov](http://www.sec.gov). Infinera assumes no obligation to, and does not currently intend to, update any such forward-looking statements set forth in this presentation.

This presentation includes certain non-GAAP financial measures such as non-GAAP revenue, non-GAAP gross margin, non-GAAP operating expenses, non-GAAP operating margin and non-GAAP diluted EPS. We present non-GAAP financial measures in addition to, and not as a substitute for, financial measures calculated in accordance with generally accepted accounting principles ("GAAP"). Non-GAAP measures should not be considered in isolation or as alternatives to GAAP measures. In addition, the non-GAAP measures we use, as presented, may not be comparable to similar measures used by other companies. See the slide in this presentation for reconciliations to the most comparable GAAP financial measures.

# Agenda

Topic	Speaker	Time
Market Opportunity and Strategic Focus	David Heard	8:00-8:30
Optical Engine Technology and Innovation Roadmap	Parthi Kandappan	8:30-8:50
Coherent Pluggables Optics Strategy	Dave Welch	8:50-9:15
<i>Break</i>		9:15-9:20
Portfolio Strategy	Glenn Laxdal	9:20-9:45
Financial Roadmap	Nancy Erba	9:45-10:05
<i>Break</i>		10:05-10:15
Q&A	Executive Team	10:15-11:00



**David Heard**

Chief Executive Officer



**Parthiban Kandappan**

Chief Technology Officer



**Dave Welch**

Chief Innovation Officer



**Glenn Laxdal**

SVP of Product Management



**Nancy Erba**

Chief Financial Officer

INVESTOR DAY 2021

# Market Opportunity and Strategic Focus

David Heard  
CEO

# Infinera at a Glance



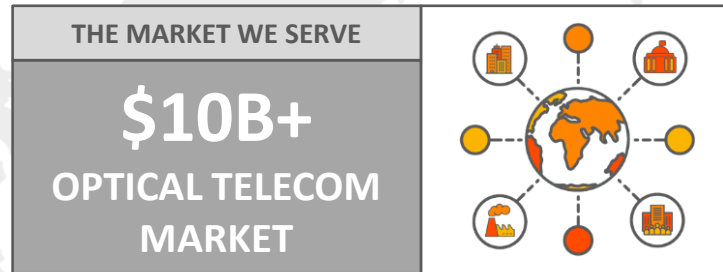
# Infinera®

Founded in **2000**

Headquarters:

**San Jose, California**

(NASDAQ: INFN)



Source: Omdia

**\$1.3B+**

2020 REVENUE

**1900+**

PATENTS

**1000+**

CUSTOMERS

**3000+**

EMPLOYEES

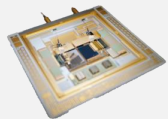
**45+**

COUNTRIES WITH  
OPERATIONS

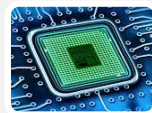
**FOUNDED ON THE PREMISE THAT VERTICAL INTEGRATION WOULD BE  
CRITICAL TO THE OPTICAL MARKET**

## HIGH-PERFORMANCE OPTICAL SUBSYSTEMS

FIRST PIC, BEST COHERENT DSP



PHOTONICS



PROCESSORS

## NETWORKING SYSTEMS

FIRST COMPACT MODULAR SYSTEM



# Who Do We Serve and Why

## OUR CUSTOMERS



FIXED AND MOBILE  
SERVICE PROVIDERS

9 of 10

Top Service Providers

74%  
of market



INTERNET  
CONTENT PROVIDERS

5 of 6

Top Content Providers

14%  
of market



ENTERPRISE AND  
VERTICALS

Global Presence

Enterprise and Gov

12%  
of market

Source: Signal AI

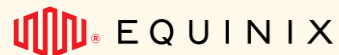
## CUSTOMER NEEDS:

### DRIVE DOWN CAPITAL COSTS

- Lowest cost per bit
- More traffic per fiber
- Highest-performance optics
- Accelerate innovation

### DRIVE DOWN OPERATING COSTS

- Open networking solutions
- Network automation
- Increased agility



# Our Conviction at Infinera

1



**FAVORABLE MARKET  
DYNAMICS**

2



**WINNING  
STRATEGY**

3



**VERTICALLY  
INTEGRATED  
INNOVATION**

4

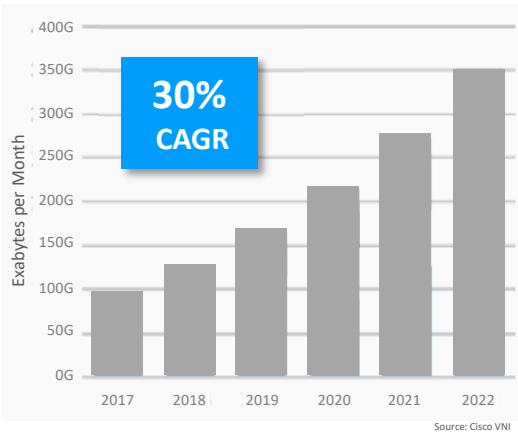


**TEAM TO  
EXECUTE**

# 4 Key Market Drivers

1

## RELENTLESS DEMAND FOR CAPACITY



### DRIVEN BY EDGE EVOLUTION



5G



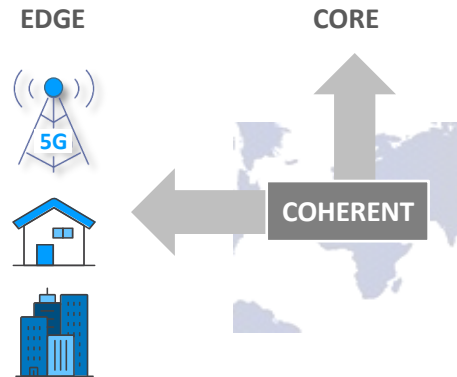
DAA

CLOUD SERVICES

EDGE COMPUTE

2

## INCREASING MARKET FOR COHERENT



Edge going to 100G

Metro going to 400G

Core going to 800G

3

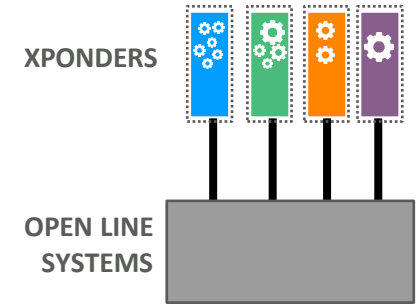
## COMPETITIVE DISRUPTION



FEWER CAPABLE SUPPLIERS  
GEOPOLITICAL DYNAMICS

4

## SHIFT TO OPEN

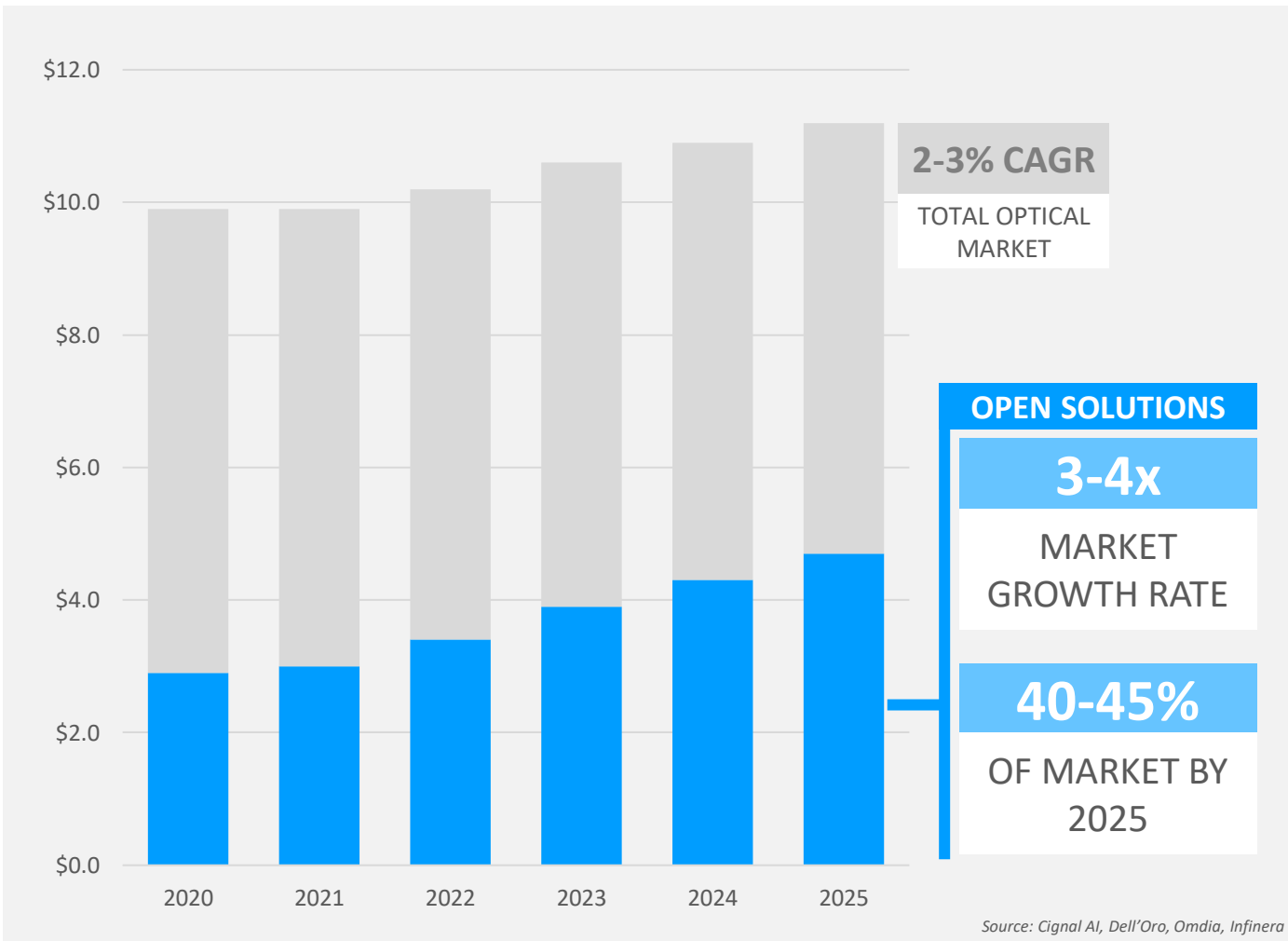


OPERATIONAL SIMPLICITY  
ACCELERATED INNOVATION

CREATING INSERTION OPPORTUNITIES



## SHIFT TO OPEN



## KEY GROWTH SEGMENTS

### OPEN OPTICAL SOLUTIONS

4-5x  
MARKET GROWTH RATE

Compact Modular Platforms



### COHERENT OPTICAL SOLUTIONS

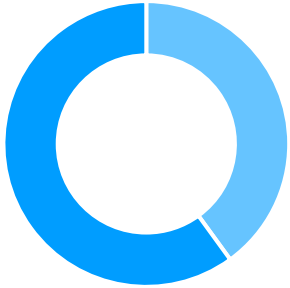
Edge going to 100G

Metro going to 400G

Core going to 800G

2-3x  
MARKET GROWTH RATE

85-90%  
OF MARKET BY 2025



60% EMBEDDED



40% PLUGGABLES



# Key Ingredients to a Successful Strategy



# Company Strategy



## LEAD THE MARKET TO OPEN

### CORE

→ 800G

LEADING PERFORMANCE  
FEW SUPPLIERS

### METRO

→ 400G

VERTICALLY INTEGRATED  
MODULAR SOLUTIONS

### EDGE

→ 100G

DISRUPT WITH POINT-TO-  
MULTIPOINT PLUGGABLES

OPEN OPTICAL PLATFORMS



## GAIN SHARE AND DRIVE SCALE

LONG-HAUL, SUBSEA, METRO CORE  
→ 800G insertion w/ ICE6

METRO AND AGGREGATION  
→ 400G w/ GX, XTM  
→ Competitive Displacements

CREATE NEW \$1-2B MARKET  
→ Point-to-Multipoint Optics (XR)

INCREASE WALLET SHARE WITH TOP  
50 NETWORK OPERATORS



## EXECUTE FOR SHAREHOLDER VALUE

ACHIEVE TARGET BUSINESS  
MODEL BY 2023

CAPITAL STRUCTURE  
IMPROVEMENT

2023 TARGET  
BUSINESS MODEL

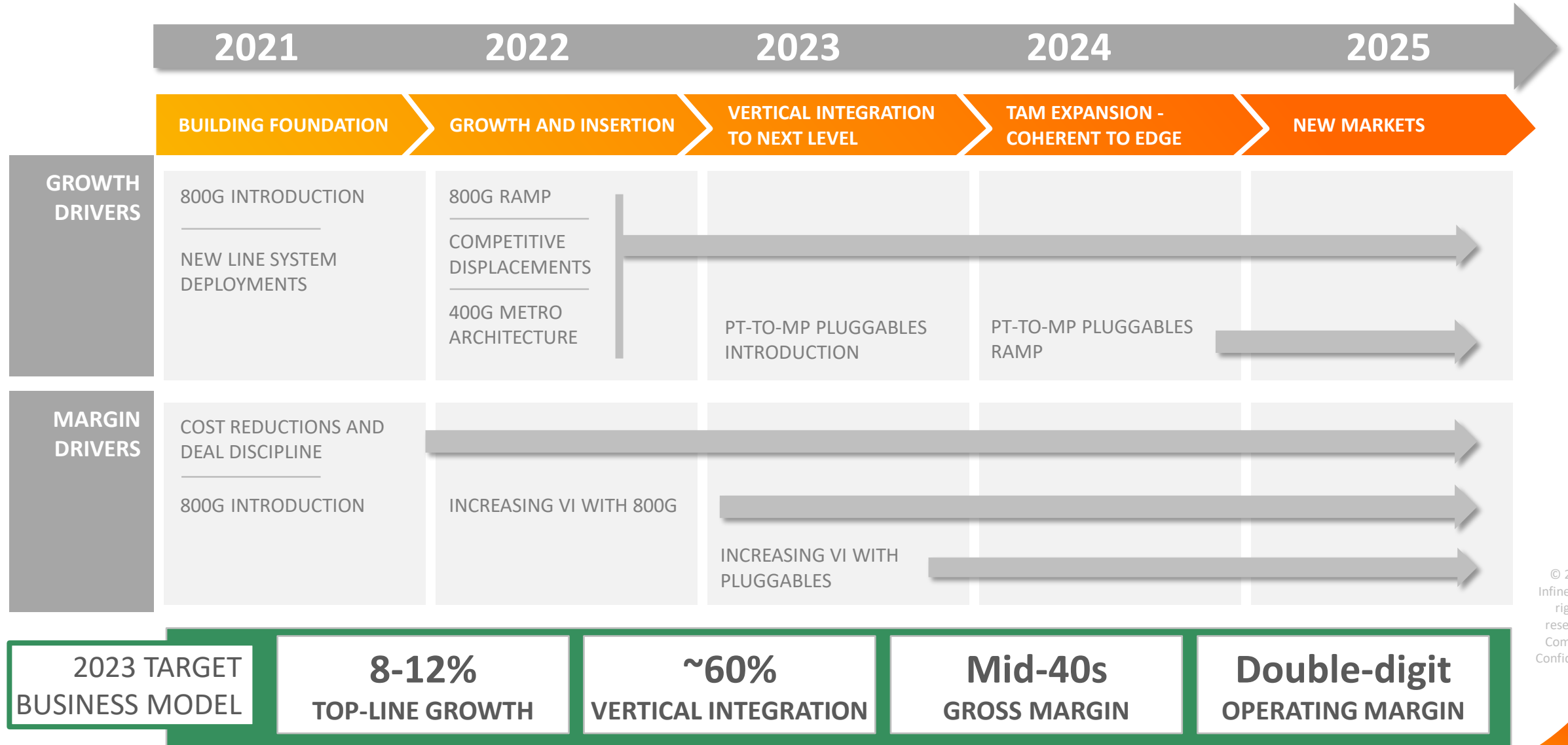
8-12%  
TOP-LINE GROWTH

~60%  
VERTICAL INTEGRATION

Mid-40s  
GROSS MARGIN

Double-digit  
OPERATING MARGIN

# Looking Ahead

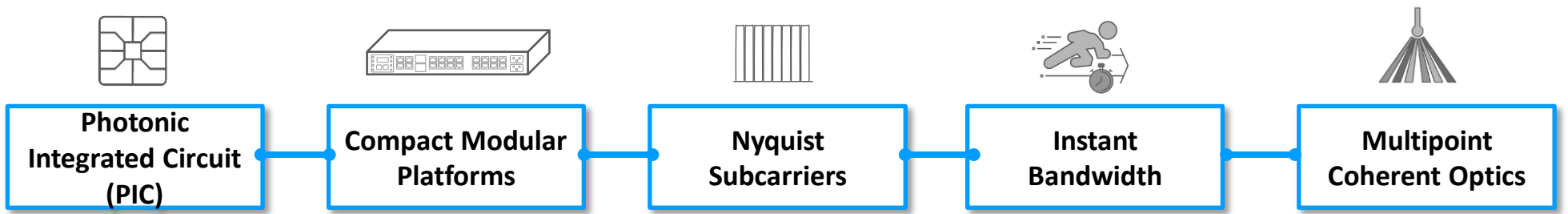


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All metrics are non-GAAP and exclude acquisition-related deferred revenue adjustments, stock-based compensation, amortization of intangible assets, and restructuring charges. The Company is unable to provide a reconciliation to the most directly comparable GAAP measures, as it is unable, without unreasonable efforts, to calculate such excluded items, which could have a significant impact on the GAAP measures.

# Leveraging Core Competencies

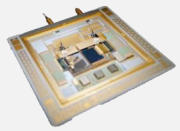
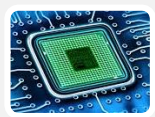
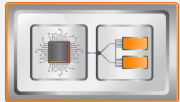
**BUILDING ON  
LONG HISTORY  
OF INNOVATION**



## COHERENT OPTICAL ENGINES

## OPEN OPTICAL TRANSPORT PLATFORMS

### OPTICAL INNOVATION CENTER

		
OPTICS	DSP	PACKAGING

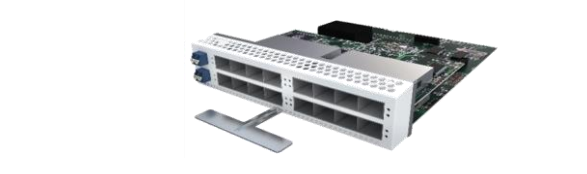
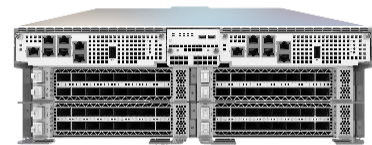
<b>INVENTED THE SPACE</b>	<b>#2</b>	<b>16% CAGR</b>
CLOUD XPRESS	MARKET POSITION	\$3-3.5B BY 2025

Source: Signal AI

## HIGH-END EMBEDDED

## AGILE PLUGGABLES

## CARRIER-GRADE, MULTI-APPLICATION COMPACT MODULAR PLATFORM

**GX SERIES  
COMPACT MODULAR  
PLATFORM**











**70% of BoM**

**40% of BoM**

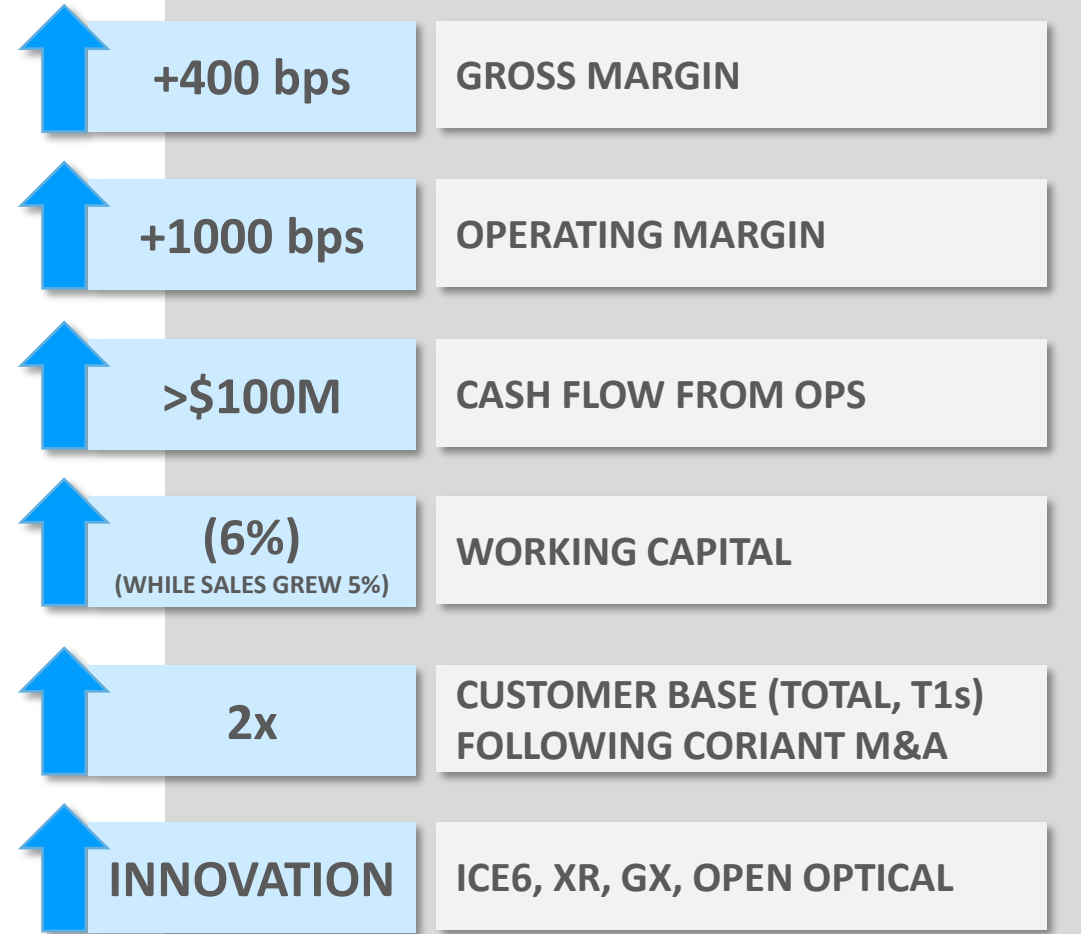
**SUPPORT CSP AND ICP APPLICATIONS**

# Operational Excellence and Profitability

## TEAM TO EXECUTE

	<b>CEO</b> David Heard		<b>CFO</b> Nancy Erba
	<b>INNOVATION</b> Dave Welch		<b>CTO</b> Parthiban Kandappan
	<b>SALES</b> Nick Walden		<b>ENGINEERING</b> Greg Greco
	<b>PLM</b> Glenn Laxdal		<b>SERVICES</b> Alexander Derecho
	<b>OPERATIONS</b> Craig Cocchi		<b>MARKETING</b> Rob Shore

