

CONNECTING AT THE SPEED OF LIGHT

Investor Presentation

March 13, 2018

Safe Harbor Statement

This presentation may contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this presentation, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. The forward-looking statements contained in this presentation reflect our current views with respect to future events, and we assume no obligation to update any forward-looking statements.

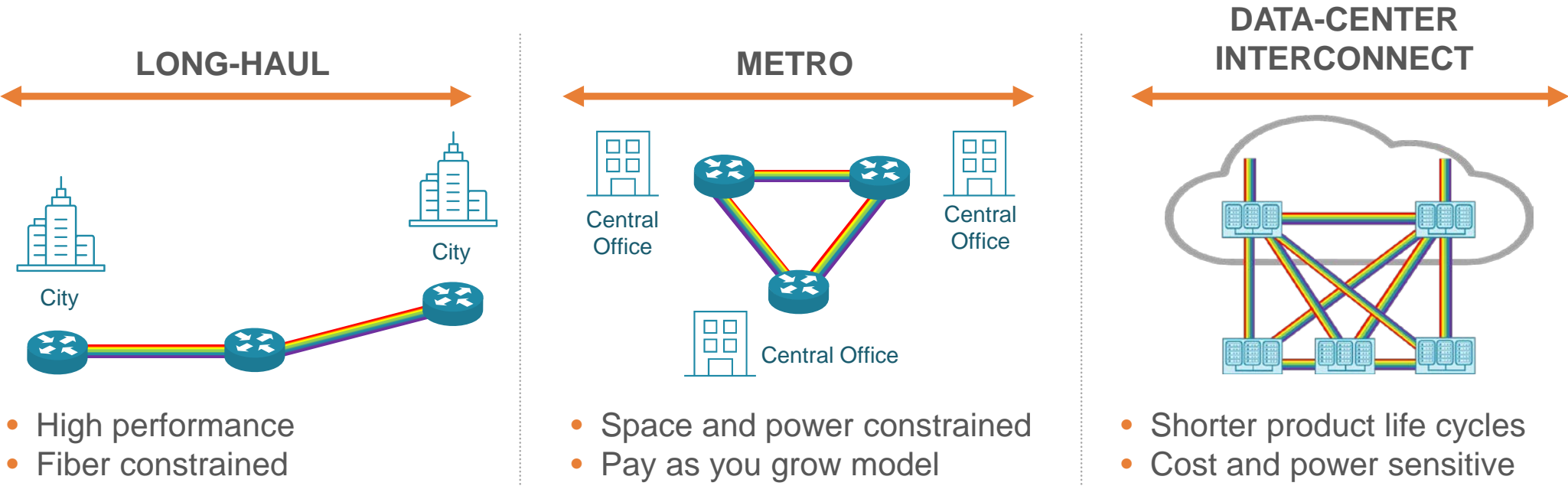
Forward-looking statements represent our management’s beliefs and assumptions only as of the date of this presentation, and our actual future results may be materially different from what we expect. We have included important factors in the cautionary statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and other documents we have filed with the SEC, particularly in the Risk Factors section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

Non-GAAP Financial Measures

This presentation includes measures defined by the SEC as non-GAAP financial measures. We believe that these non-GAAP financial measures can provide useful supplemental information to investors when read in conjunction with our reported results. Reconciliations of these non-GAAP financial measures to their closest GAAP measures are available in the Appendix to this presentation and descriptions of these non-GAAP financial measures can be found in our earnings release with respect to our fourth quarter and full-year 2017 results.

Markets We Address

Acacia solutions significantly reduce complexity and cost of high speed networks



Optical modules and components

- Plug and play with a **variety of network equipment**
- Simplifies **optical link management eliminating complex manual calibration**
- **Key characteristics:** speed, industry leading density and power efficiency, automation and manageability

