

Applying the Science of Networking

Enabling Cyber-Hardened, Rapid Networking for All IoT “Things” and Locations

Company Presentation May 2022

For illustrative purposes only. Past performance is not indicative of future results. There is no guarantee that any specific objective will be achieved. Investments may be illiquid, highly speculative and there is risk of the total loss of your investment. Please see full disclosures.

FORWARD LOOKING STATEMENTS



This document contains forward-looking statements. In addition, from time to time, we or our representatives may make forward-looking statements orally or in writing. We base these forward-looking statements on our expectations and projections about future events, which we derive from the information currently available to us. Such forward-looking statements relate to future events or our future performance, including: our financial performance and projections; our growth in revenue and earnings; and our business prospects and opportunities. You can identify forward-looking statements by those that are not historical in nature, particularly those that use terminology such as “may,” “should,” “expects,” “anticipates,” “contemplates,” “estimates,” “believes,” “plans,” “projected,” “predicts,” “potential,” or “hopes” or the negative of these or similar terms. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the heading “Risk Factors” and elsewhere in the registration statement that we have filed with the U.S. Securities and Exchange Commission. Forward-looking statements are only predictions. The forward-looking events discussed in this document and other statements made from time to time by us or our representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties and assumptions about us. We are not obligated to publicly update or revise any forward-looking statement, whether as a result of uncertainties and assumptions, the forward-looking events discussed in this document and other statements made from time to time by us or our representatives might not occur. Past performance is not indicative of future results. There is now guarantee that any specific outcome will be achieved. Investments may be speculative, illiquid and there is a total risk of loss.

Free Writing Prospectus

We have filed a registration statement (including a preliminary prospectus) with the SEC for the offering to which this communication relates. The registration statement has not yet become effective. Before you invest, you should read the preliminary prospectus in that registration statement (including the risk factors described therein) and other documents that we have filed with the SEC for more complete information about us and this offering.

You may access these documents for free by visiting EDGAR on the SEC Website at <http://www.sec.gov>. The preliminary prospectus was filed May 2, 2022 and is available on the SEC website at <http://www.sec.gov>. Alternatively, the Company and any underwriter or dealer participating in the offering will arrange to send you the prospectus if you request it by calling Boustead Securities, LLC at 949.502.4408 or by email at offerings@boustead1828.com or standard mail at Boustead Securities, LLC, Attn: Equity Capital Markets, 6 Venture, Suite 395, Irvine, CA 92618, USA.

Form CRS/Reg BI Disclaimer:

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Risk Factors

Our business and our ability to execute our business strategy are subject to a number of risks as more fully described in the section titled "Risk Factors" of the preliminary prospectus filed with the SEC. These risks include, among others:

- We have a history of net losses, may incur substantial net losses in the future, and may not achieve or sustain profitability or growth in future periods. If we cannot achieve and sustain profitability, our business, financial condition, and operating results will be adversely affected.
- We have had negative cash flow and, given our projected funding needs, our ability to generate positive cash flow is uncertain.
- Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.
- Even after consummation of the offering as contemplated, we may need to raise additional capital to meet our business requirements in the future, and such capital raising may be costly or difficult to obtain and could dilute our stockholders' ownership interests.
- Our indebtedness could adversely affect our ability to raise additional capital to fund operations, limit our ability to react to changes in the economy or our industry and prevent us from meeting our financial obligations.
- To support our business growth, in the past years we increased our focus on serving certain IoT verticals, while continuing to serve our existing Telco customers. This change in our strategy may make it more difficult to evaluate our business growth and future prospects, and may increase the risk that we will not be successful in our plans.
- We may have ineffective sales and marketing efforts.
- We are dependent on the supply of electronic and mechanical components and our business would be harmed if we do not receive sufficient supply of such components in number and performance to meet our production requirements and product specifications in a timely and cost-effective manner.
- We are dependent on key suppliers.
- Demand for our products and solutions may not grow or may decline.
- Our gross margins may not increase or may deteriorate.
- Changes in the price and availability of our raw materials and shipping could be detrimental to our profitability.
- Expanding our operations and marketing efforts to meet expected growth may impact profitability if actual growth is less than expected.
- If our internal Company cyber-security measures are breached or fail and unauthorized access is obtained to our IT environment, we may incur significant losses of data, which we may not be able to recover and may experience a delay in our ability to conduct our day-to-day business.