## DEMONSTRATED EXECUTION (Q4'18 vs. Q4'20)



# Why I Believe

1



**FAVORABLE MARKET  
DYNAMICS**

2



**WINNING  
STRATEGY**

3



**VERTICALLY  
INTEGRATED  
INNOVATION**

4



**TEAM TO  
EXECUTE**

**IT IS ALL ABOUT EXECUTION**

# Today's Focus

**1** FAVORABLE MARKET DYNAMICS



ICE6 AND BEYOND



CTO

Parthiban Kandappan

**2** WINNING STRATEGY



PLUGGABLES STRATEGY  
XR OPTICS



INNOVATION

Dave Welch

**3** VERTICALLY INTEGRATED INNOVATION



OPEN OPTICAL PORTFOLIO  
ICE6 PROGRAM UPDATE  
CUSTOMER WINS AND TRACTION



PLM

Glenn Laxdal

**4** TEAM TO EXECUTE



TARGET BUSINESS MODEL



CFO

Nancy Erba



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# Optical Engine Technology and Innovation Roadmap

**Parthi Kandappan**

Chief Technology Officer

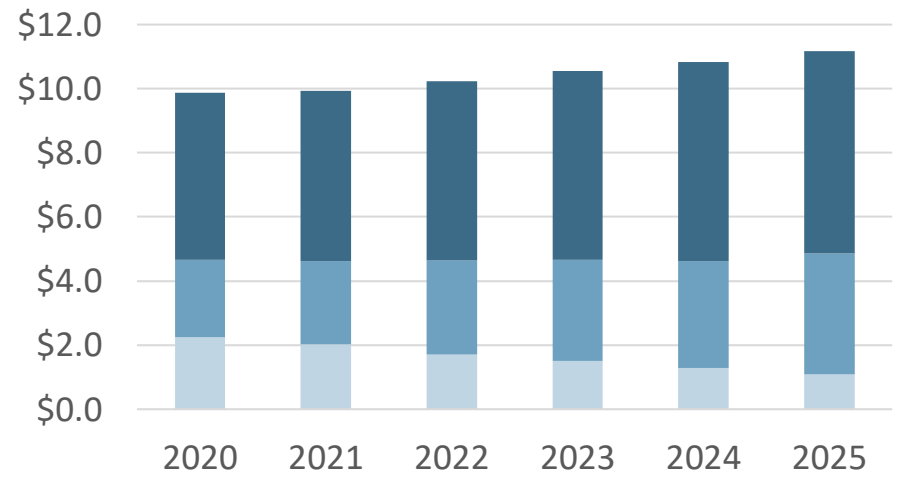
# Market for Coherent Solutions



5G   
 DAA   
 CLOUD  
**DRIVING COHERENT TO THE EDGE**

**HISTORIC MARKET FOR COHERENT SOLUTIONS**

**OPTICAL NETWORKING MARKET BY TECHNOLOGY**

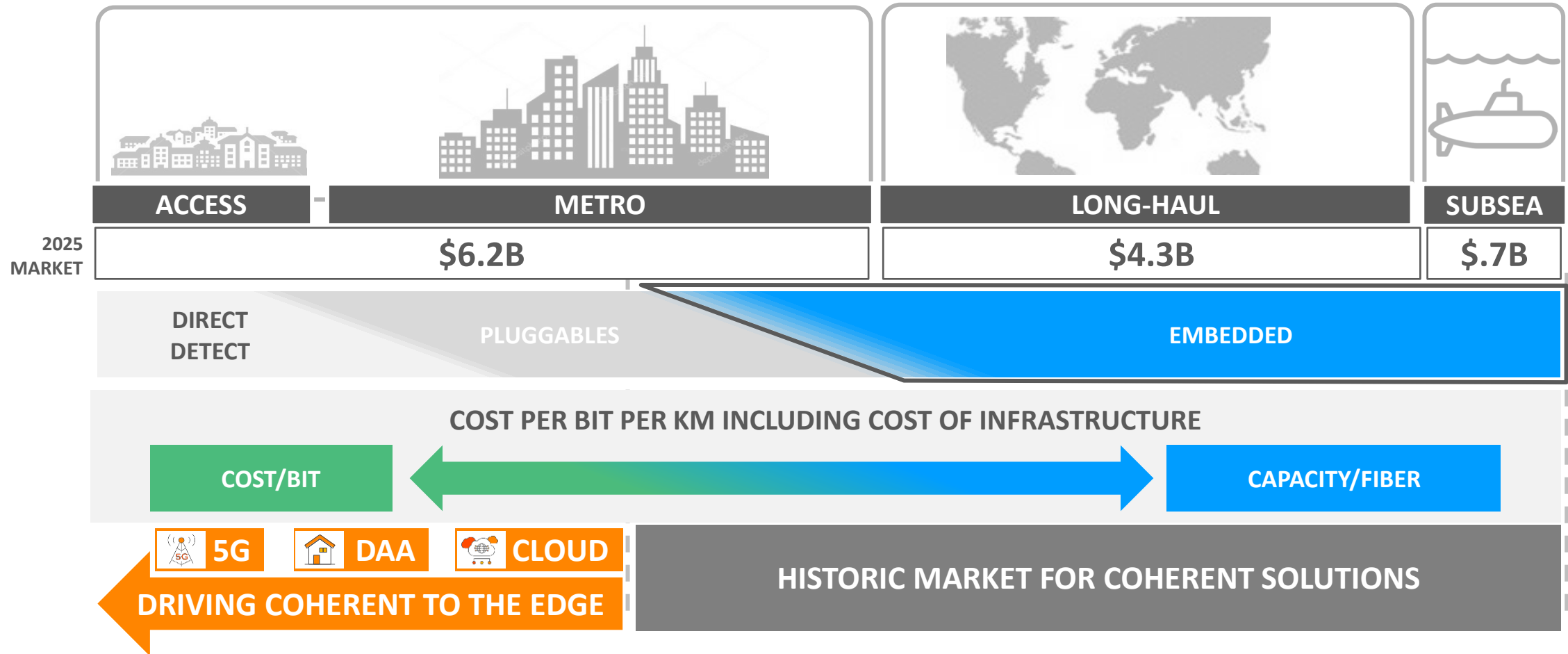


**2-3x**  
MARKET GROWTH RATE

**85-90%**  
OF MARKET BY 2025

- EMBEDDED
- PLUGGABLES
- DIRECT DETECT

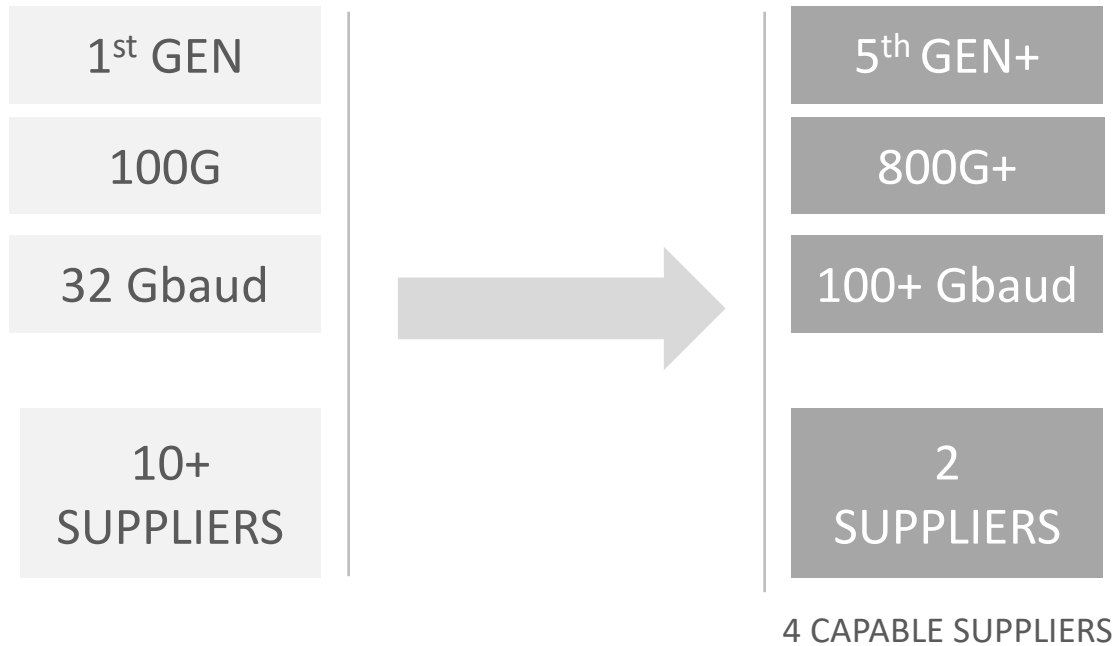
# Market for Coherent Solutions



# Growing Market with Decreasing Suppliers

AS TECHNICAL COMPLEXITY INCREASES

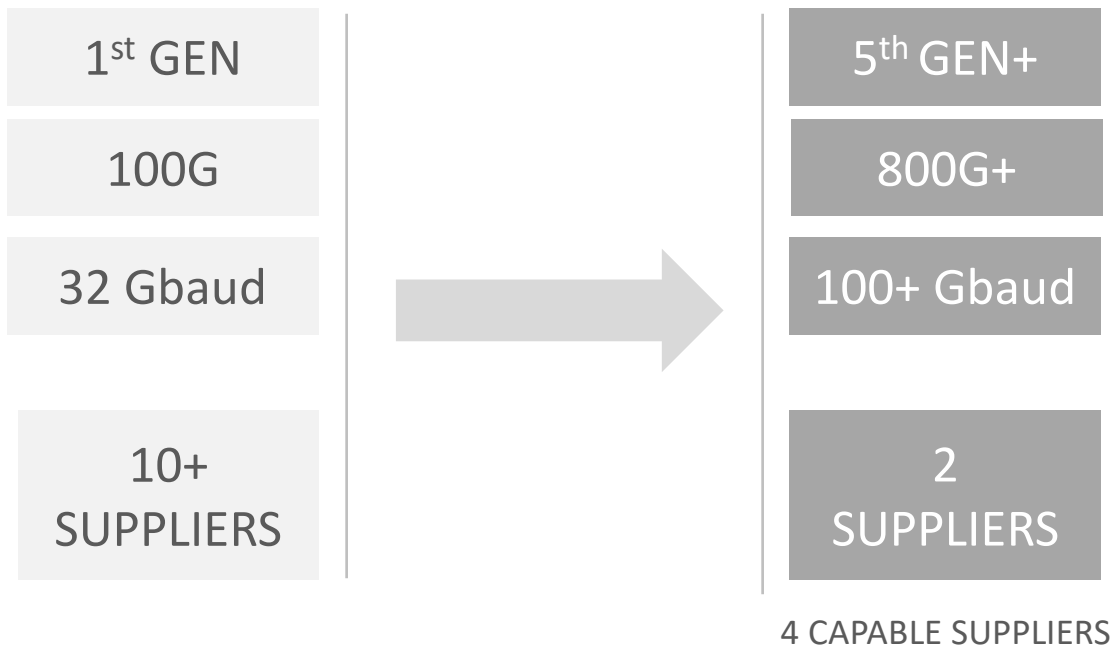
CAPABLE SUPPLIERS DECREASE AND  
VERTICAL INTEGRATION BECOMES A REQUIREMENT



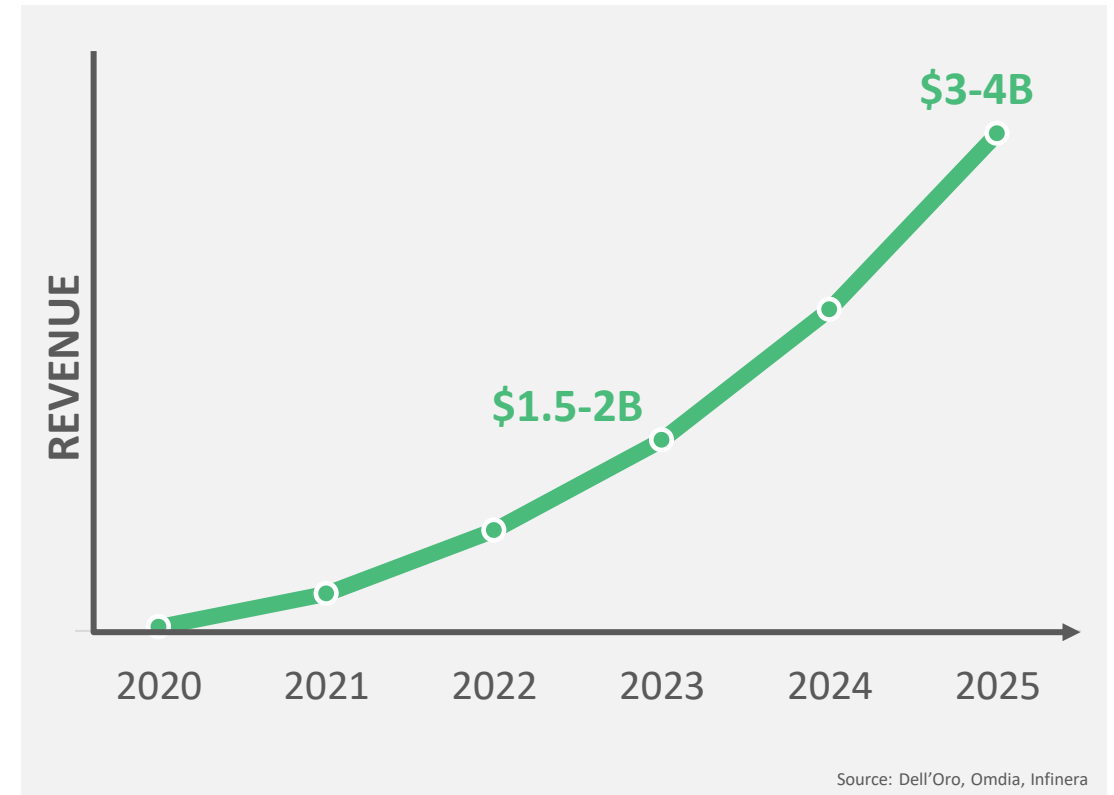
# Growing Market with Decreasing Suppliers

AS TECHNICAL COMPLEXITY INCREASES

CAPABLE SUPPLIERS DECREASE AND VERTICAL INTEGRATION BECOMES A REQUIREMENT

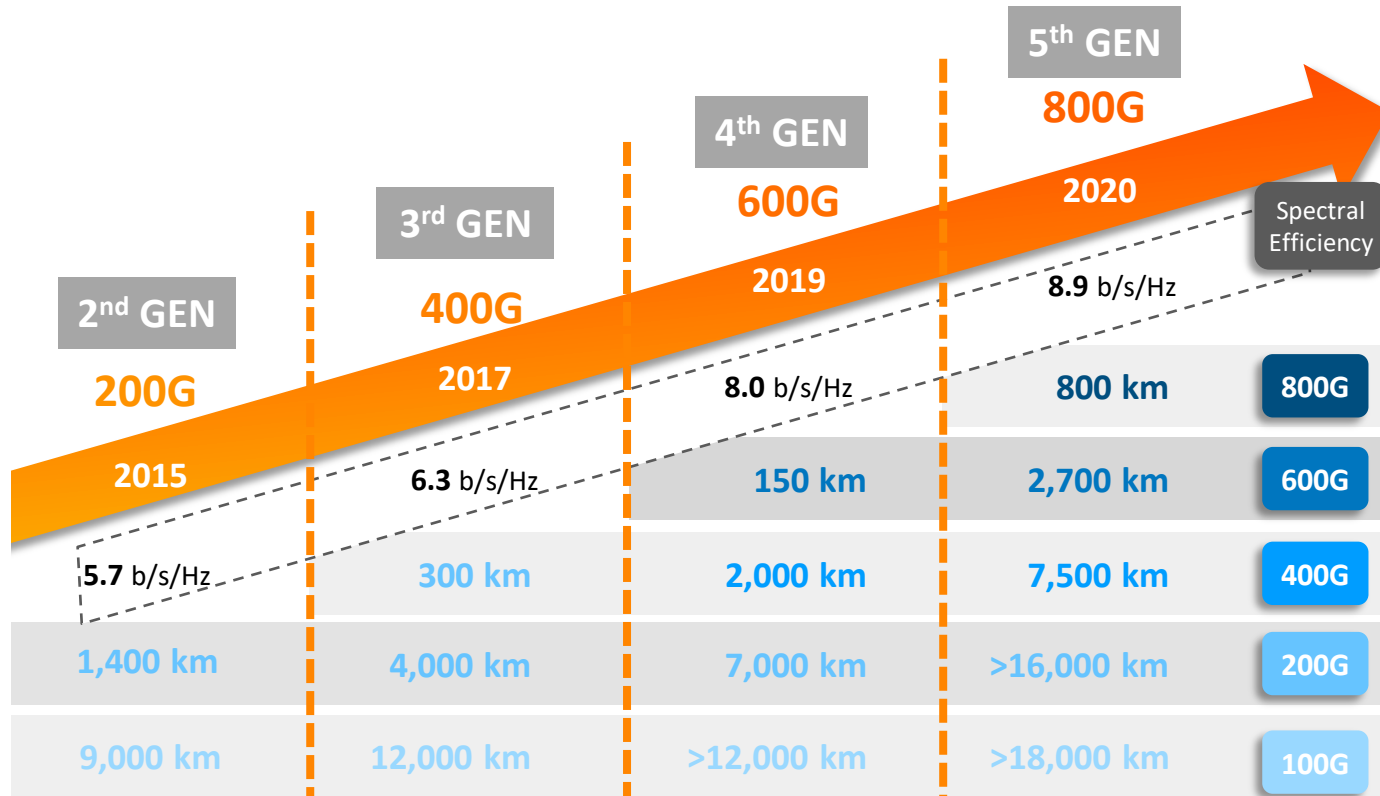


800G EMBEDDED MARKET

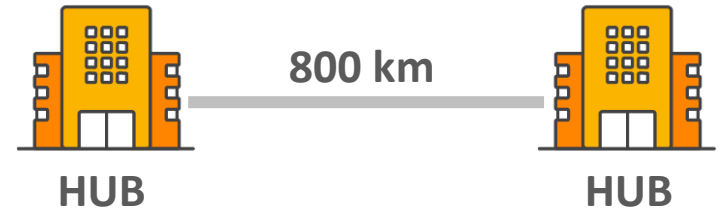


# Why Performance Matters

## WAVELENGTH CAPACITY OVER A GIVEN DISTANCE BY GENERATION



## NETWORK APPLICATION



	3rd GEN	5th GEN	
	400G	800G	
LINE RATE	300G	800G	167% ↑
CAPACITY PER FIBER	22.8T	38.4T	68% ↑



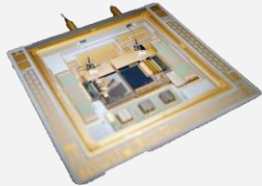
TCO REDUCTION

PRICE/PERFORMANCE

# Industry-leading Vertical Integration

## OPTICAL INNOVATION CENTER

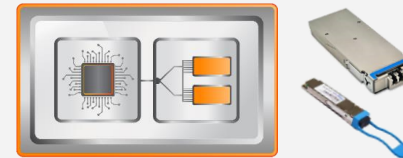
OPTICAL FRONT END



DIGITAL SIGNAL PROCESSOR (DSP)



