DATA CENTERS, CONNECTIVITY, EDGE
Alexander Ramirez
Data Center Activity Has Exploded

### Record M&A Volumes

<table>
<thead>
<tr>
<th>Transaction Value ($ in billions)</th>
<th>$3.4</th>
<th>$8.7</th>
<th>$14.8</th>
<th>$10.1</th>
<th>NA</th>
<th>$3.5</th>
</tr>
</thead>
</table>

### Key Factors

- **Accelerating Secular Tailwinds**
- **Strengthening Investor Appetite and Comfort**
- **Innovative And Evolving Financing Solutions**

### Target Acquirer FV / LQA EBITDA

<table>
<thead>
<tr>
<th>Transaction Date</th>
<th>Feb-21</th>
<th>Jun-21</th>
<th>Nov-21</th>
<th>Nov-21</th>
<th>Dec-21</th>
<th>Jan-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV / LQA EBITDA</td>
<td>16.1x</td>
<td>24.3x</td>
<td>24.8x</td>
<td>27.1x</td>
<td>In-line</td>
<td>28.6x</td>
</tr>
</tbody>
</table>

Source: Public Company Filings. Includes transactions announced in 2021 with transaction values greater than $3bn.
Connectivity is Critical

Key Customers Seek Robust Connectivity Solutions...

- **Carriers**
  - Low latency, low-cost connectivity to peer with other networks

- **Content Distributors**
  - Improve user experience by quickly serving local content

- **Cloud Providers**
  - Deliver low-latency applications to larger customer base

- **Enterprise and IT Services**
  - Ability to run low latency-apps across multiple clouds

...Driving Significant Interconnect Growth

**Global Interconnect Forecast (’000)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Physical</th>
<th>Virtual</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021E</td>
<td>1,278</td>
<td>1,165</td>
<td>2,443</td>
</tr>
<tr>
<td>2022E</td>
<td>1,433</td>
<td>1,272</td>
<td>2,705</td>
</tr>
<tr>
<td>2023E</td>
<td>1,613</td>
<td>1,385</td>
<td>2,998</td>
</tr>
<tr>
<td>2024E</td>
<td>1,821</td>
<td>1,504</td>
<td>3,325</td>
</tr>
<tr>
<td>2025E</td>
<td>2,052</td>
<td>1,630</td>
<td>3,682</td>
</tr>
<tr>
<td>2026E</td>
<td>2,340</td>
<td>1,762</td>
<td></td>
</tr>
</tbody>
</table>

% Virtual

- 2021E: 8.8%
- 2022E: 11.3%
- 2023E: 14.1%
- 2024E: 17.4%
- 2025E: 20.5%
- 2026E: 24.7%

Source: Structure Research (December 2021), Cowen and Company.
Edge is the New Frontier

**What Is The Edge?**

*Cloud scale computing moving closer to the end devices*

**How Will This Market Evolve?**

*Edge Market Forecast ($ in billions)*

- Cloud scale computing moving closer to the end devices
- New Use Cases Requiring Evolutions in Cloud Architecture
  - Artificial Intelligence
  - Internet of Things
  - 5G

**Benefits of Distributed Intelligence**

- Reduces Application Latency
- Enhance Quality of Experience
- Meets Data Locality Requirements
- Optimizes Service TCO

**Source:** Intel

**Source:** Tologa Research.

- $10bn
- $116bn
- 42% CAGR
- 2021 2028

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The Edge Is Evolving

Verizon announced a 5G edge computing partnership with Google Cloud and Ericsson - December 17, 2021

Equinix and Nokia partnered to provide production framework for testing 5G and edge solutions - September 23, 2021

AT&T and Google Cloud announced to expand 5G and edge collaboration to deliver next-generation business outcomes - July 06, 2021

Switch and Dell proposed to build Edge data centers at FedEx locations across the US - November 12, 2020

Microsoft announced Azure edge zones with AT&T support - November 17, 2021

Launched an on-premises, private edge compute solution in partnership with Microsoft Azure - September 06, 2021

Dish will use AWS outposts and AWS local zones to build its network in the cloud - April 21, 2021

Flexential and American Tower partnered and launched its local edge program, making connectivity easy for edge applications - September 24, 2020
Edge Infrastructure Opportunity

Core
Large Scale Compute

Edge Infrastructure Platform
Aggregation Hubs: Traffic Aggregation & Distribution
Proximity Hubs: First Point of Reliability

Atlas Edge

IOT Edge
On Premises Edge
Network Edge

Cloud out
Edge in

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