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- We provide cyber security features as part of our products that may not completely prevent information security breaches, and our products are installed in live customer environments and may be compromised by cyber-attacks and damage customer assets.
- We depend on key information systems and third-party service providers.
- We depend on our management team and other key employees, and the loss of one or more of these employees or an inability to attract and retain highly skilled employees could adversely affect our business.
- We may face the effects of increased competition and rapid technological changes.
- Our results of operations are likely to fluctuate from quarter to quarter and year to year, which could adversely affect the trading price of our common stock.
- The loss of one or more of our significant customers, or any other reduction in the amount of revenue we derive from any such customer, would adversely affect our business, financial condition, results of operations and growth prospects.
- The effects of health pandemics, such as the ongoing global COVID-19 pandemic, have had, and could in the future have, an adverse impact on our business, financial condition and results of operations.
- Claims by others that we infringe their intellectual property could force us to incur significant costs or revise the way we conduct our business.
- Our patents and proprietary technology may be challenged or disputed.
- Any failure to protect our intellectual property rights could impair our ability to protect our proprietary technology and our brand.
- We may be adversely affected by fluctuations in the currency exchange rate of the Israeli Shekel.
- Unanticipated changes in our effective tax rate and additional tax liabilities, including those resulting from our international operations or the implementation of new tax rules, could harm our future results.
- The requirements of being a public company may strain our resources, divert management's attention, and affect our ability to attract and retain executive management and qualified board members.
- We have identified a material weakness in our internal control over financial reporting. If we experience material weaknesses in the future or otherwise fail to implement and maintain an effective system of internal controls in the future, we may not be able to accurately report our financial condition or results of operations which may adversely affect investor confidence in us, and as a result, the value of our common stock.

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Free Writing Prospectus

This presentation highlights basic information about us and the offering. Because it is a summary, it does not contain all of the information that you should consider before investing. This offering may only be made by means of a prospectus.

We have filed a registration statement on Form S-1 (File No. 333-264321), including a preliminary prospectus, dated May 2, 2022 (the "Preliminary Prospectus") with the SEC for the offering to which this communication relates. The registration statement has not yet become effective. Before you invest, you should read that registration statement, the Preliminary Prospectus and the final prospectus (when available) for more complete information about the Company and this offering.

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Issuer	Actelis Networks, Inc.
Offering Amount	\$15 Million
Shares Offered	Common Stock of the company
Price Range	\$4.00-\$6.00 per share
Overallotment Option	15% of shares sold in the offering
Use of Proceeds	Sales and marketing, R&D, G&A, capital investments and working capital
Ticker Symbol / Exchange	ASNS / Nasdaq CM
Expected Pricing	May 5, 2022
Bookrunner	Boustead Securities, LLC