TECHNOLOGY INTEGRATION



UNIQUE CAPABILITY

INDIUM PHOSPHIDE (PIC)

HISTORY OF GAME-CHANGING INNOVATION

ADVANCED TECHNOLOGY INTEGRATION CENTER

### VALUE FOR INFINERA



INDUSTRY-LEADING PERFORMANCE



SECURE SUPPLY CHAIN



LOWER COST STRUCTURE

### UNIQUE CUSTOMER VALUE



LOWEST COST/BIT/KM



GREATEST CAPACITY/FIBER



SUPERIOR OPERATIONAL MODELS

## HISTORY OF PIONEERING OPTICAL INNOVATION

Photonic Integrated Circuit (PIC)

Instant Bandwidth

Nyquist Subcarrier-based Transmission

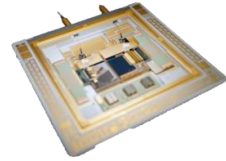
Dynamic Bandwidth Allocation

Long-codeword PCS

Multipoint Coherent Transport Solution – XR Optics

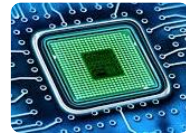
# Infinera Optical Innovation Center

## OPTICAL FRONT END



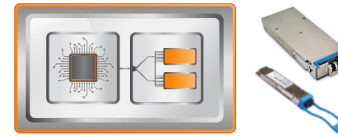
InP FAB

## DIGITAL SIGNAL PROCESSOR (DSP)



DSP DEVELOPMENT CENTER

## TECHNOLOGY INTEGRATION

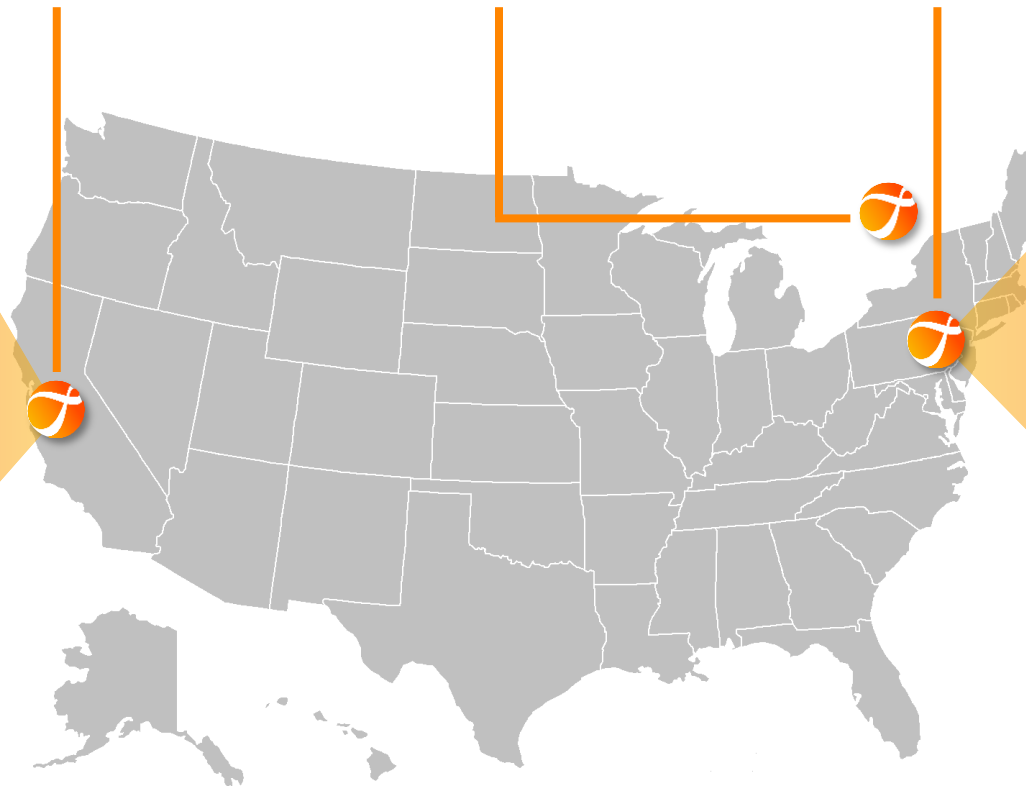


PACKAGING FACILITY

THE ONLY US-BASED  
INDIUM PHOSPHIDE  
FOUNDRY AT OUR SIZE  
AND SCALE



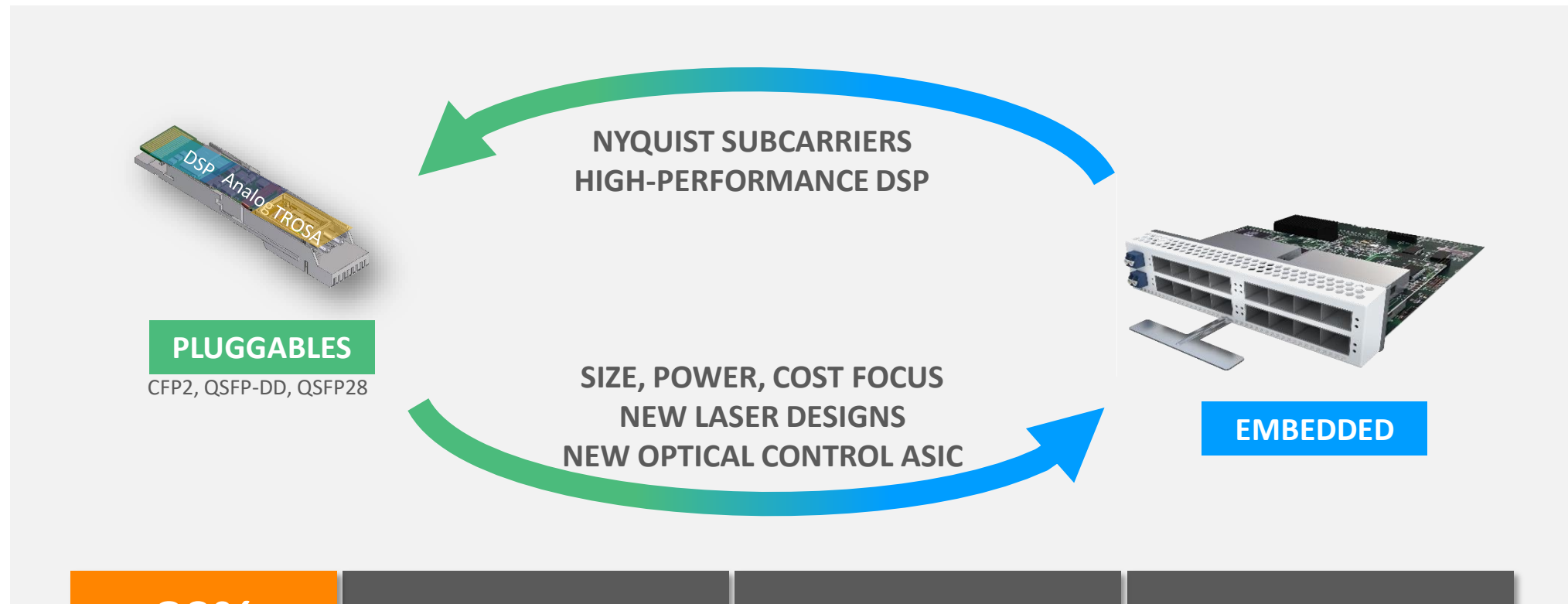
INDUSTRY'S MOST  
ADVANCED OPTICAL  
TECHNOLOGY  
INTEGRATION CENTER





# Investment in High-end Coherent Optical Engines

## “VIRTUOUS” INVESTMENT CYCLE



**80%**  
TECHNOLOGY  
REUSE

COMMON DSP  
FOUNDATION

COMMON OPTICAL  
FRONT END

COMMON  
MATERIALS AND FAB

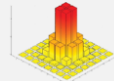
# ICE6 Industry-leading Performance

## INFINERA OPTICAL INNOVATION CENTER

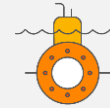
## INNOVATION-DRIVEN PERFORMANCE LEADERSHIP



**Ultra-high Baud Rate**  
(32-96 Gbaud)



**LC-PCS**

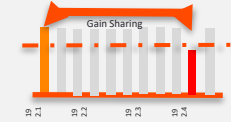


**Subsea Modulations**  
(ME-8QAM, etc.)

20% 33%



**High-gain SD-FEC**



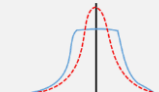
**SD-FEC Gain Sharing**



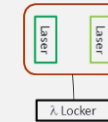
**Nyquist Subcarriers**



**DBA**



**Super-Gaussian**



**Shared Wavelocker**



**Lightning Tolerance**

## METRO/LONG-HAUL



PRESS RELEASE

**Verizon Successfully Completes High-Speed Long-haul Data Session**

Verizon sends 800 Gbps across long distance fiber in preparation for significant increase in amount of data from enterprise and consumer 5G applications

Dallas, Texas – July 21, 2020 – Verizon, along with Infinera, recently completed a successful test in Verizon's live fiber network to move 800 Gbps of data on a single wavelength across extreme distances. This significant technological advancement in the fiber network will lay the groundwork for managing the blazing fast gigabit speeds, super low single-digit millisecond latency, and huge scalability that will come as a result of Verizon's 5G Ultra Wide Band (UWB) network.



PRESS RELEASE

**Windstream Partners with Infinera to Test 800G over 730 Km in Live Production Network Using ICE6 Technology**

Sunnyvale, Calif., and Little Rock, Ark. – June 17, 2020, 8:00 a.m. ET – Infinera (NASDAQ: INFN) and Windstream, a leading provider of advanced network communications, today announced the completion of a live network trial that successfully achieved 800 gigabits per second (800G) single-wavelength transmission over 730 kilometers (km) across Windstream's long-haul network between San Diego and Phoenix. In addition to the industry-leading real-world performance at 800G, Windstream and Infinera set another industry record by looping back the signal to achieve a

**TIER 1 NA OPERATOR**



PRESS RELEASE

**Infinera Breaks Industry Record with 800G Transmission over 950 Kilometers in a Live Network Trial**

Sunnyvale, Calif. – March 17, 2020, 8:00 a.m. ET – Infinera (NASDAQ: INFN) announced today the successful completion of a live network trial of 800 gigabits per second (800G) single-wavelength transmission at 96 Gbaud over 950 kilometers (km) across a long-haul link in a major North American network operator's production network. Powered by Infinera's sixth-generation dual-800G Infinite Capacity Engine (ICE6) technology, this achievement signals a major industry milestone in driving down the cost per bit of telecommunications networks. The trial showcased the ability of Infinera's 800G technology designed to enable network operators to rapidly and cost-effectively address the increasing capacity demands of new services such as 5G, enhanced

## SUBMARINE



BLOG

**ICE6 Trial on MAREA Trans-Atlantic Cable Yields Two Record Results**

January 12, 2021  
By Geoff Bennett  
Director, Submarine Marketing

**Record-breaking 30 Tb/s Trans-Atlantic Capacity – First Trans-Atlantic 700 Gb/s Wavelength**

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Voice of our Customers

**Telstra**

**Andy Lumsden**

Engineering & Operations International Networks



INVESTOR DAY 2021

Voice of our Customers

# Telefónica Telxius Cable

Carlos Dasi Dieguez  
CTO



# Embedded ICE Roadmap

## 5<sup>th</sup> GENERATION



**Additional performance enhancements**

**100 Gbaud+ operation**

**~10% cost per bit reduction**

## 6<sup>th</sup> GENERATION

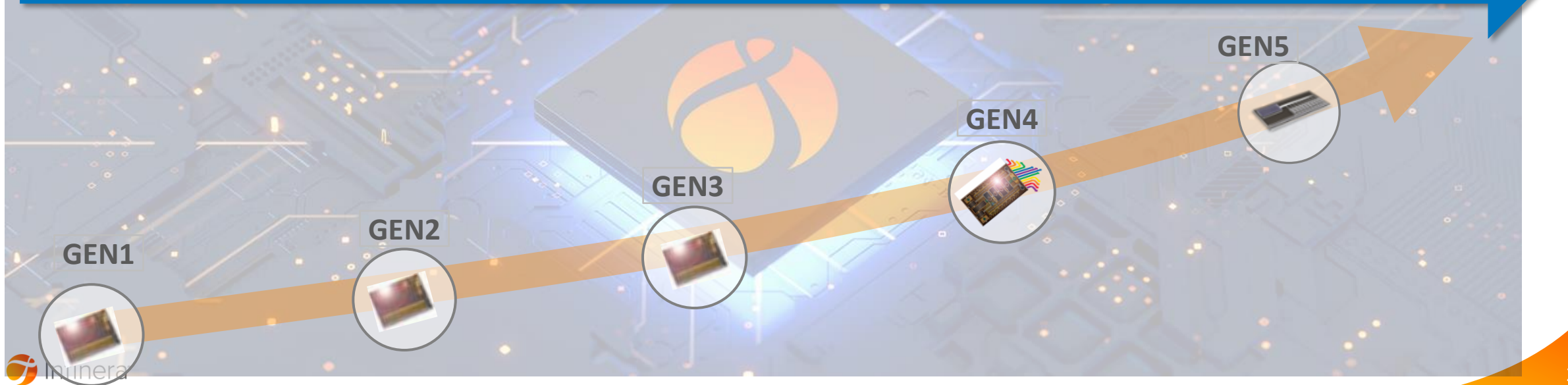


**Technology development underway**

**Target >30% TCO benefit**

**>140 Gbaud**

## TECHNOLOGY EVOLUTION



# Key Takeaways



## ICE6 AND BEYOND



PLUGGABLES STRATEGY  
XR OPTICS



OPEN OPTICAL PORTFOLIO  
ICE6 PROGRAM UPDATE  
CUSTOMER WINS AND TRACTION



TARGET BUSINESS MODEL

**LARGE AND GROWING MARKET**

~60% of Market by 2025

**INDUSTRY LEADING VI**

**LEADERSHIP IN 5<sup>th</sup> GEN (800G)**

**6<sup>th</sup> GEN R&D UNDERWAY**

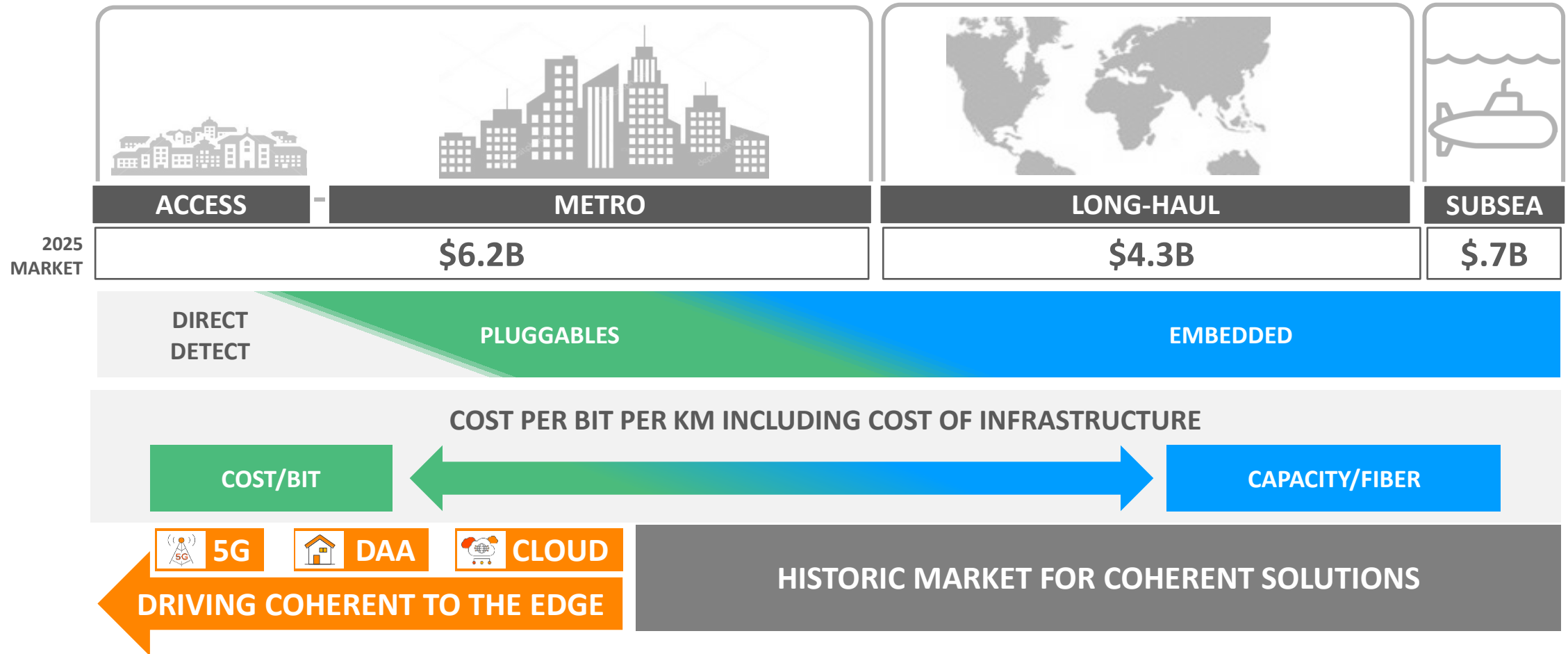
INVESTOR DAY 2021

# Coherent Pluggable Optics Strategy

**Dave Welch**  
Chief Innovation Officer

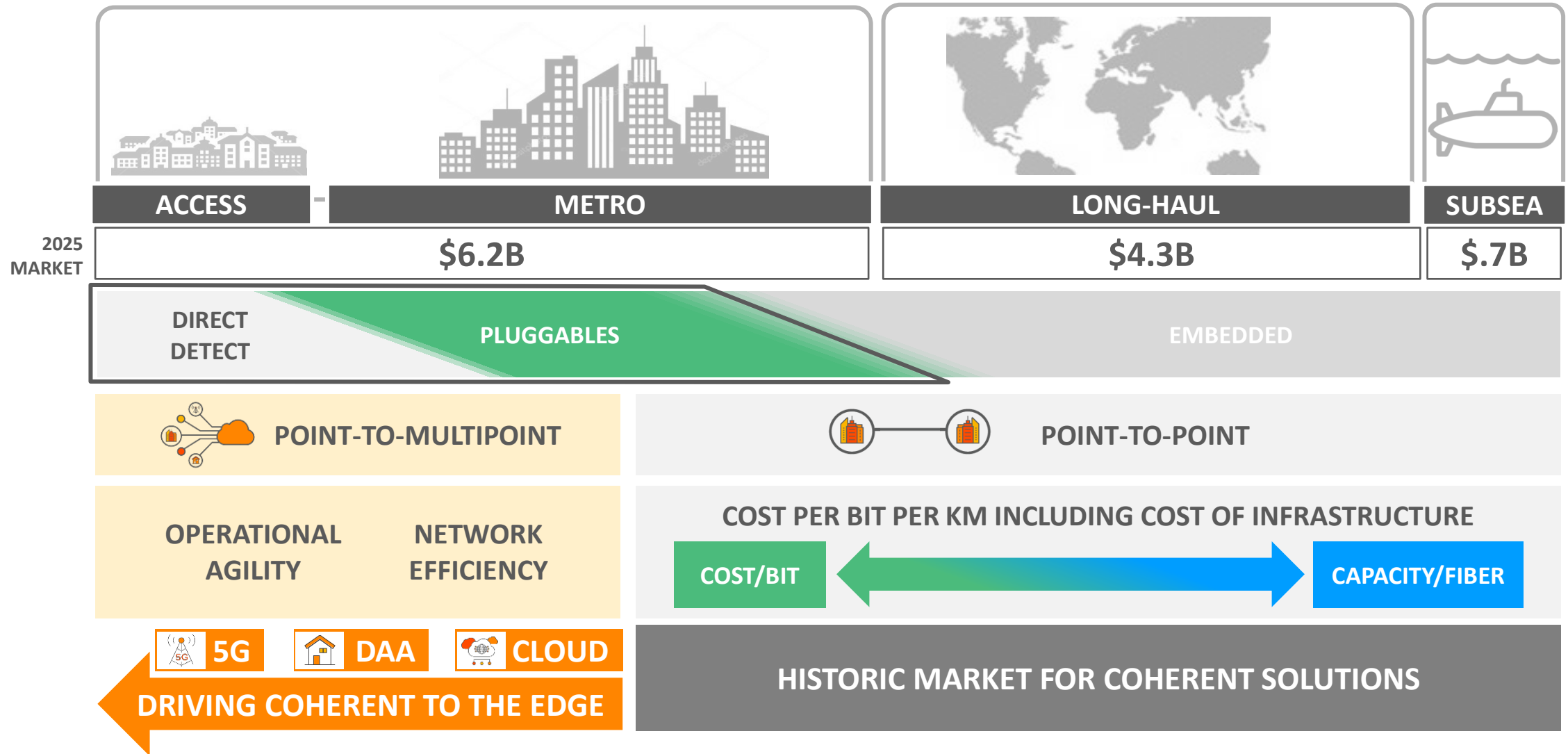


# Market for Coherent Solutions



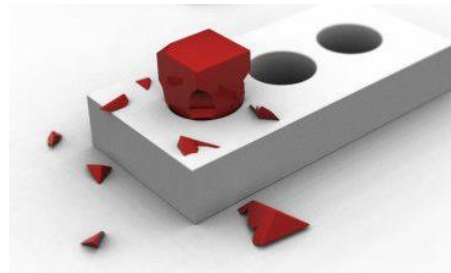


# Market for Coherent Solutions



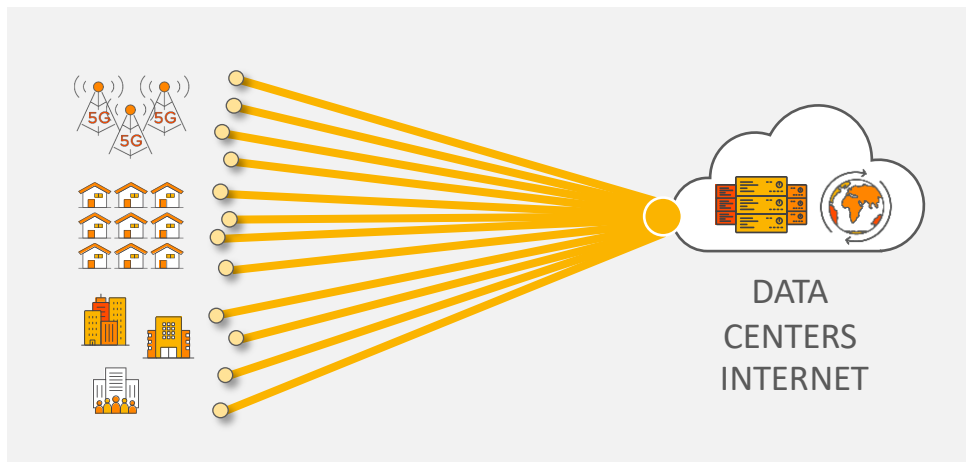
# What's the Problem?