Key Market Segments

According to LightCounting¹, optical component spend is estimated to reach

~\$12 billion globally by 2022

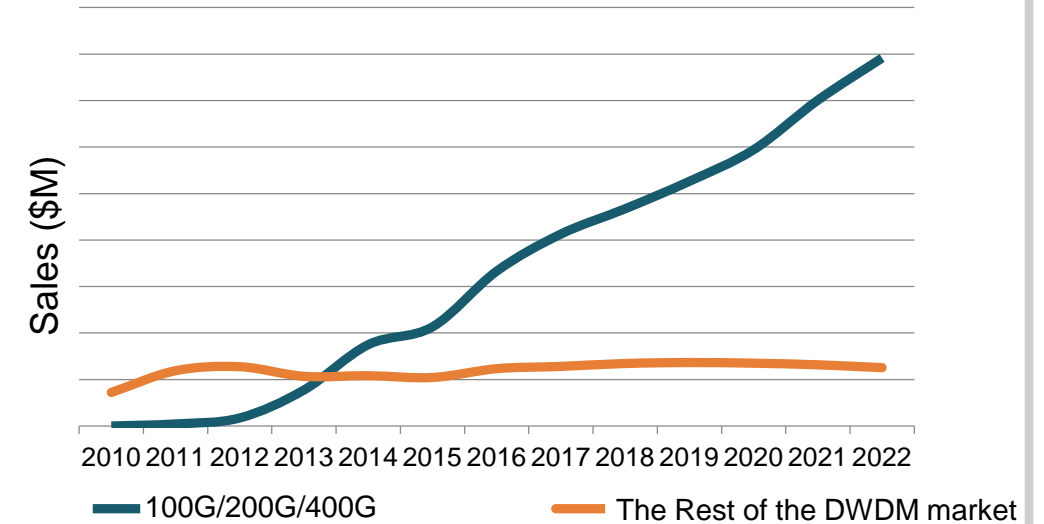
Three drivers for 100G+ market growth:

DCI
 Low-power
 High density
 Low-cost per bit

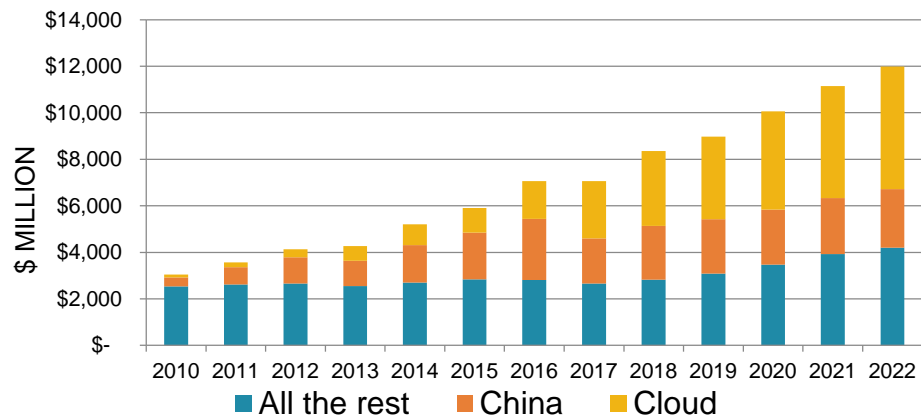
Metro
 Density
 Low-cost
 Plugability
 Interoperability

China
 Low-power
 Easy to deploy DCOs

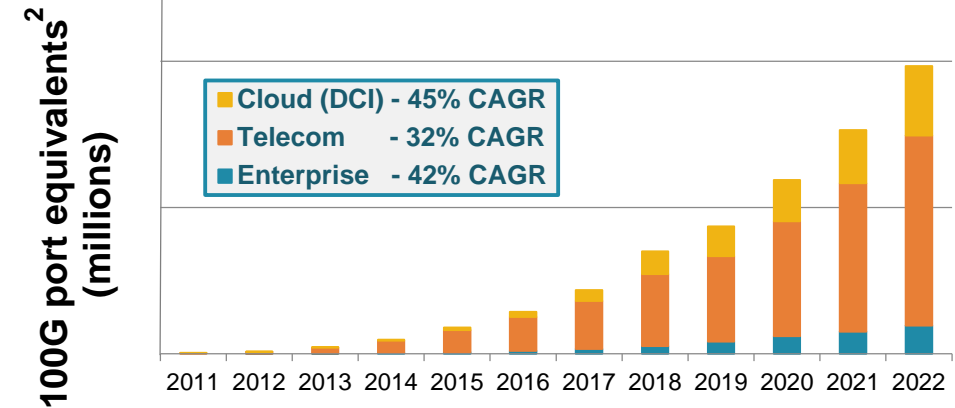
100G+ Module Sales Compared to the Rest of the WDM Market¹