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COMPANY OVERVIEW

Actelis at a Glance

Provider of Gigabit-Grade, Cybersafe, Rapid Deployment IoT Networking



>300

Customers

*Cities, Rail,
Roads, Military*

>\$24M

Value of Actelis' IoT
Previously Installed
Base

In over 30 countries

30+

Global Patents

*+More on-going
new applications*

>20%

Ave. Annual IoT growth

2018-2021

>50%

Ave. Gross Margin

45

Employees &
Contractors

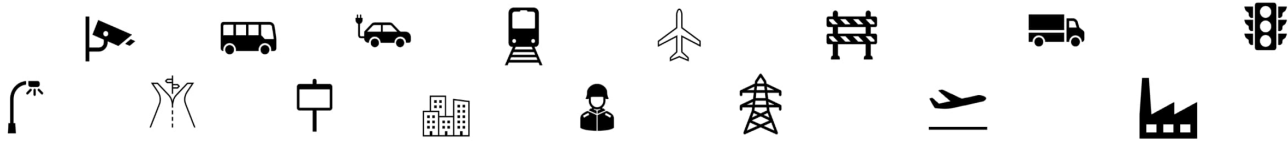
(1) Per Company Statistics

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Global IoT Market to Hit \$1.8 Trillion in 2028 at 24.5% CAGR ⁽¹⁾

Smart City Market at \$696 Billion by 2028 with CAGR of 29.3% ⁽²⁾



<u>Smart Traffic (ITS)</u>	<u>Smart City</u>	<u>Smart Rail</u>	<u>Military and Gov.</u>	<u>Power, Water, Oil</u>	<u>Industry, Education</u>
Lights	Parking	Signaling	Perimeter security	Substations	Robotics
Cameras	Security	Obstacle detect	Weapons control	Generators	Warehouse
Lane Management	Wi-Fi	Controls	Energy	Oil/gas flow	Access control
Signs	Garbage	Security	Radars	Perimeter security	Security
V2V	Transportation	Ticketing	Airports	Water plants	Parking

(1) Facts and Factors Jan. 2022

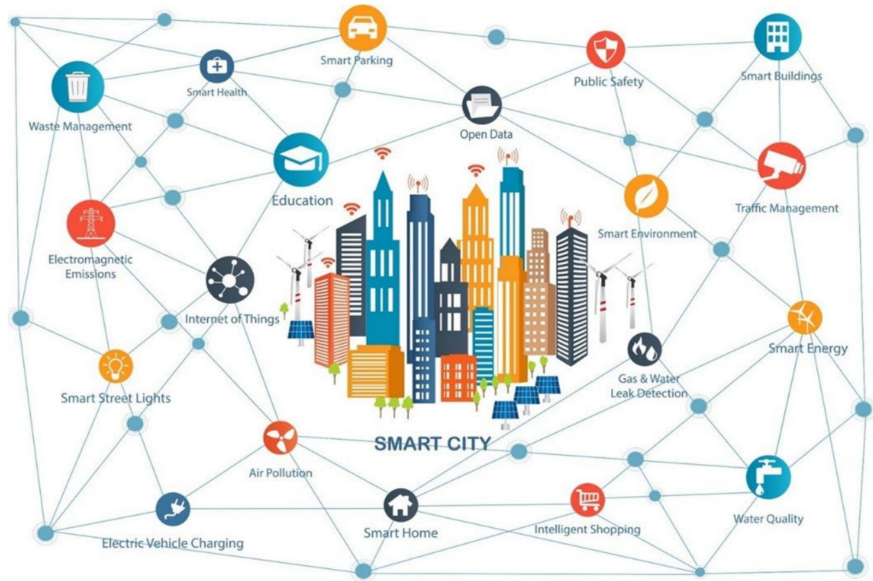
(2) Grand View Research May. 2021

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IoT Connectivity Modernization Needs Growing Exponentially

Major efforts to Securely Connect Tens of Millions of Locations at High-Speed

- Billions of devices currently connected with copper cables
Historically low speed, low reliability, not secure
- New Fiber Optic cables are being installed
Reliable, fast, but expensive and slow to deploy
- Wireless is getting faster
Historically very low speed, lowest reliability and security



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Obstacles to IoT Development

Making the Case for Hybrid Networks (Example)

Connectivity	Consumes over 70% of IoT network's cost and time
Easy-to-reach Locations (70-90%)	Fiber is laid on existing poles @ ~\$26K/Mile (work takes days/weeks)*
Hard-to-reach Locations (10-30%)	Fiber needs boring, trenching, permits, right-of-way @\$70K-\$400K/Mile (takes months)*