**POINT-TO-MULTIPOINT  
TRAFFIC PATTERNS**

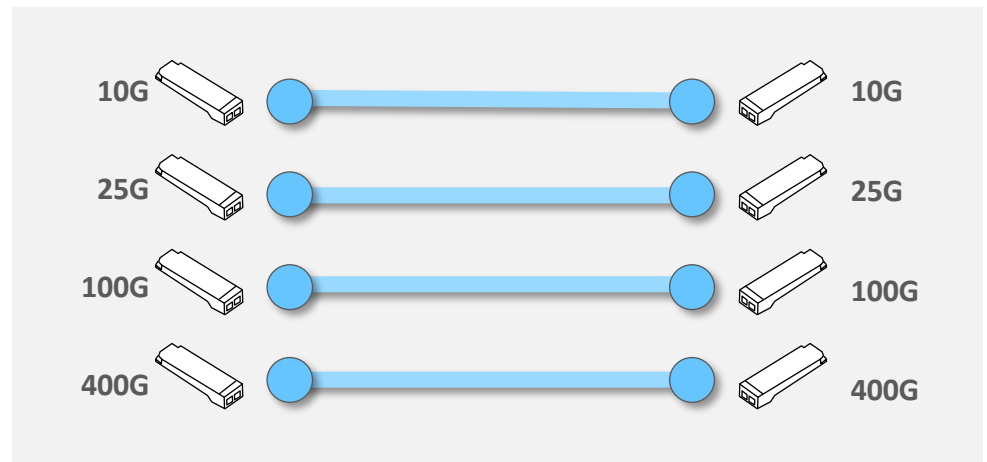


**POINT-TO-POINT  
TRANSMISSION TECHNOLOGY**

## NETWORK TRAFFIC PATTERN



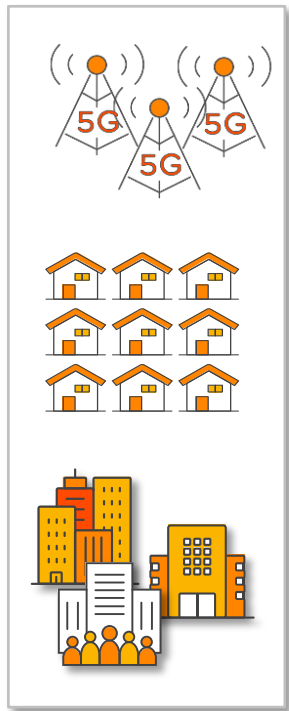
## OPTICAL NETWORKING TECHNOLOGY



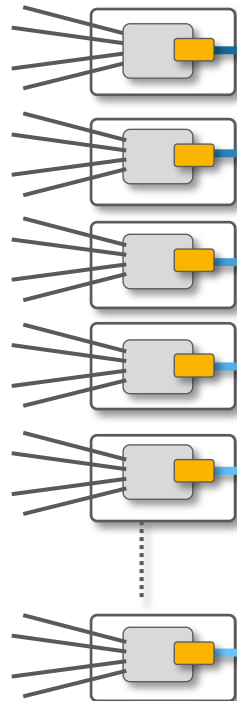
# Aggregation Networks Using Point-to-Point Technology

**N x 2  
TRANSCEIVERS**

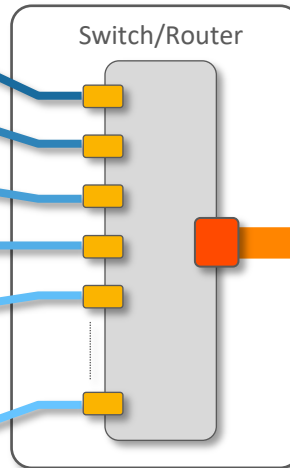
**INTERMEDIATE  
AGGREGATION**



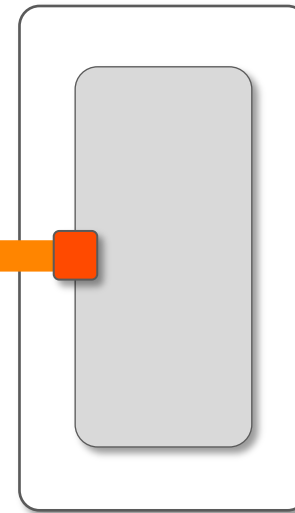
**COHERENT EDGE**



**ELECTRICAL  
AGGREGATION**



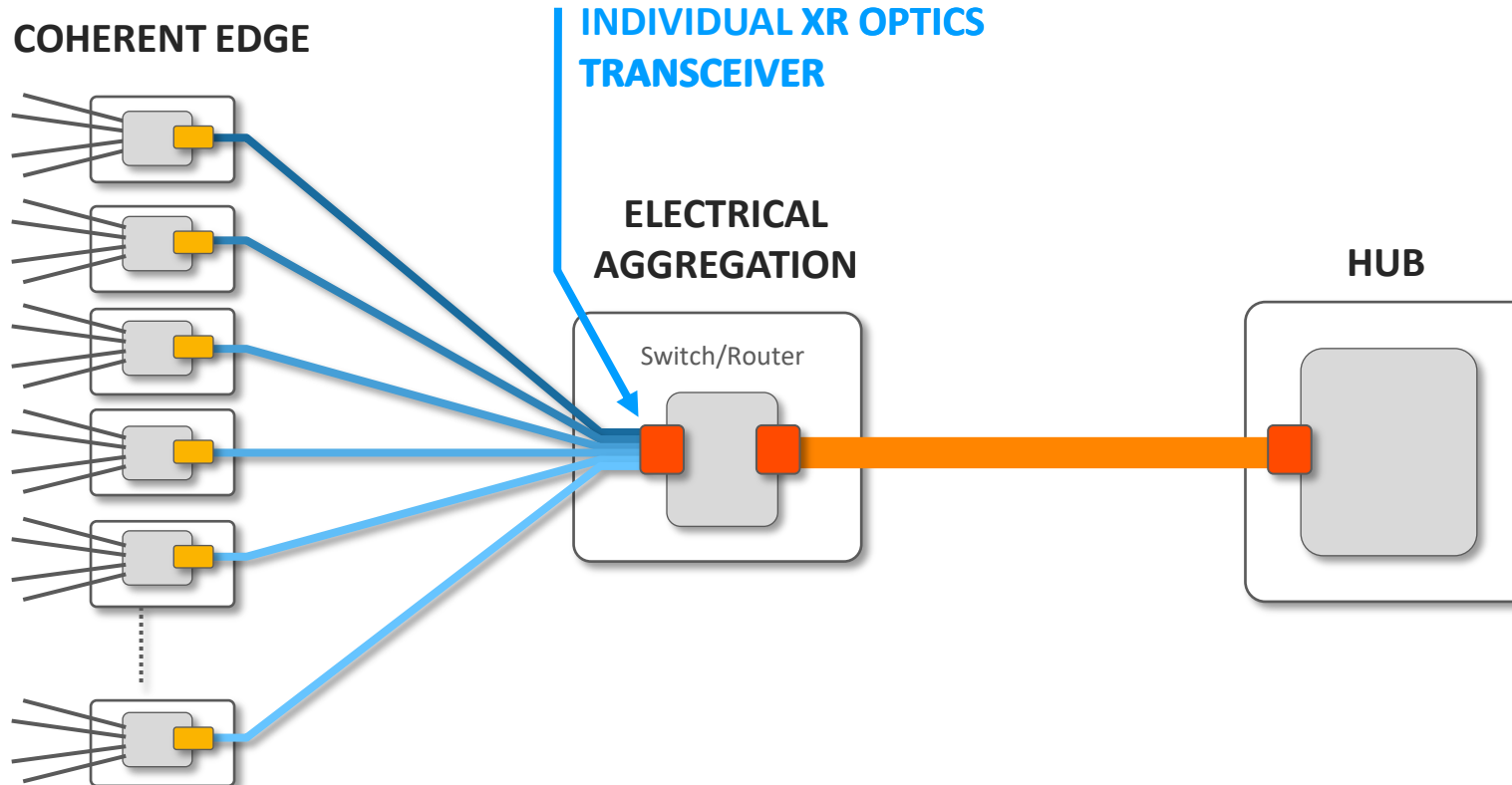
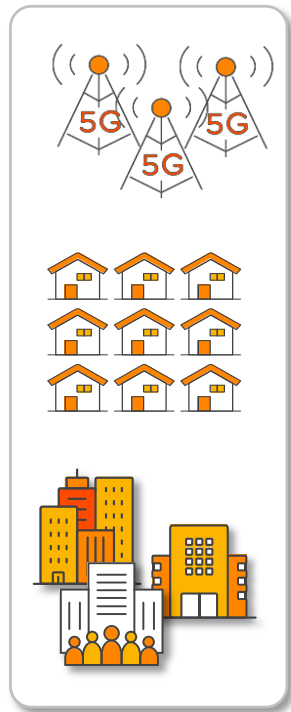
**HUB**