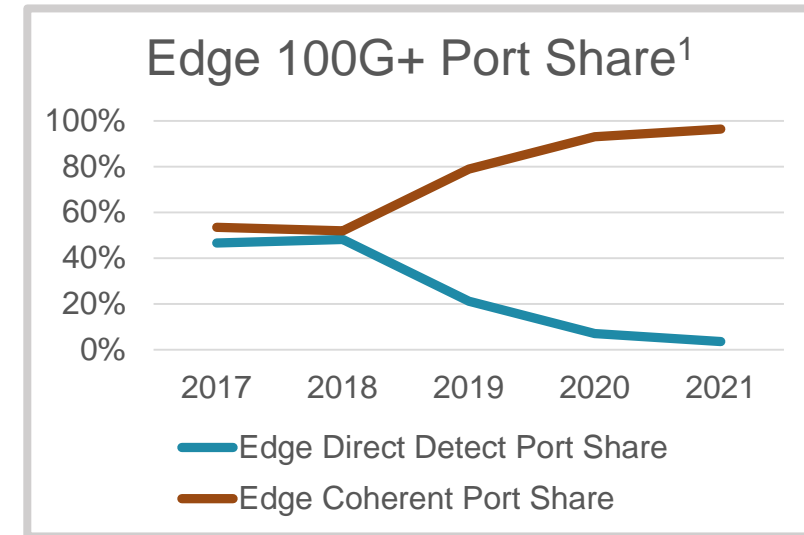
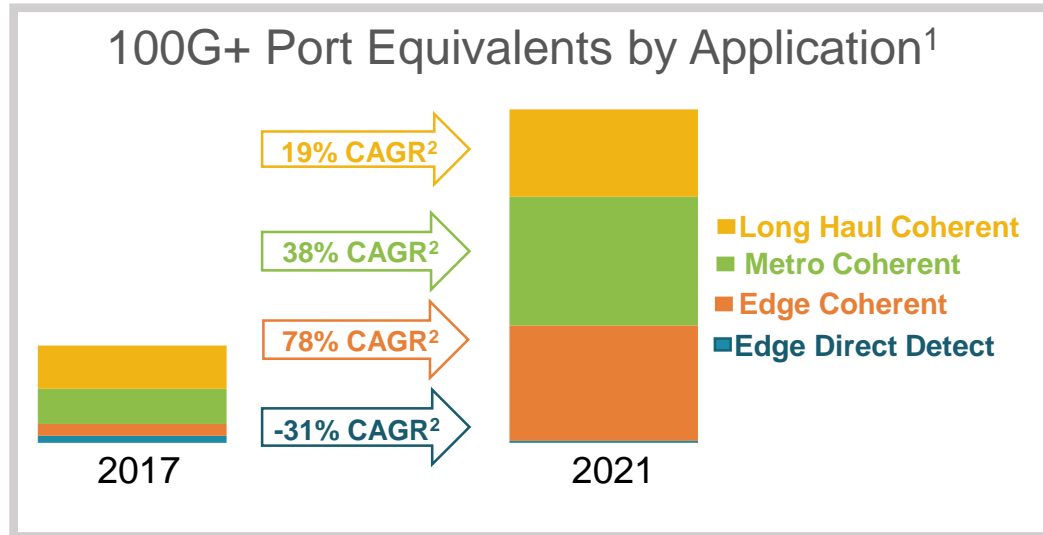
Sales of Optics Components and Modules¹



100/200/400 Gbps port shipments¹



Higher growth anticipated in coherent edge (<100km) applications



- Driven by DCI requirements
- In the edge market, preferred solutions are cost optimized and low power
- Coherent expected to increase share in edge applications at higher data rate due to performance requirements

Well Positioned to Deliver Highly Integrated Interconnects

Diverse Set of Skills and Expertise Represents High Barrier to Entrance



Acacia has all the pieces of the interconnect puzzle to deliver:

- Superior performance
- Higher density
- Easy deployment and management
- Lower cost
- Lower power

We believe we were the first to introduce to the market:

1st

Silicon
Coherent
PIC

1st

Dual-core
DSP

1st

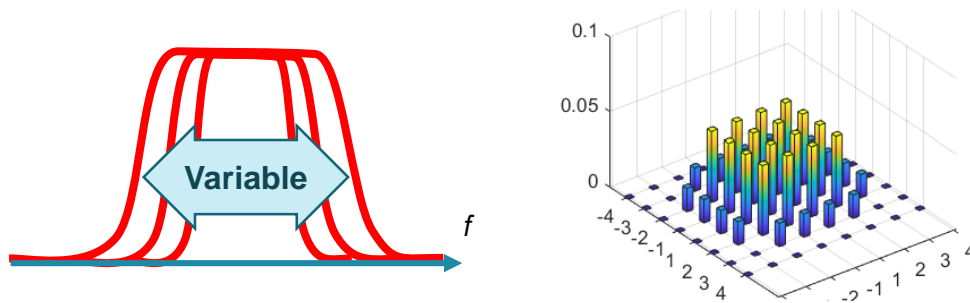
100G MSA
100G CFP-DCO
400G Module
200G CFP2-DCO