# The Solution: XR Optics – Multipoint Optical Transceiver

**N + 1  
TRANSCIEVERS**

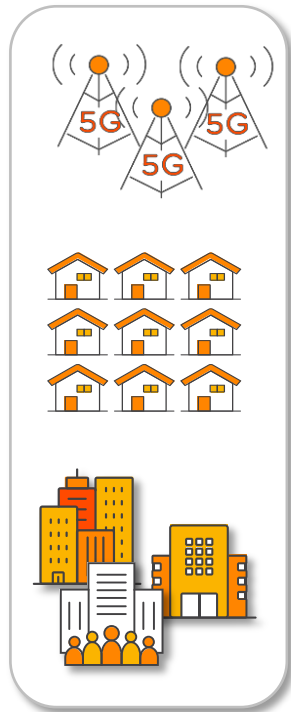
**INTERMEDIATE  
AGGREGATION**



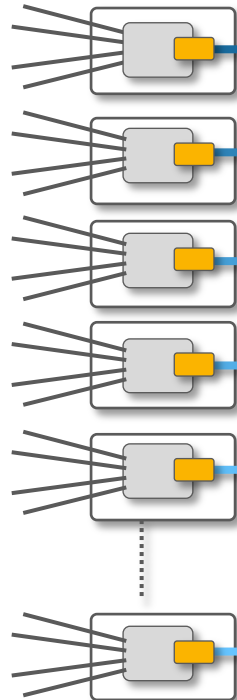
# The Solution: XR Optics

**N + 1  
TRANSCEIVERS**

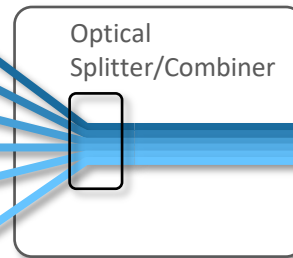
**INTERMEDIATE  
AGGREGATION**



**COHERENT EDGE**

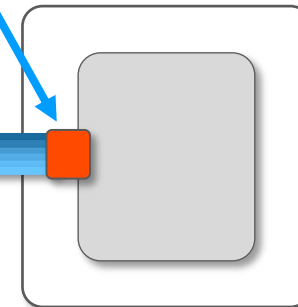


**OPTICAL  
AGGREGATION**



**XR OPTICS  
TRANSCEIVER**

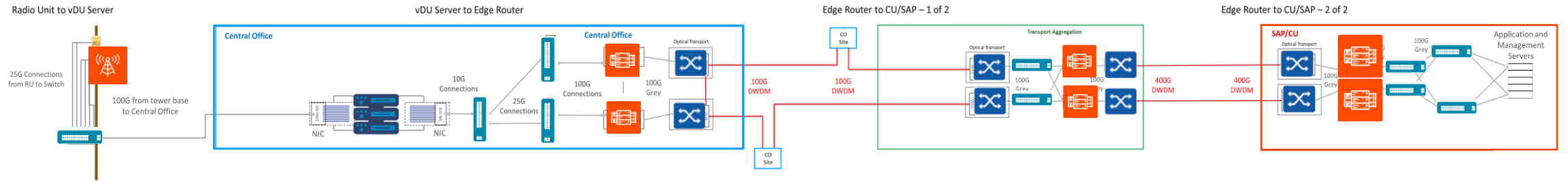
**HUB**



**AS MUCH AS  
70%  
REDUCTION IN  
NETWORK COST**

# 5G Backhaul Application

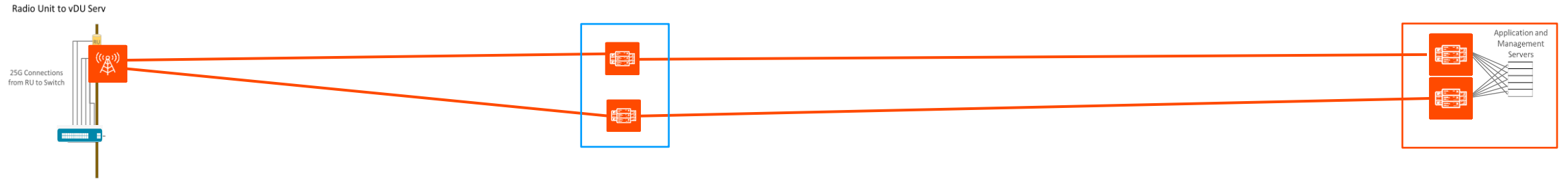
## A TRIP FROM THE CELL TOWER TO THE DATA CENTER



TRANSCEIVERS	52
SWITCH/ROUTER	19
TRANSPORT BOX	8

# 5G Backhaul Application

## A TRIP FROM THE CELL TOWER TO THE DATA CENTER



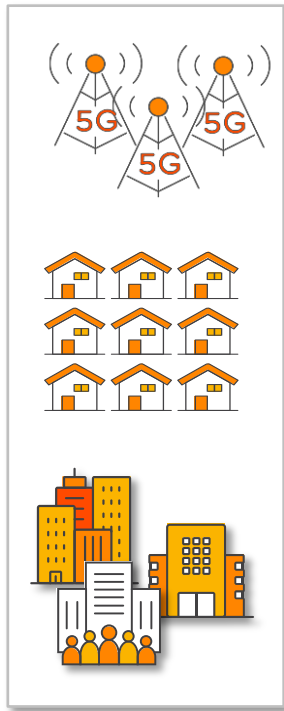
TRANSCEIVERS	52
SWITCH/ROUTER	19
TRANSPORT BOX	8



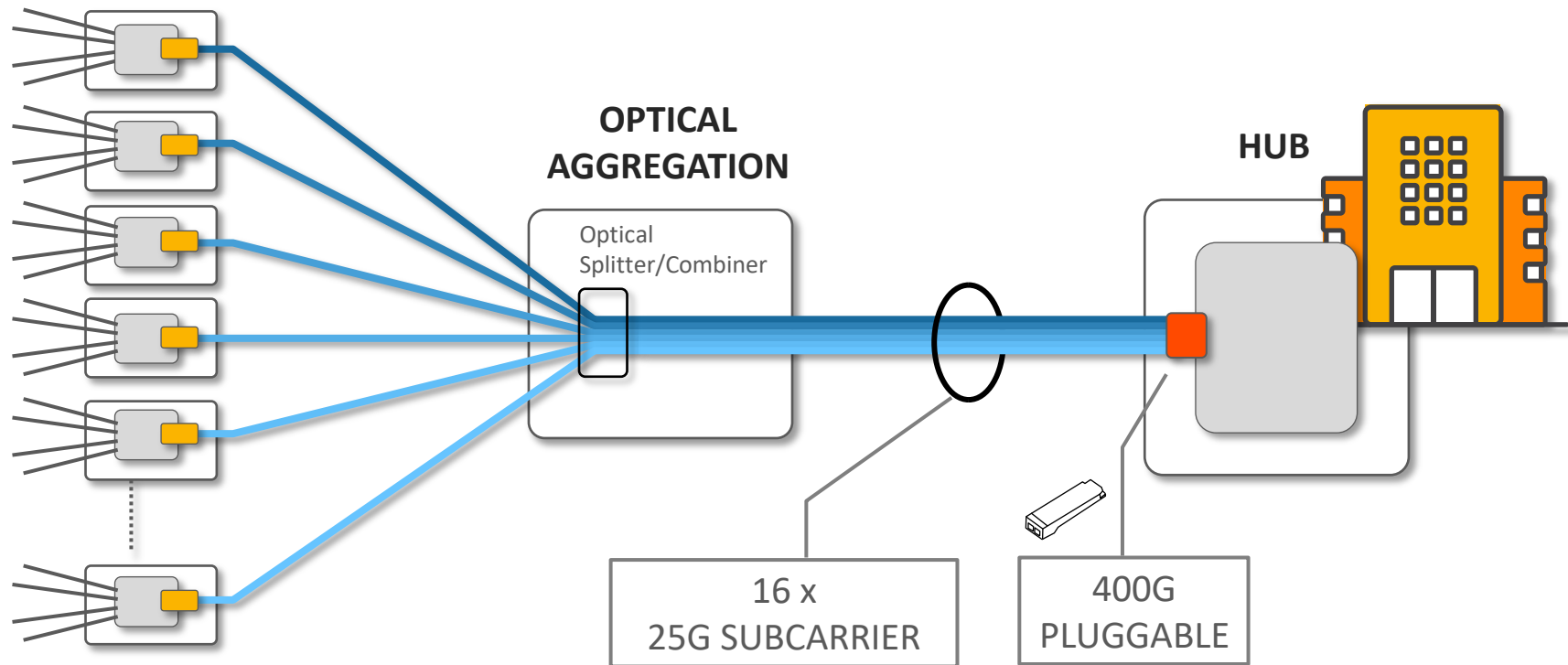
TRANSCEIVERS	7
SWITCH/ROUTER	4
TRANSPORT BOX	0

**AS MUCH AS 70% TCO REDUCTION  
SIGNIFICANT NETWORK SIMPLIFICATION**

# XR Optics: Multipoint Application



## COHERENT EDGE





# The Solution: XR Optics

THE ONLY SOLUTION THAT SUPPORTS BOTH



POINT-TO-MULTIPOINT

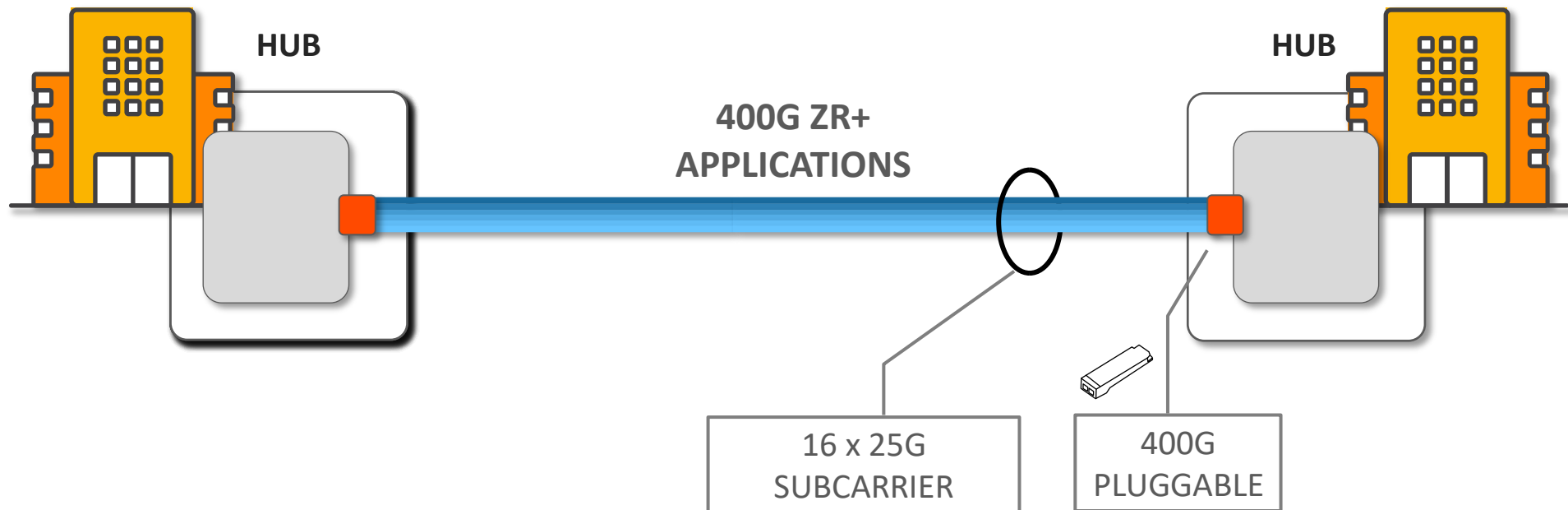


POINT-TO-POINT



SINGLE TECHNOLOGY SUPPORTS MULTIPLE RATES

100G	200G	400G	800G
4 x SUBCARRIERS	8 x SUBCARRIERS	16 x SUBCARRIERS	32 x SUBCARRIERS



# Universal Optical Networking Technology

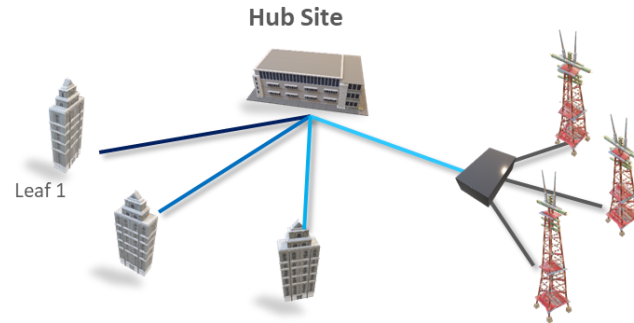
SINGLE SOLUTION TO ADDRESS MULTIPLE APPLICATIONS

## POINT-TO-MULTIPOINT AGGREGATION

5G

HIGH-SPEED BROADBAND

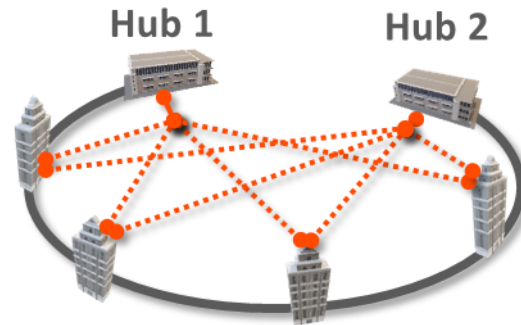
PON OVERLAY



## POINT-TO-POINT

METRO AGGREGATION

DCI AND METRO/REGIONAL TRANSPORT



Hub Site Data Center

Hub Site Data Center

METRO/REGIONAL



## AS MUCH AS 70% TCO SAVINGS



**Virgin Media Trials Infinera's Cutting Edge Multi-gigabit Network Technology**

*New full fiber technology could support a scaled rollout of multi-gigabit speeds to Virgin Media's customers in the future.*

San Jose, Calif. – March 3, 2021, 8:00 a.m. ET – Infinera (NASDAQ: INFN) announced today that Virgin Media has trialed innovative network technology which provides new ways to roll out multi-gigabit speeds to consumers and businesses.



**BT models, lab trials Infinera's XR optics**

As the two companies will describe in a paper to be delivered during ECOC 2020, the modelling indicates the use of XR optics in a metro scenario could produce a greater than 70% savings in capex over a five-year period.



**Infinera and American Tower Complete Live Network Demonstration of First Point-to-Multipoint Coherent Optical Transmission in Latin America**

San Jose, Calif. – March 15, 2021, 8:00 a.m. ET – Infinera (NASDAQ: INFN) and American Tower announced today the successful completion of the first point-to-multipoint coherent optical transmission in a carrier network environment in Latin America. This field trial was conducted with Infinera's XR optics technology over American Tower's Passive Optical Network.

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Voice of our Customers

**BT**

**Andrew Lord**

Senior Manager of Optical Research



# XR Optics Open Ecosystem

**OPEN XR**  
FORUM

Consortium of **network operators**, **equipment manufacturers**, and **subcomponent manufacturers** to adopt **open specifications** for subcarrier-based coherent transmission solutions supporting point-to-point and point-to-multipoint applications

## KEY NETWORK OPERATOR FOUNDING MEMBERS

2 OF THE TOP 4

NA OPERATORS

2 TIER 1

EMEA OPERATORS

## UNPRECEDENTED MARKETING TRACTION

148 Direct customer engagements

15 Network trials conducted

26 Early adopters, including 8 Tier 1s

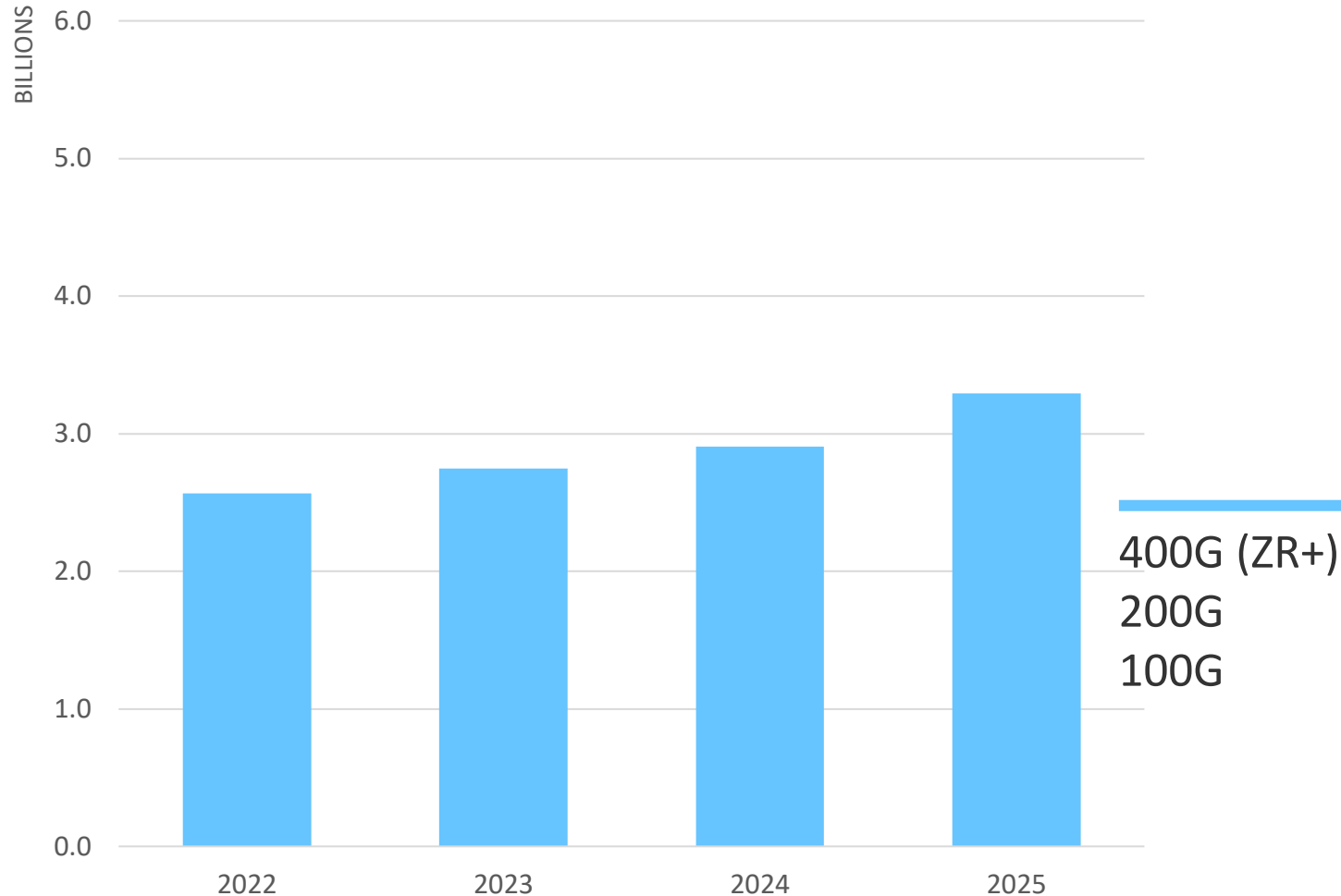
3 Prestigious industry awards

## XR OPTICS NETWORK TRIALS



# XR Optics Total Addressable Market

## OPTICAL MARKET BASED ON COHERENT PLUGGABLES



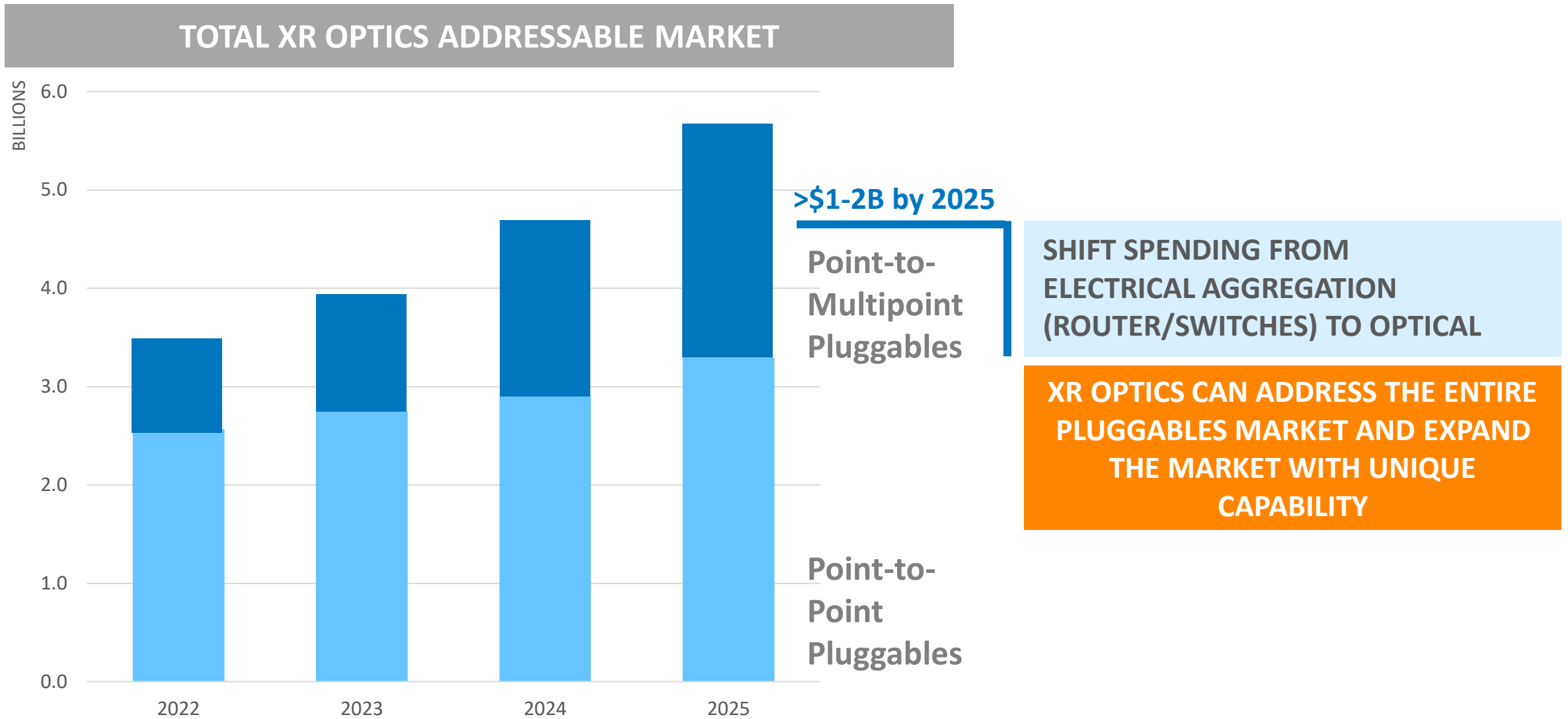
**POINT-TO-POINT APPLICATION**  
XR optics can address all pluggable applications by varying the number of subcarriers

**16 SCs = 400G**

**8 SCs = 200G**

**4 SCs = 100G**

# XR Optics Total Addressable Market

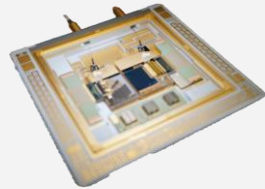


Source: Signal AI, Dell'Oro, Omdia, LightCounting and Infinera

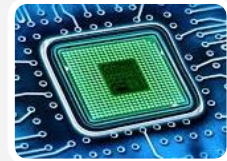
# Building Pluggable Coherent Optics

## OPTICAL INNOVATION CENTER

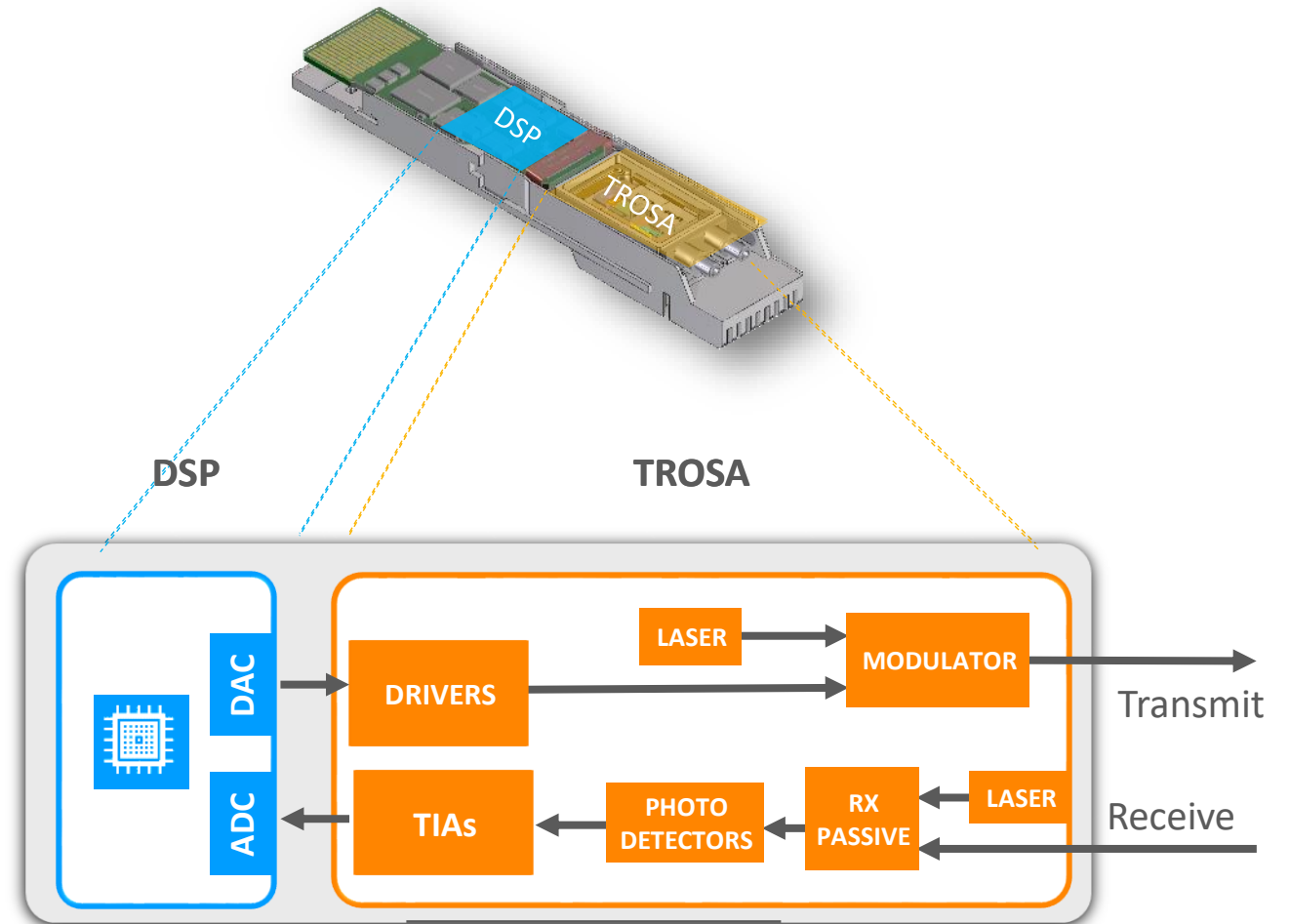
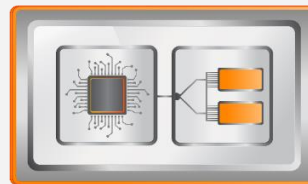
OPTICAL FRONT END



DIGITAL SIGNAL PROCESSOR (DSP)



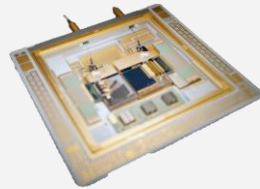
TECHNOLOGY INTEGRATION



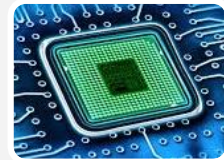
# Building Pluggable Coherent Optics

## OPTICAL INNOVATION CENTER

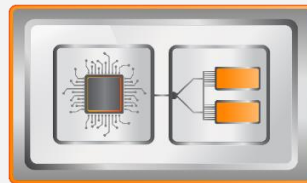
OPTICAL FRONT END



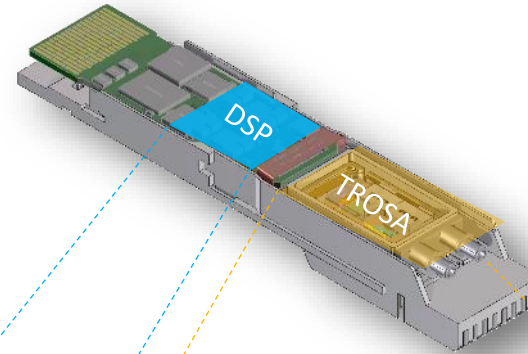
DIGITAL SIGNAL PROCESSOR (DSP)



TECHNOLOGY INTEGRATION

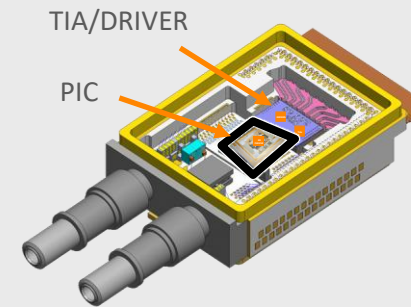
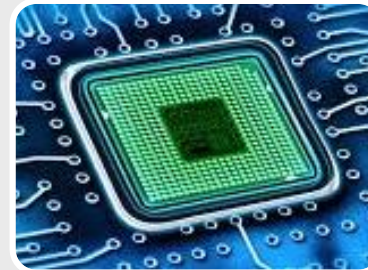


TECHNOLOGY INTEGRATION



DSP

TROSA



GREATEST DEGREE OF INTEGRATION

HIGHER OUTPUT POWER

SUPERIOR VALUE TO OUR CUSTOMERS

INCREASED NETWORK FUNCTIONALITY

SUPERIOR PERFORMANCE



# ICE-XR Coherent Pluggables Suite

VERTICALLY INTEGRATED + HIGHLY DIFFERENTIATED



## FLEXIBLE SUBCARRIER-BASED SUITE OF PLUGGABLE OPTICAL SOLUTIONS



POINT-TO-POINT  
OPERATION



TRANSFORMATIVE POINT-  
TO-MULTIPOINT OPERATION

FIRST XR  
PLUGGABLE  
RELEASE IN 2022  
100G/400G  
CFP2/QSFP-DD



**100G**

(4 Subcarriers)  
QSFP-28/QSFP-DD/CFP2

**400G**

(16 Subcarriers)  
QSFP-DD/CFP2

**800G**

(32 Subcarriers)  
CFP2

LEVERAGE COMMON TROSA, DSP, MATERIALS

INDUSTRY'S ONLY UNIFIED EDGE-TO-CORE  
PLUGGABLE SOLUTION

ENABLED BY XR OPTICS TECHNOLOGY AND  
INDIUM PHOSPHIDE VERTICAL INTEGRATION

# Key Takeaways



ICE6 AND BEYOND



**PLUGGABLES STRATEGY  
XR OPTICS**



OPEN OPTICAL PORTFOLIO  
ICE6 PROGRAM UPDATE  
CUSTOMER WINS AND TRACTION



TARGET BUSINESS MODEL

**VALUE OF MP COHERENT OPTICS**

**XR SUPPORT FOR POINT-TO-POINT  
AND POINT-TO-MULTIPOINT**

**OPEN XR FORUM LAUNCH**  
MSA Open Specifications

**\$1-2B NEW TAM**

**ICE-XR INTRODUCTION**

INVESTOR DAY 2021

Break

**The Program**  
Will Resume Shortly



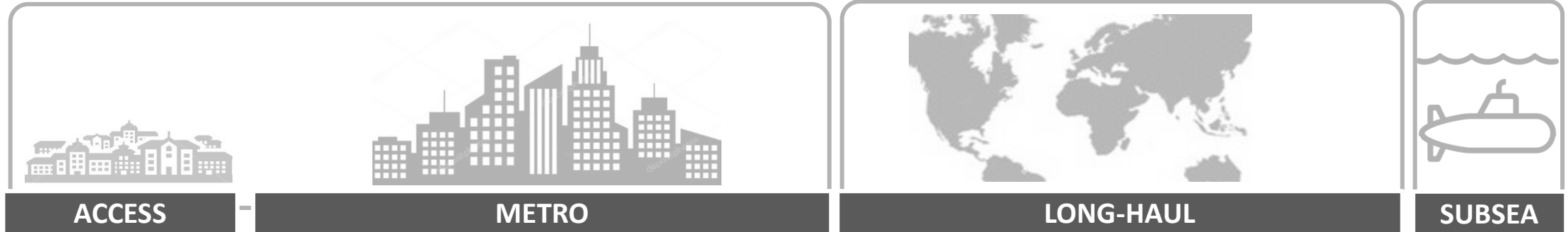
INVESTOR DAY 2021

# Portfolio Strategy

**Glenn Laxdal**  
SVP, Global PLM



# Aligning Portfolio to Key Market Trends



**BANDWIDTH GROWTH**

FTTx DAA 5G

**30%+ Traffic Growth**

**COHERENT PLUGGABLES (100G, 400G)**

**HIGH-END OPTICS (800G)**

**OPEN AND DISAGGREGATED**

**COMPETITIVE DISPLACEMENT**

**COHERENT OVERLAY NETWORKS (Metro Line System Upgrades)**

# The Drive to Open Networking

## THE MOVE TO OPEN IS A NATURAL MARKET EVOLUTION

ACCESS

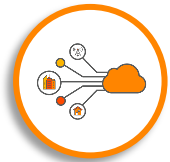
MOBILE

CABLE

NFV

O-RAN

OPTICAL



2003

2005

2010

2012

2020

2021

### OPEN NETWORKING FORUM



### OPEN ROADM



### TELECOM INFRA PROJECT

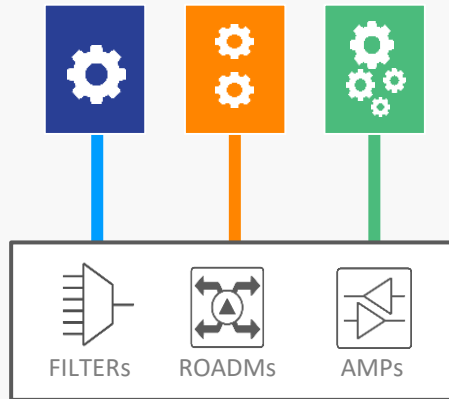


### ONAP



# What Are Open Optical Solutions?

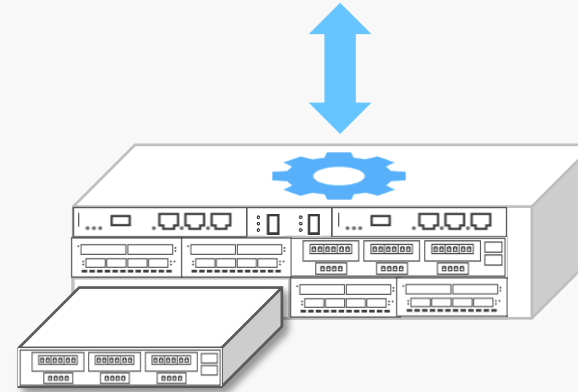
## SEPARATION OF XPONDERS AND LINE SYSTEMS



XPONDERS

OPTICAL LAYER

## OPERATIONALLY SIMPLIFIED PLATFORMS



STANDARDIZED DATA MODELING

OPEN, AGILE SOFTWARE

MODULAR PLATFORMS



ELIMINATE  
VENDOR LOCK-IN



ACCELERATE  
INNOVATION CYCLES

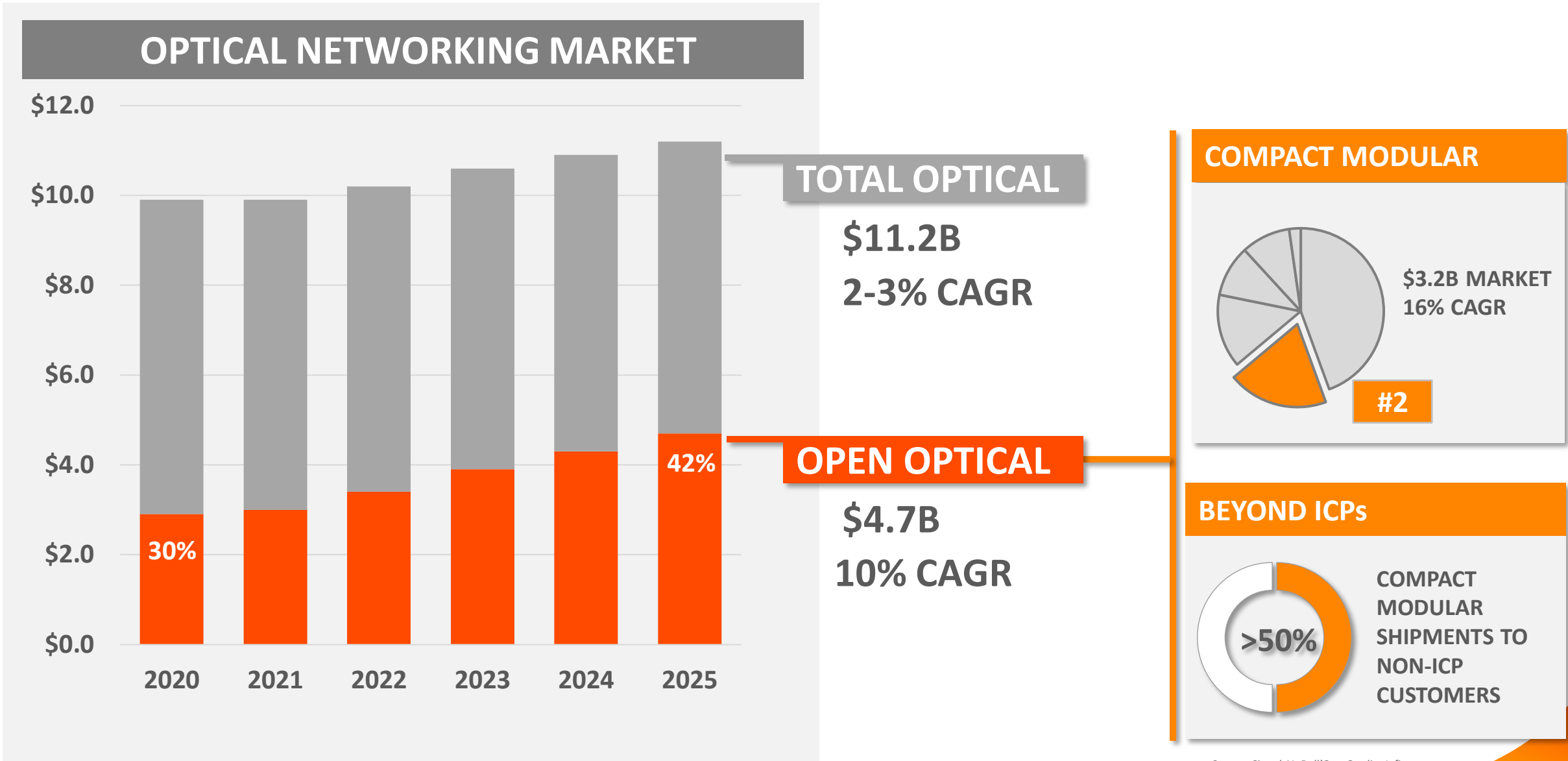


ACCELERATE  
NEW TECHNOLOGY  
INTRODUCTION



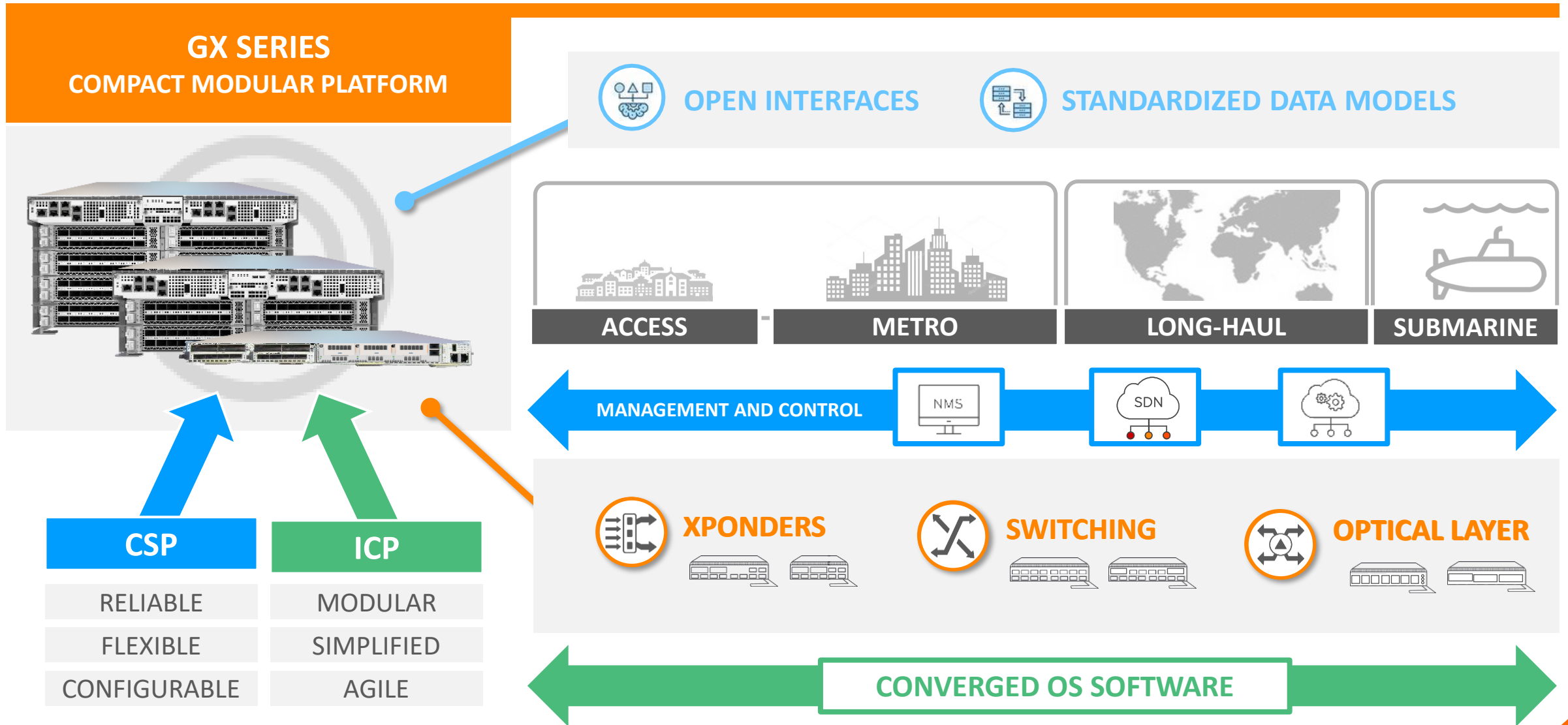
INCREASE  
NETWORK FLEXIBILITY

# Open Optical Networking

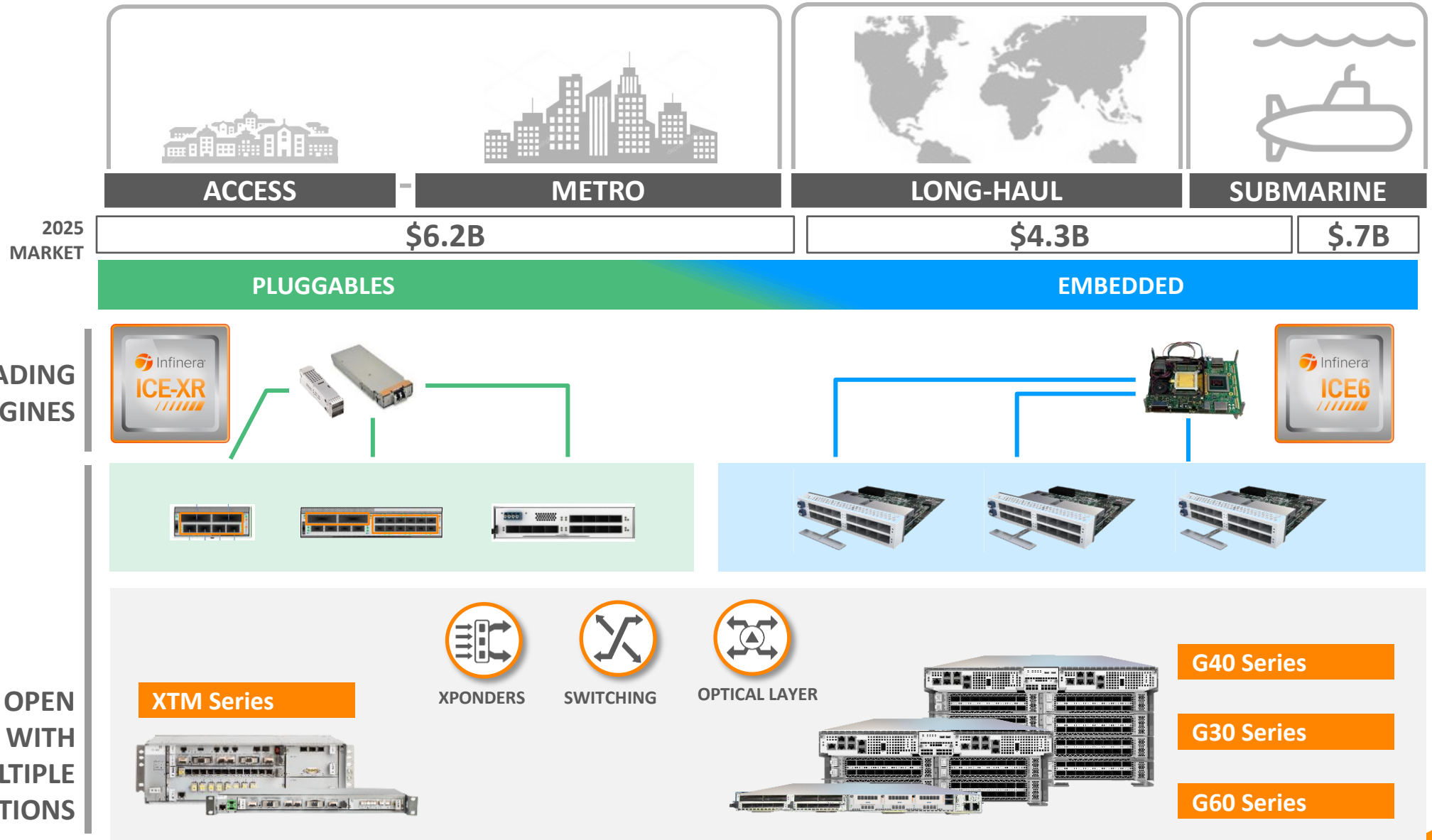




# Compact Modular Platforms

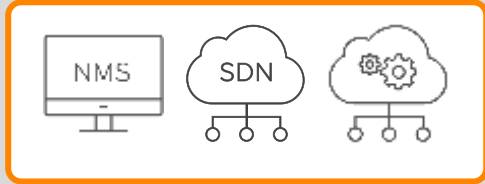


# Open Optical Networking Portfolio



# SDN Network Automation

## MANAGEMENT AND CONTROL



REAL-TIME  
PLANNING



ZERO-TOUCH  
COMMISSIONING



NETWORK ANALYTICS  
AND OPTIMIZATION



INSTANT  
BANDWIDTH



OPEN APIs

NETCONF/YANG

OPEN ROADM

OPENCONFIG

MEF PRESTO

## CONVERGED OS



OPEN, MODULAR ARCHITECTURE  
CONTAINER-BASED PACKAGES



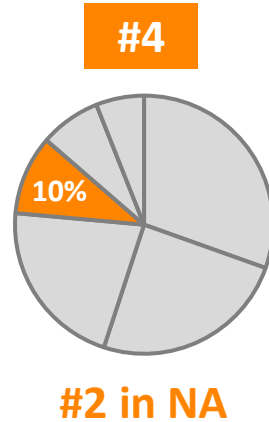
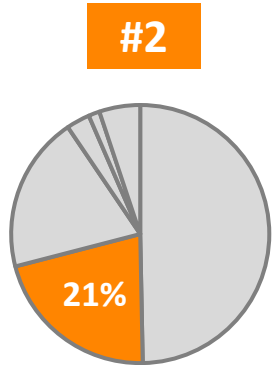
STANDARDIZED DATA MODELS  
TRUST – SECURITY – ENCRYPTION

# Long-Haul/Subsea Networks – Why We Win



## MARKET POSITION

SUBSEA	LONG-HAUL
--------	-----------



## KEY MARKET DRIVERS



- Market shifting to 800G – best reach performance wins
- Maximize fiber asset; highest spectral efficiency and reach
- C+L-band line systems
- Interoperability between subsea and terrestrial