Acacia AC1200 Based on Acacia's Pico DSP ASIC

Demonstrating at OFC

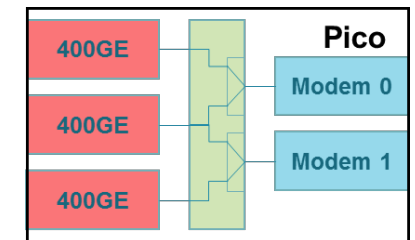
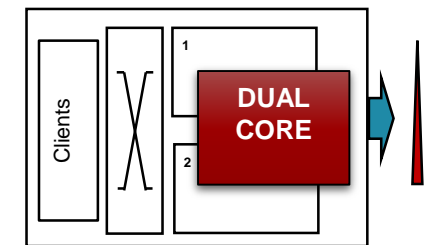
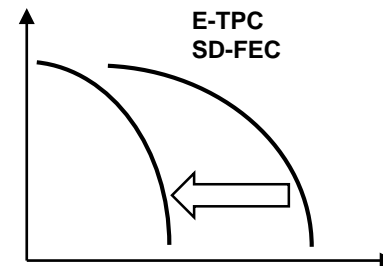
3D-Shaping optimizes performance based on network characteristics

- Shaping of the constellation points' **probability** to optimize **capacity** using Acacia's patented Fractional QAM modulation;
- Shaping of the constellation points' **location** to optimize **reach**; and
- Shaping of the **spectral width** to match the available channel **passband** by adapting the baud rate.



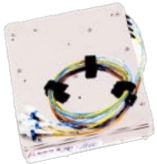
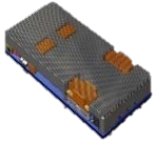



Rich feature set of features for performance and flexibility

- **Flexible Client Interfaces** – supports a wide range of interfaces to the host card.
- **Enhanced Turbo Product Code SD-FEC** – enables maximum reach, while maintaining low power dissipation.
- **Internal Crossbar Switch** – enables increased traffic flexibility



Broad Coherent Module Portfolio

Acacia’s high-density module portfolio supports a wide range of applications and system architectures

Product Family	AC400 	AC1200 	CFP-DCO 	CFP2-DCO 	CFP2-ACO 
Versions	<ul style="list-style-type: none"> • C-Band • L-Band 		<ul style="list-style-type: none"> • Gen 1 • Gen 2 		
Benefits	<ul style="list-style-type: none"> • Flexibility • Performance 	<ul style="list-style-type: none"> • Flexibility • Capacity • Performance 	<ul style="list-style-type: none"> • Pluggability • Low Power 	<ul style="list-style-type: none"> • Pluggability • Low Power 	<ul style="list-style-type: none"> • Pluggability • DSP Independent
Applications	<ul style="list-style-type: none"> • DCI • Metro • Long-Haul • Submarine 	<ul style="list-style-type: none"> • DCI • Metro • Long-Haul • Submarine 	<ul style="list-style-type: none"> • DCI • Metro • Long-haul 	<ul style="list-style-type: none"> • DCI • Metro • Long-haul 	<ul style="list-style-type: none"> • DCI • Metro • Long-haul

Evolution of Coherent Architectures Toward Modules

Optical Integration and Digital Interfaces

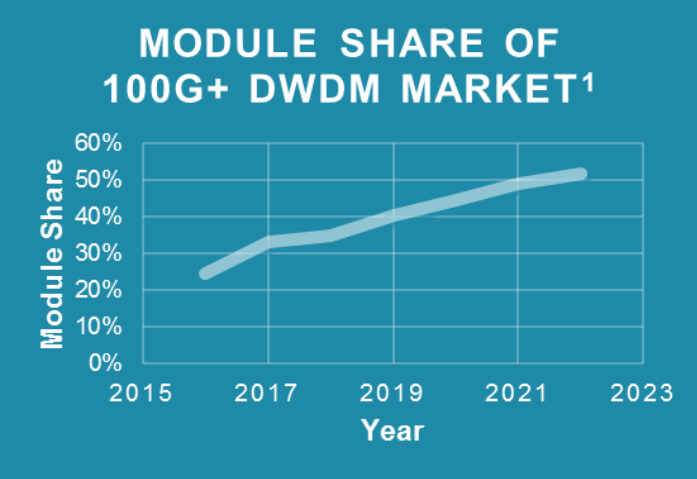
PLUGGABLE DCO

AC100M 100G CFP2-DCO 200G 400ZR 400G

PLUGGABLE ACO

AC100M 100G + ACACIA DSP + CFP2-ACO 200G

Compact, high-capacity module solutions based on integrated photonics and digital host interfaces