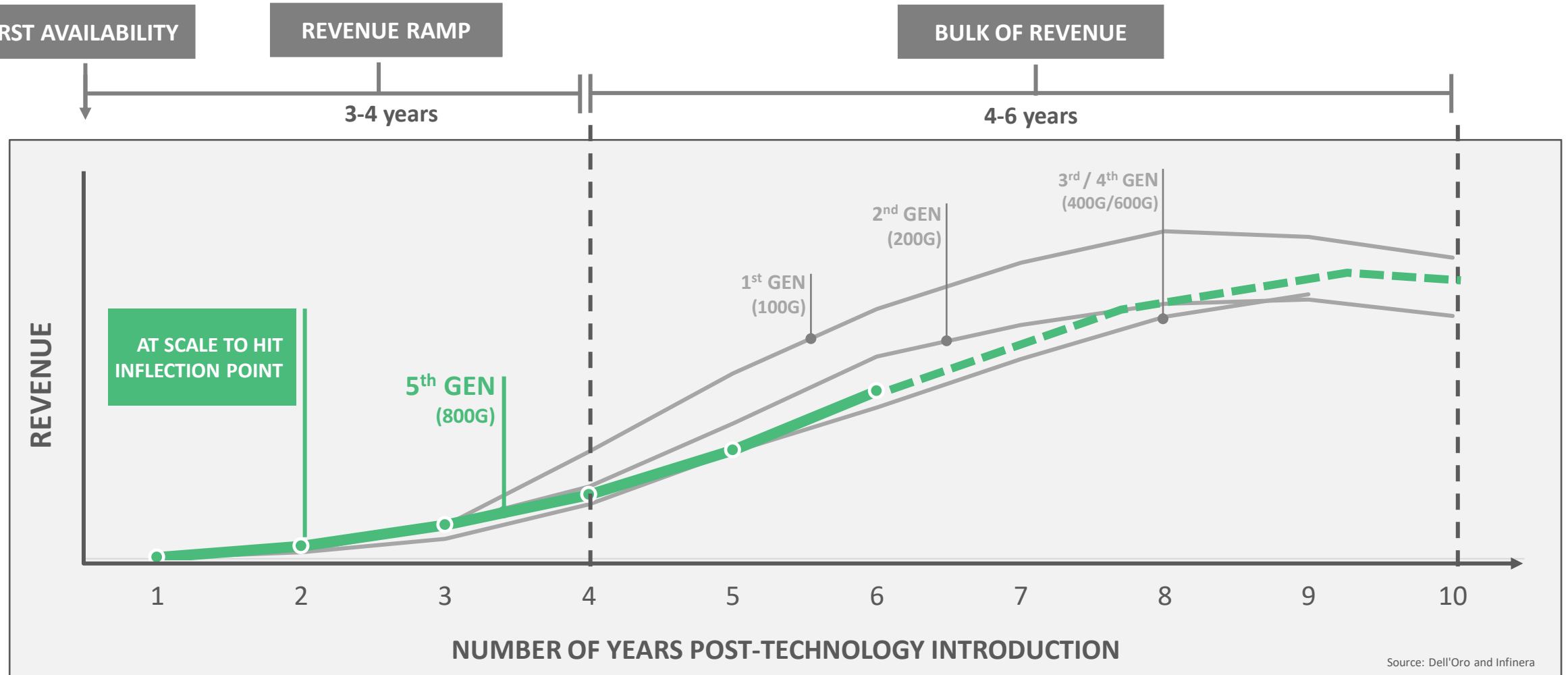
## INFINERA STRATEGY



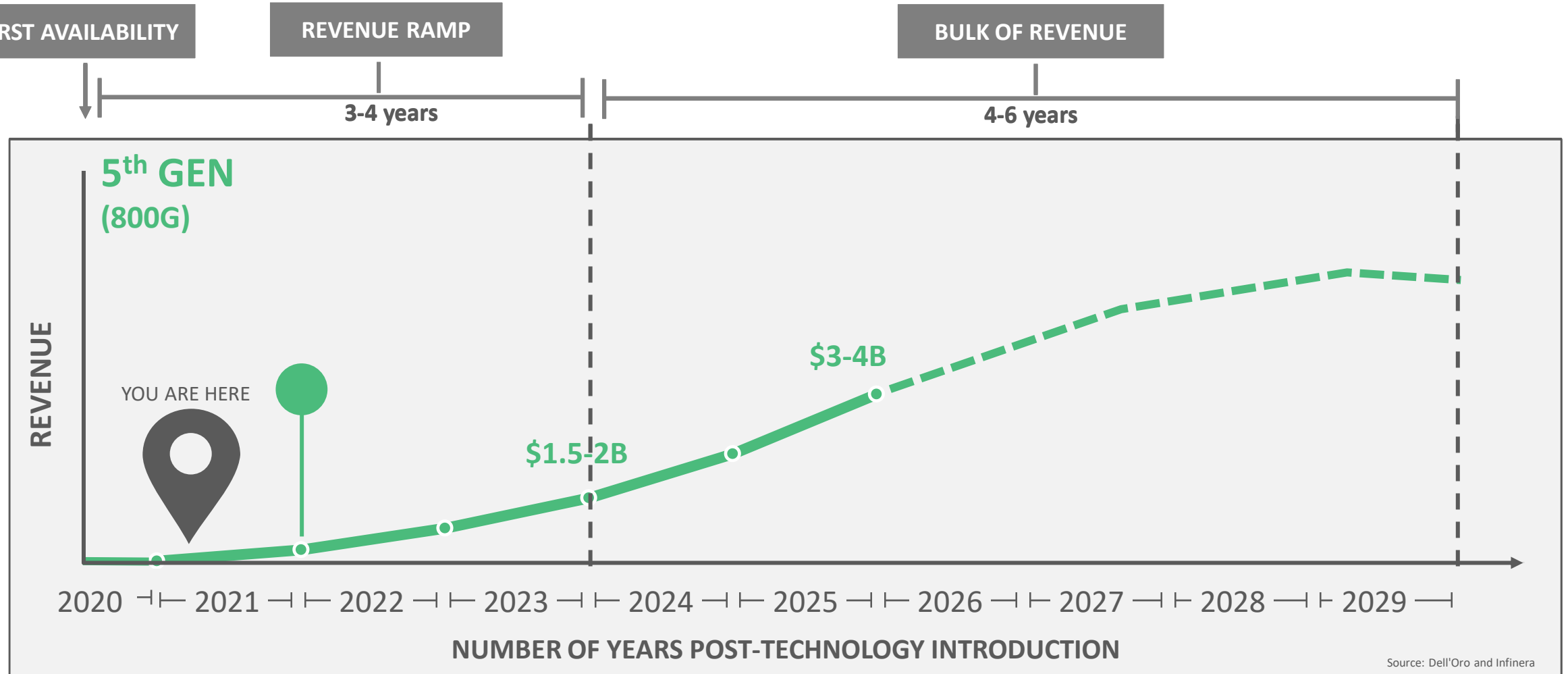
- Industry-leading 800G reach and performance
- Significant momentum building with 800G
- Lowest cost structure – flexible deployment options
- C+L-band line system



# Coherent Optics Revenue Lifecycle



# Coherent Optics Revenue Lifecycle



Source: Dell'Oro and Infinera

# GX G40 + ICE6 Update

## ICE6 SHIPPING

- 22** DESIGN WINS
- 13** CUSTOMER ORDERS
- 57** TRIALS/CERTIFICATIONS

**SUBSTANTIAL BACKLOG**

## TECHNOLOGY LIFECYCLE

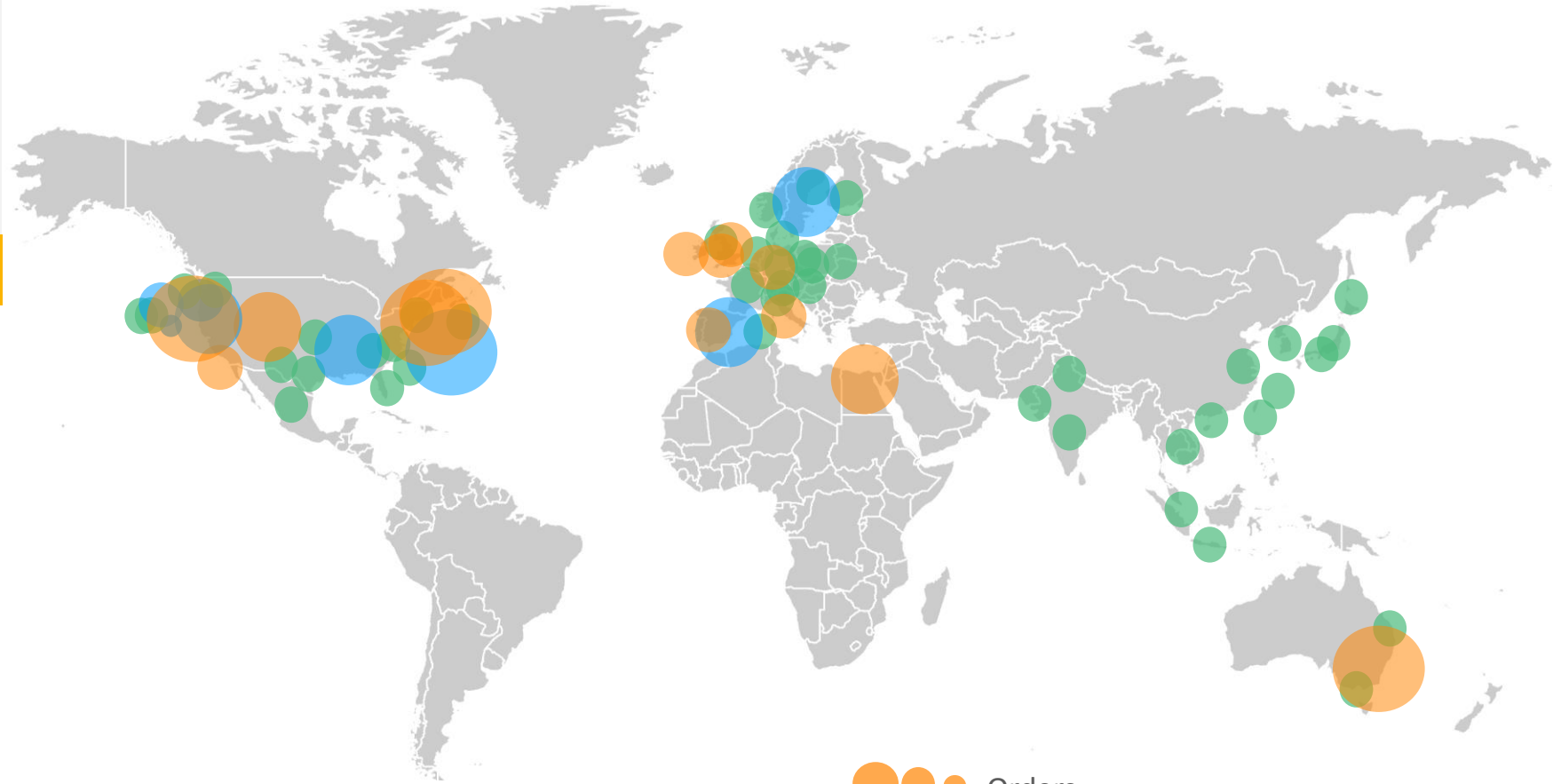
GROWING TO \$3-4B BY 2025

YOU ARE HERE



**7-10 YEARS**

## ICE6 ACTIVITY



Bubble size = relative size of opportunity

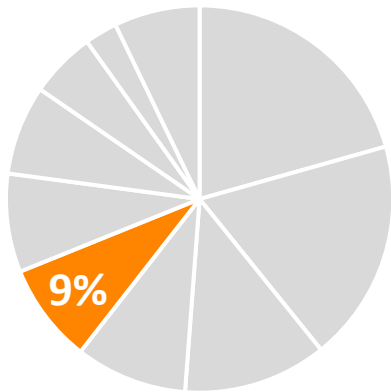
- Orders
- Design Wins
- Trials

# Metro Networks – Why We Win



## MARKET POSITION METRO AND AGG

**#5**



## KEY MARKET DRIVERS



- Metro is being disrupted – fastest growth segment
- 400G coherent overlay – 50GHz fixed grid to flex grid upgrade
- 100G coherent moves to the metro edge
- Competitive displacement

## INFINERA STRATEGY



- Multi-service compact modular metro system
- High-performance 100G-400G pluggables
- Differentiated P2MP pluggables
- Network automation – P2P and P2MP networks

**\$1-2B**  
NEW TAM

**P2MP**  
APPLICATIONS



INVESTOR DAY 2021

Voice of our Customers

**euNetworks**

**Andrew Holder**  
Chief Technology Officer



# Go To Market – Global Presence

## LOCAL PRESENCE IN MORE THAN 30 COUNTRIES

GROW SHARE IN THE TOP 50

INCREASE REVENUE SHARE WITH CLOUD OPERATORS

GAIN SHARE IN LONG-HAUL AND SUBSEA

GROW WALLET SHARE IN EMEA W/ DISPLACEMENT

HIT 5G VOLUME WITH TRANSFORMATIVE SOLUTION



# Key Takeaways



ICE6 AND BEYOND



PLUGGABLES STRATEGY  
XR OPTICS



**OPEN OPTICAL PORTFOLIO  
ICE6 PROGRAM UPDATE  
CUSTOMER WINS AND TRACTION**



TARGET BUSINESS MODEL

**OPEN OPTICAL TRANSFORMATION  
GX SERIES NG-COMPACT MODULAR  
OPEN NETWORKING PORTFOLIO  
ICE6 RAMPING AND MARKET TRACTION  
WINNING IN LH/SUBSEA & METRO/AGG  
GTM AND CUSTOMER TRACTION**

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# Financial Roadmap

**Nancy Erba**  
CFO



# A Dynamic and Exciting Market

---

- 1** STRONG UNDERLYING DEMAND DRIVERS
- 2** COMPETITIVE DISRUPTION – GEOPOLITICAL AND OTHER
- 3** NEED FOR HIGH-PERFORMANCE EMBEDDED **AND** PLUGGABLES
- 4** ACCELERATING SHIFT TO OPEN OPTICAL
- 5** INCREASED SCARCITY OF KEY ENABLING TECHNOLOGIES

# Priorities and Key Enablers

## FINANCIAL FITNESS

## GROWTH AND VALUE CREATION

1

2

3

4

### STRENGTHEN FINANCIAL FOUNDATION

### CONSISTENT AND PREDICTABLE EXECUTION

### TECHNOLOGY AND MARKET LEADERSHIP

### ENHANCE SHAREHOLDER VALUE

People, processes, systems  
M&A integration  
Cost reductions, deal discipline

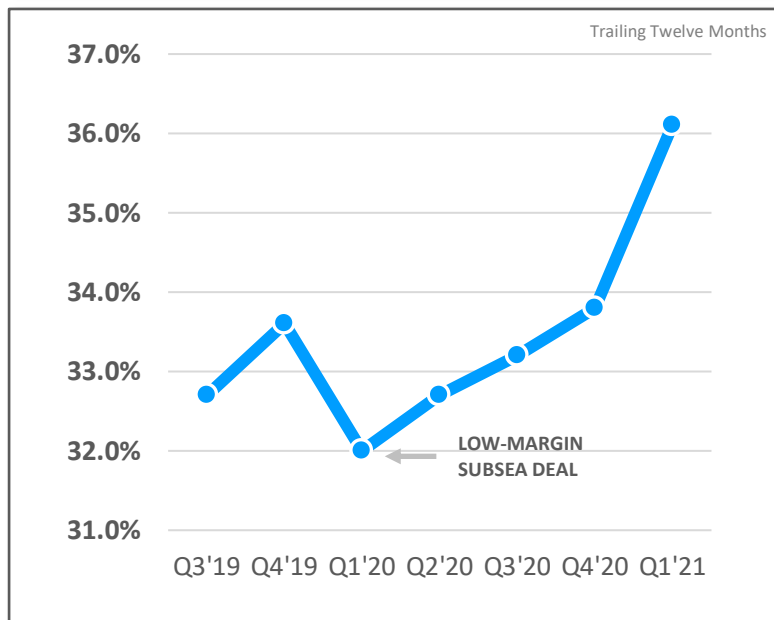
Operational excellence  
Forecast accuracy  
Customer intimacy

Invest in key technologies  
Prioritize fast-growing segments  
Maximize insertion opportunities

Drive above-market growth  
Expand margins, generate FCF  
Allocate capital efficiently

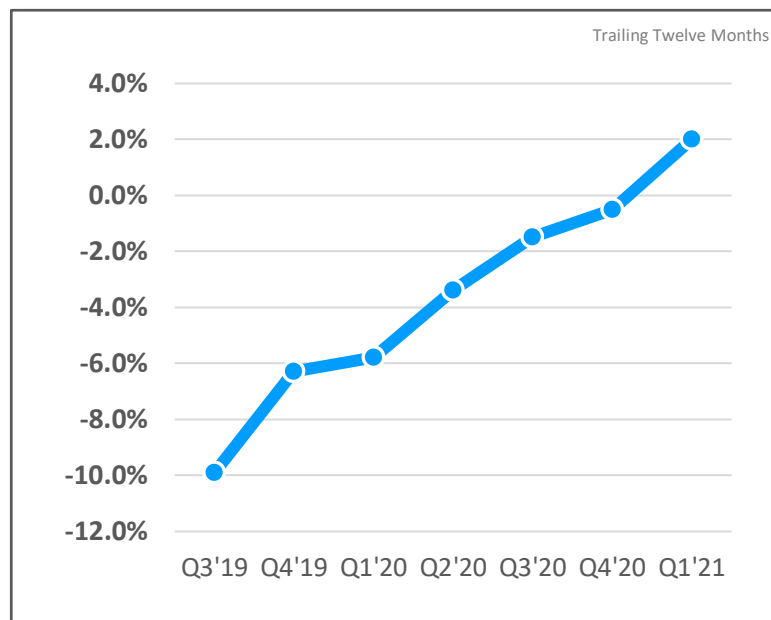
# Financial Progress Last 3 Years

## GROSS MARGIN



**ON TRACK FOR +300-400 BPS  
EXPANSION IN 2021**

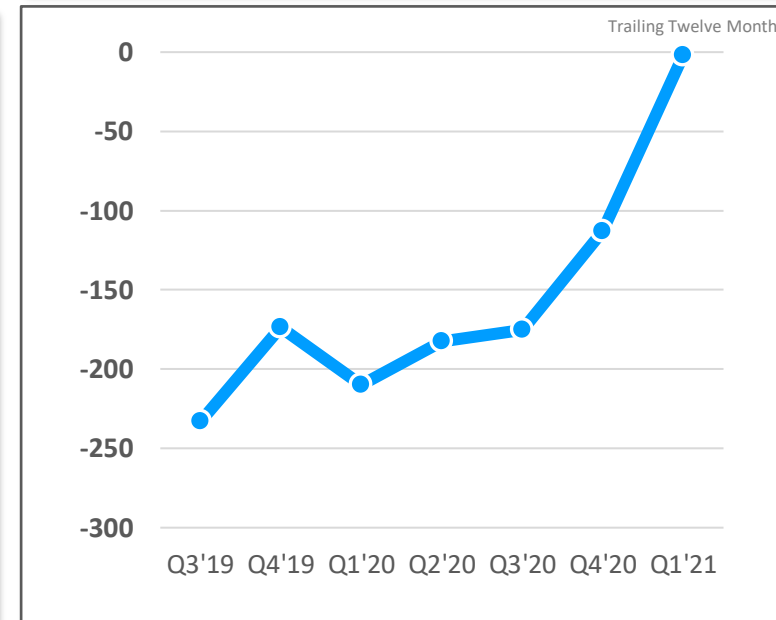
## OPERATING MARGIN



**COST  
REDUCTIONS**

**FOCUSED  
INVESTMENTS**

## CASH FLOW FROM OPS



**SIGNIFICANT IMPROVEMENT IN  
WORKING CAPITAL EFFICIENCY**  
(>\$100M improvement in CFFO Q1'21)

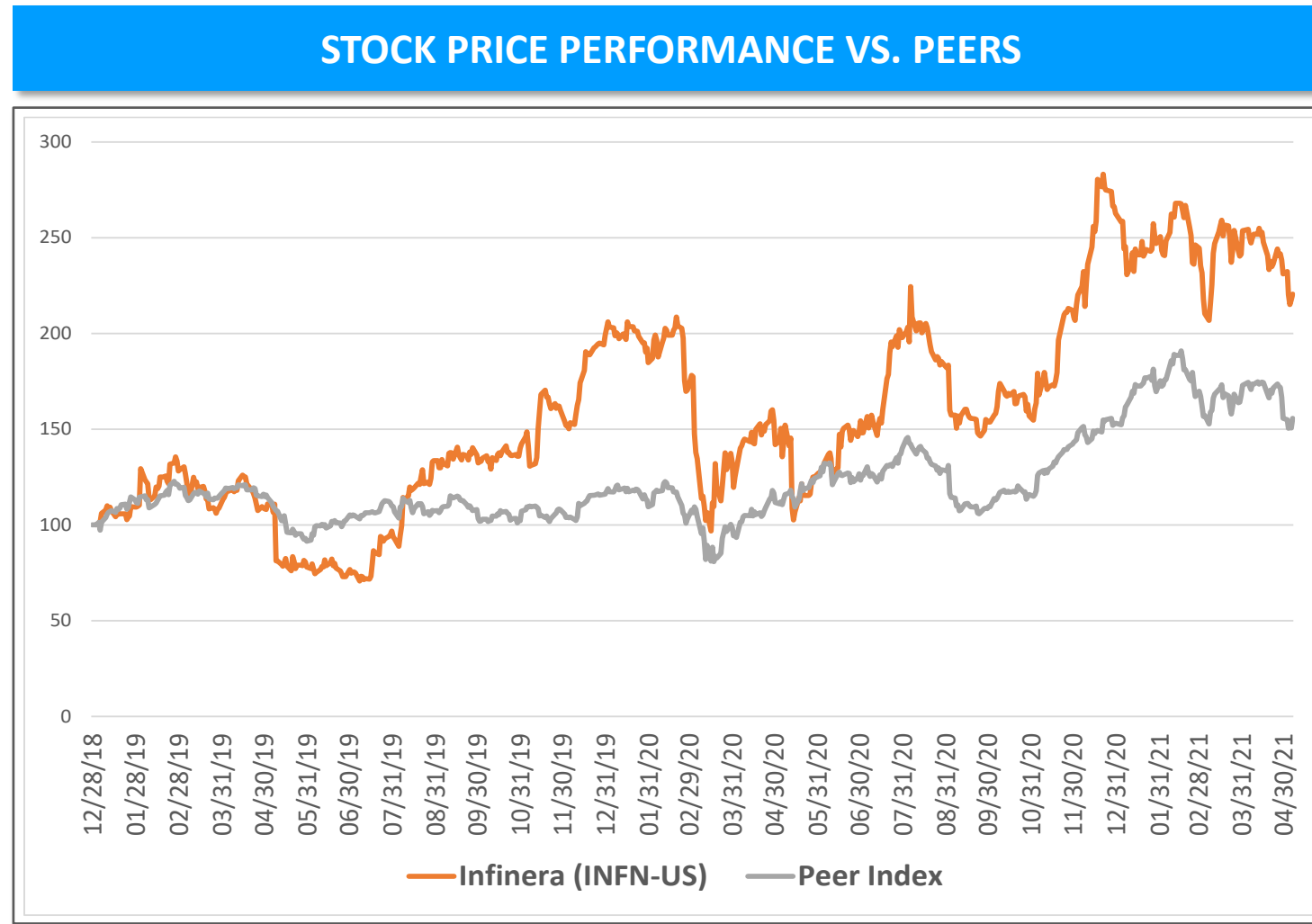
**ESTABLISHING A PATTERN OF  
CONSISTENT EXECUTION**

**STEADY PROGRESS TOWARD OUR  
LONG-TERM TARGET MODEL**

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Gross margin and operating margin are non-GAAP and exclude acquisition-related deferred revenue adjustments, stock-based compensation, amortization of intangible assets, restructuring charges, other customer-related charges, acquisition and integration costs, acquisition-related inventory adjustments, COVID-19 related costs and litigation charges

# Financial Progress Last 3 Years



Peer index comprised of: Adva, Ciena, II-VI, Lumentum, Neophotonics, Nokia, Ribbon  
Source: Nasdaq



# Target Business Model

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## 2023 TARGET BUSINESS MODEL

**8-12%**  
TOP-LINE GROWTH

**~60%**  
VERTICAL INTEGRATION

**Mid-40s**  
GROSS MARGIN

**Double-digit**  
OPERATING MARGIN

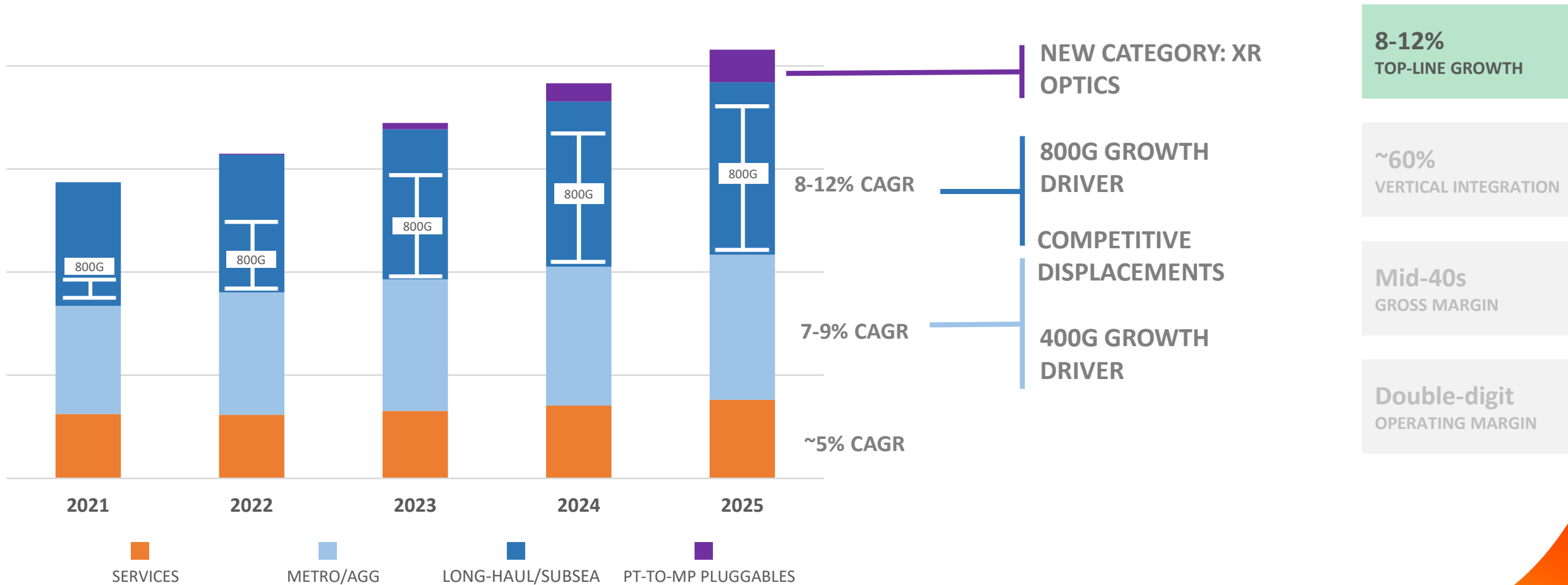
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*All metrics are non-GAAP and exclude acquisition-related deferred revenue adjustments, stock-based compensation, amortization of intangible assets, and restructuring charges. The Company is unable to provide a reconciliation to the most directly comparable GAAP measures, as it is unable, without unreasonable efforts, to calculate such excluded items, which could have a significant impact on the GAAP measures.*

# Target Business Model: Revenue

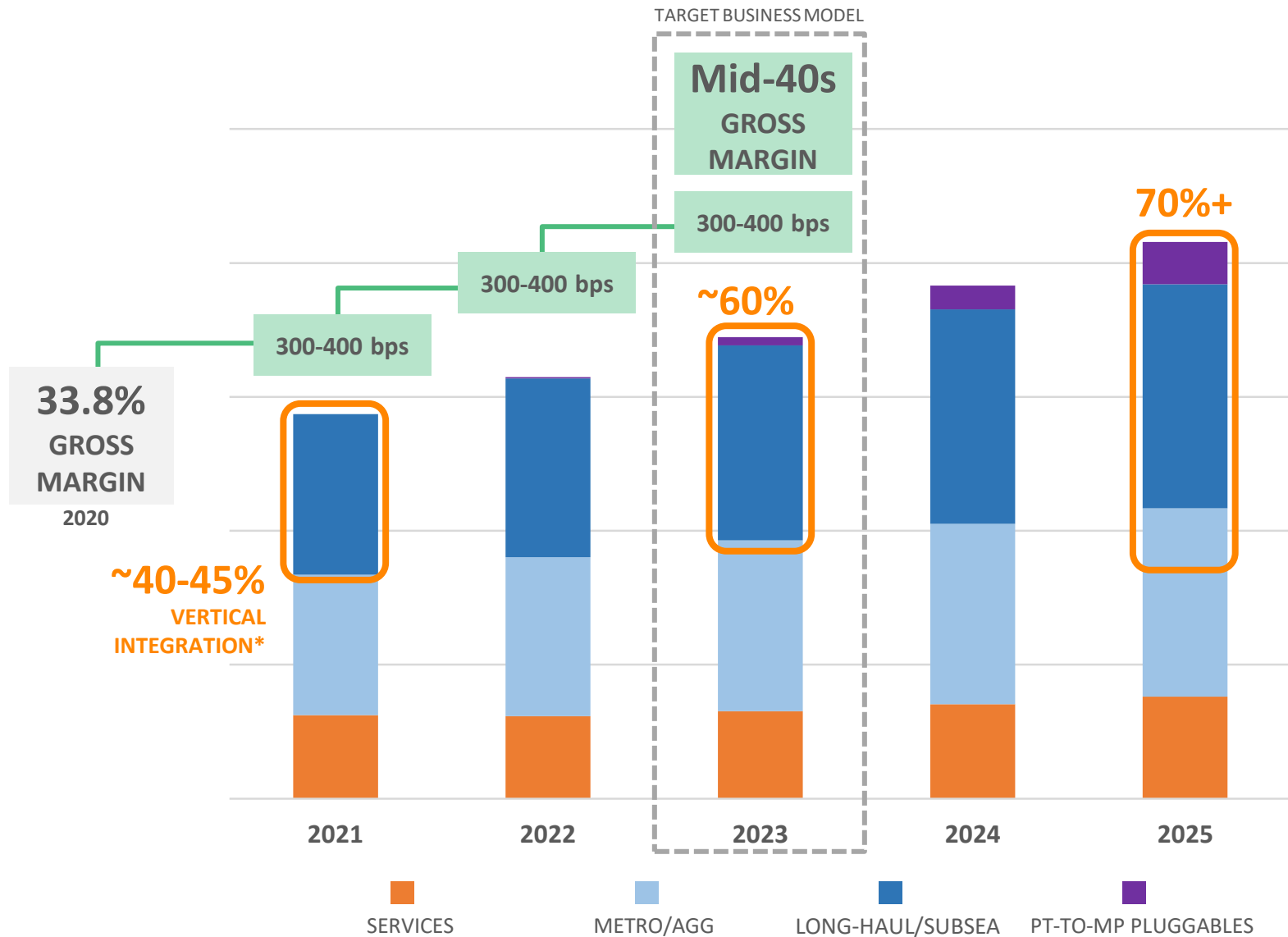
**8-12% REVENUE CAGR**

(~3-4x MARKET GROWTH)



Revenue is non-GAAP and excludes acquisition-related deferred revenue adjustment. The Company is unable to provide a reconciliation to the most directly comparable GAAP measure, as it is unable, without unreasonable efforts, to calculate such excluded item, which could have a significant impact on the GAAP measure.

# Target Business Model: Gross Margin and Vertical Integration



- (+) Vertical Integration
- (+) Cost Reduction
- (+) Operating Leverage
- (-) Supply Constraints
- (-) Line Systems

8-12%  
TOP-LINE GROWTH

~60%  
VERTICAL INTEGRATION

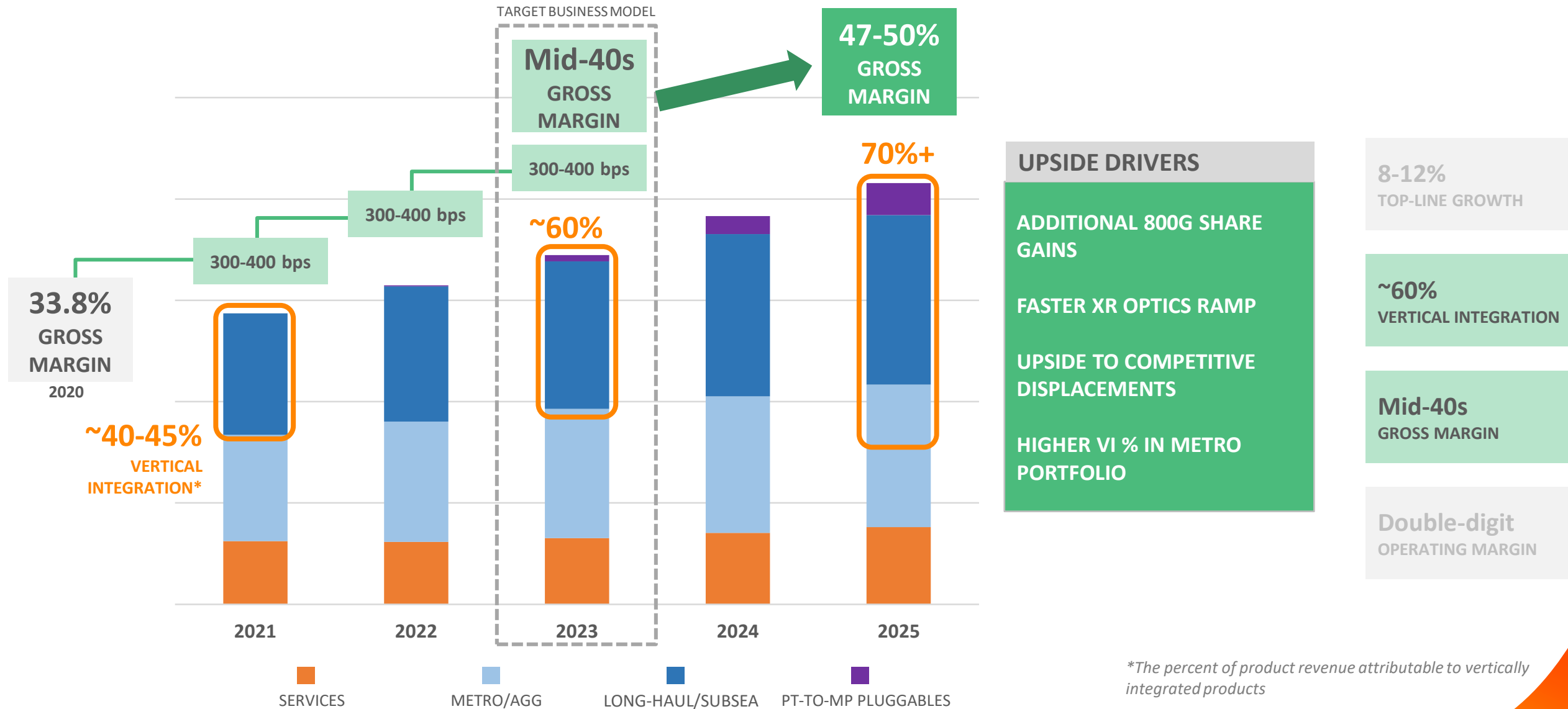
Mid-40s  
GROSS MARGIN

Double-digit  
OPERATING MARGIN

*\*The percent of product revenue attributable to vertically integrated products*

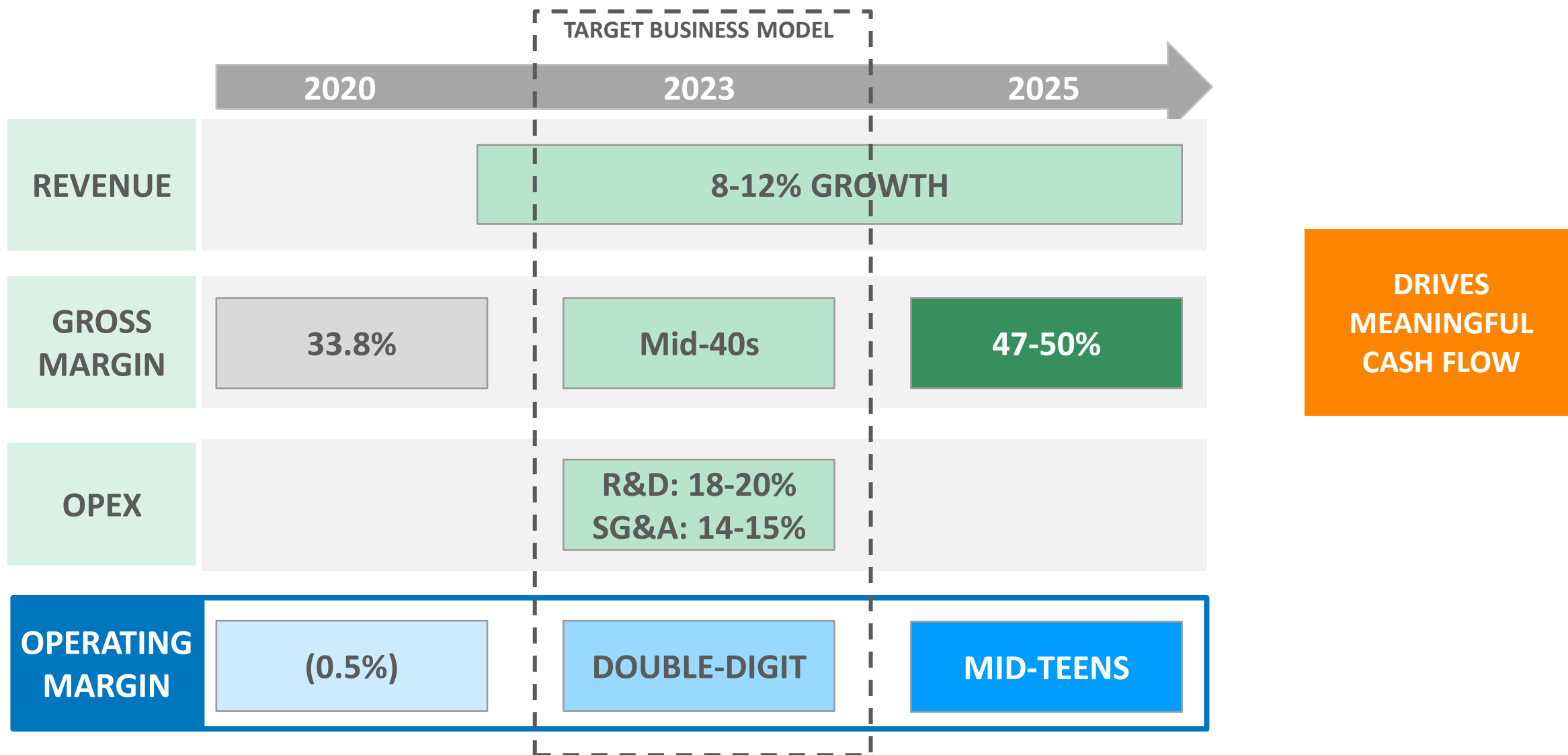
*All metrics are non-GAAP and exclude acquisition-related deferred revenue adjustments, stock-based compensation, amortization of intangible assets, and restructuring charges. The Company is unable to provide a reconciliation to the most directly comparable GAAP measures, as it is unable, without unreasonable efforts, to calculate such excluded items, which could have a significant impact on the GAAP measures.*

# Target Business Model: Gross Margin and Vertical Integration



All metrics are non-GAAP and exclude acquisition-related deferred revenue adjustments, stock-based compensation, amortization of intangible assets, and restructuring charges. The Company is unable to provide a reconciliation to the most directly comparable GAAP measures, as it is unable, without unreasonable efforts, to calculate such excluded items, which could have a significant impact on the GAAP measures.

# Target Business Model: Operating Margin



All metrics are non-GAAP and exclude acquisition-related deferred revenue adjustments, stock-based compensation, amortization of intangible assets, and restructuring charges. The Company is unable to provide a reconciliation to the most directly comparable GAAP measures, as it is unable, without unreasonable efforts, to calculate such excluded items, which could have a significant impact on the GAAP measures.

# Key Takeaways

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ICE6 AND BEYOND



PLUGGABLES STRATEGY  
XR OPTICS



OPEN OPTICAL PORTFOLIO  
ICE6 PROGRAM UPDATE  
CUSTOMER WINS AND TRACTION



**TARGET BUSINESS MODEL**

**COMPELLING GROWTH DRIVERS**

**PLAN TO ACHIEVE TARGET BUSINESS  
MODEL BY 2023**

**MEANINGFUL UPSIDE  
OPPORTUNITIES**

**VALUE CREATION FOR CUSTOMERS,  
EMPLOYEES, SHAREHOLDERS**

INVESTOR DAY 2021

# Closing Comments


David Heard  
CEO




# Closing




**FAVORABLE MARKET DYNAMICS**



**WINNING STRATEGY**



**VERTICALLY INTEGRATED INNOVATION**



**TEAM TO EXECUTE**



# GAAP to Non-GAAP Reconciliation

	Q4'18 Actual	Q1'19 Actual	Q2'19 Actual	Q3'19 Actual	Q4'19 Actual	Q1'20 Actual	Q2'20 Actual	Q3'20 Actual	Q4'20 Actual	Q1'21 Actual	2020 Actual
<b>Reconciliation of Gross Margin:</b>											
<b>U.S. GAAP as reported</b>	<b>25.5%</b>	<b>22.7%</b>	<b>20.7%</b>	<b>26.7%</b>	<b>29.0%</b>	<b>23.3%</b>	<b>29.4%</b>	<b>31.8%</b>	<b>35.7%</b>	<b>35.4%</b>	<b>30.2%</b>
Acquisition-related deferred revenue adjustment	1.3%	1.0%	0.8%	0.7%	0.5%	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%
Other customer related charges	-	-	2.5%	-	-	-	-	-	-	-	-
Stock-based compensation expense	0.5%	0.4%	0.4%	0.5%	0.4%	0.6%	0.6%	0.6%	0.5%	0.5%	0.6%
Amortization of acquired intangible assets	2.3%	2.8%	2.5%	2.3%	2.1%	2.6%	2.6%	2.1%	1.2%	1.3%	2.1%
Acquisition and integration costs	-	0.7%	3.2%	2.5%	1.8%	0.3%	0.2%	0.0%	-	-	0.1%
Acquisition-related inventory adjustments	1.5%	0.6%	-	-	-	-	-	-	-	-	-
Restructuring and related costs	0.8%	7.1%	0.6%	0.4%	1.4%	0.3%	0.5%	0.4%	-	0.1%	0.3%
COVID-19 related costs	-	-	-	-	-	0.9%	0.2%	-	-	-	0.2%
<b>Non-GAAP as adjusted</b>	<b>31.9%</b>	<b>35.3%</b>	<b>30.7%</b>	<b>33.1%</b>	<b>35.2%</b>	<b>28.3%</b>	<b>33.8%</b>	<b>35.2%</b>	<b>37.6%</b>	<b>37.6%</b>	<b>33.8%</b>
<b>Reconciliation of Income/(Loss) from Operations</b>											
<b>U.S. GAAP as reported</b>	<b>-33.3%</b>	<b>-38.2%</b>	<b>-36.6%</b>	<b>-21.3%</b>	<b>-15.8%</b>	<b>-23.3%</b>	<b>-13.5%</b>	<b>-7.9%</b>	<b>-1.9%</b>	<b>-7.0%</b>	<b>-11.4%</b>
Acquisition-related deferred revenue adjustment	1.4%	1.0%	0.9%	0.7%	0.5%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Other customer related charges	-	-	2.8%	-	-	-	-	-	-	-	-
Stock-based compensation expense	2.8%	3.0%	4.5%	3.1%	2.9%	3.5%	3.8%	3.5%	3.7%	3.3%	3.6%
Amortization of acquired intangible assets	9.2%	5.3%	5.1%	4.5%	3.9%	4.0%	4.1%	3.5%	2.6%	2.7%	3.5%
Acquisition and integration costs	4.1%	3.1%	7.8%	6.3%	4.8%	3.1%	1.2%	0.3%	-0.1%	0.2%	1.1%
Acquisition-related inventory adjustments	1.6%	0.6%	-	-	-	-	-	-	-	-	-
Restructuring and related costs	4.0%	13.3%	1.8%	1.0%	6.0%	2.0%	2.1%	2.5%	2.0%	0.9%	2.1%
COVID-19 related costs	-	-	-	-	-	1.0%	0.2%	-	-	-	0.3%
Litigation charges	-	-	1.4%	-	-	-	-	-	-	-	-
<b>Non-GAAP as adjusted</b>	<b>-10.2%</b>	<b>-11.9%</b>	<b>-12.3%</b>	<b>-5.7%</b>	<b>2.3%</b>	<b>-9.4%</b>	<b>-1.8%</b>	<b>2.2%</b>	<b>6.6%</b>	<b>0.4%</b>	<b>-0.5%</b>

INVESTOR DAY 2021

Break

**The Program**  
Will Resume Shortly



INVESTOR DAY 2021

Q&A

Executive Team

Infinera