Embedded Module

AC100 100G AC400 400G AC1200 1.2TB

Coherent interconnect is shifting to modules

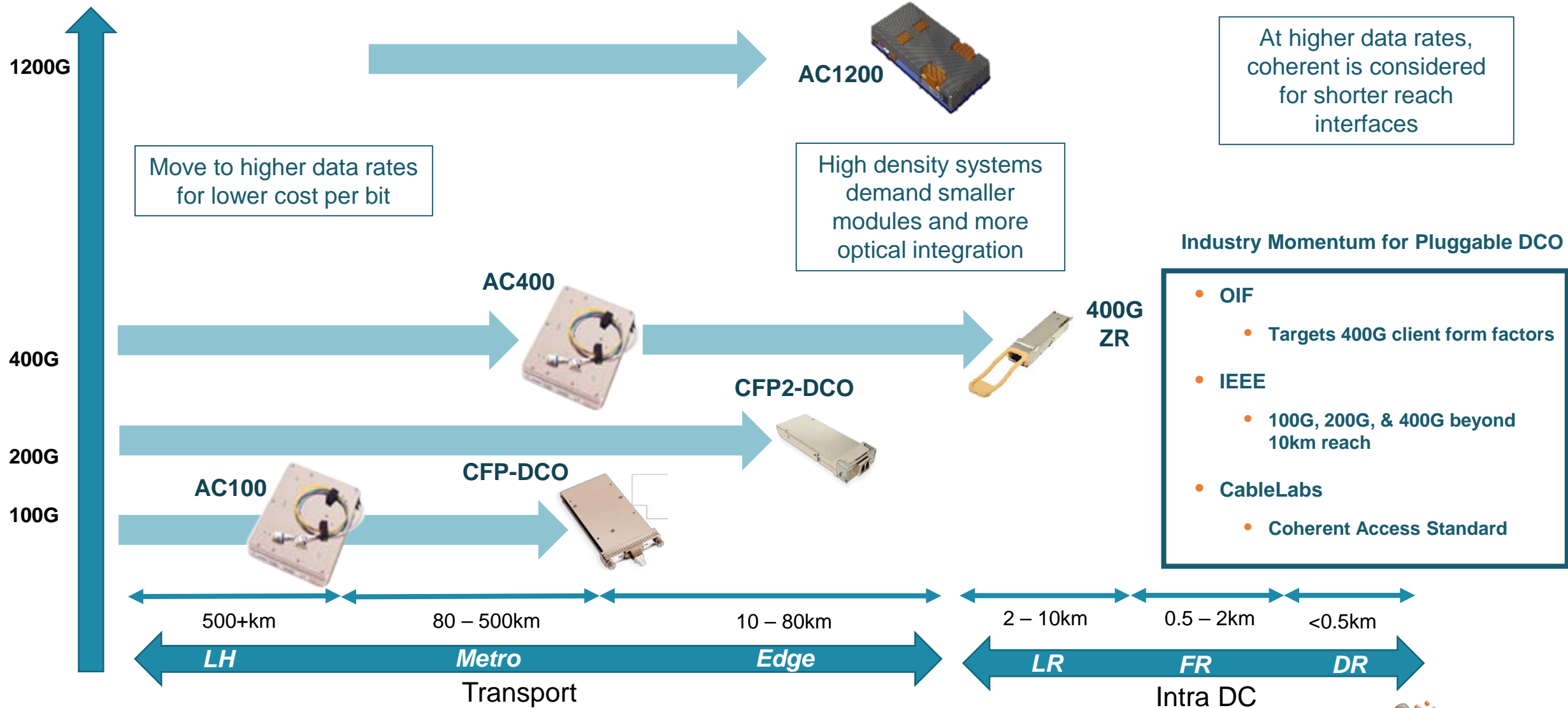


Early coherent line card 100G

1. Reprinted with permission: LightCounting, Oct 2017



Coherent Technology Trends – DCO and Shorter Reaches



Thank You