Connecting Fiber to Hard-to-Reach Locations May Cost 50% of all Project Budget and Cause Months of Delay**

(*) – Analysis by Columbia Telecommunications Corporation
 (**)- Fiber Availability is 31%/12%/11% of in US/UK/ Germany, respectively; (FTTH council, Europe, 4/2020)

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Hybrid Architecture Makes Existing Network Part of the Digital Future

Extending Safe, Gigabit-Grade Connectivity over Fiber + Enhanced Existing Wires



Fiber is preferred for performance and reliability, but:

- Can be very slow to deploy in many locations
- May not be possible economically in many hard-to-reach locations

Existing coax/wires connect billions of locations/devices and are instantly available at no cost, but:

- Historically suffer from low speed and low reliability
- Are unprotected from hacking and cyber attacks
- Actelis' technology enhances wires securely to Gigabit-Grade



1+1

Actelis' Hybrid Fiber-Copper Networking Solutions are Combing the Best of Both:

- Providing Cyber-Safe, Gigabit-Grade connectivity combining Fiber and enhanced existing wires
- Eliminating deployment obstacles in challenging locations
- Helping IoT projects converge on time and budget

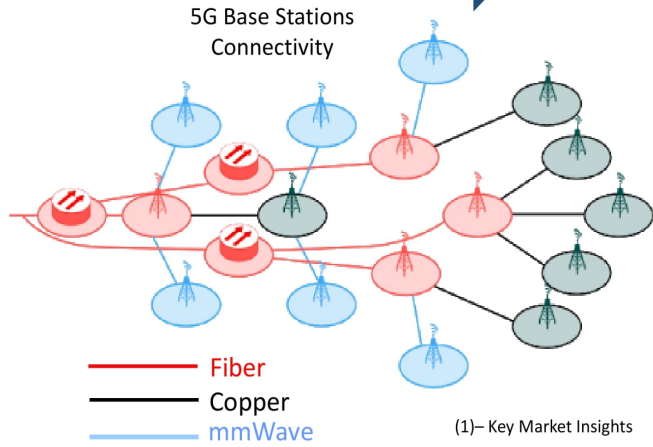
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Actelis' Hybrid Networks Enable 5G in Smart Cities and on Roads

5G Expected to Grow at 54.4% CAGR 2021-2028 ⁽¹⁾

5G...to dramatically improve quality of life with high data-rate, low latency, for mobile, eHealth, autonomous vehicles, smart cities, smart homes, Industrial IoT... ⁽¹⁾

- 5G Requires 10X-100X cell grid density
- Requires Fiber, Copper or mmWave at Gigabit speeds to 14.2M locations by 2027
- Many locations are hard-to-reach with Fiber, out-of-sight for mmWave, but are on wires
- Hybrid Networking makes 5G practical with connectivity + remote powering



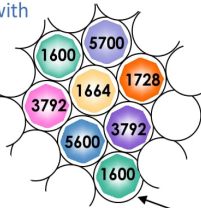
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MetaLIGHT Unique Signal Processing and Coding Technology

Combining 100X Wire⁽⁵⁾ Performance Boost with Triple-Shield Security

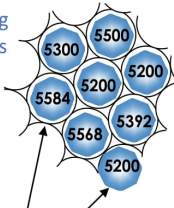
- Lines interfering with other lines
- Suboptimal
- Unreliable
- Unsecure

Unsynchronized Transmission



- Lines supporting other lines
- Optimal
- Reliable
- Secure

Synchronized Transmission



Copper Cable

Individual Wires

- Optimal synchronization of multi-line signals
- Elimination of interference to boost speed
- Data line coding for resilience, security ⁽¹⁾
- Multi-line scrambling for low latency, security ⁽²⁾
- 256-bit encryption of transmission ⁽³⁾
- Multi-line modulation for up to 10Gbps ⁽⁴⁾
- Spectrally compliant reach extenders to 100Km
- Remote powering + Data to 4G/5G base stations

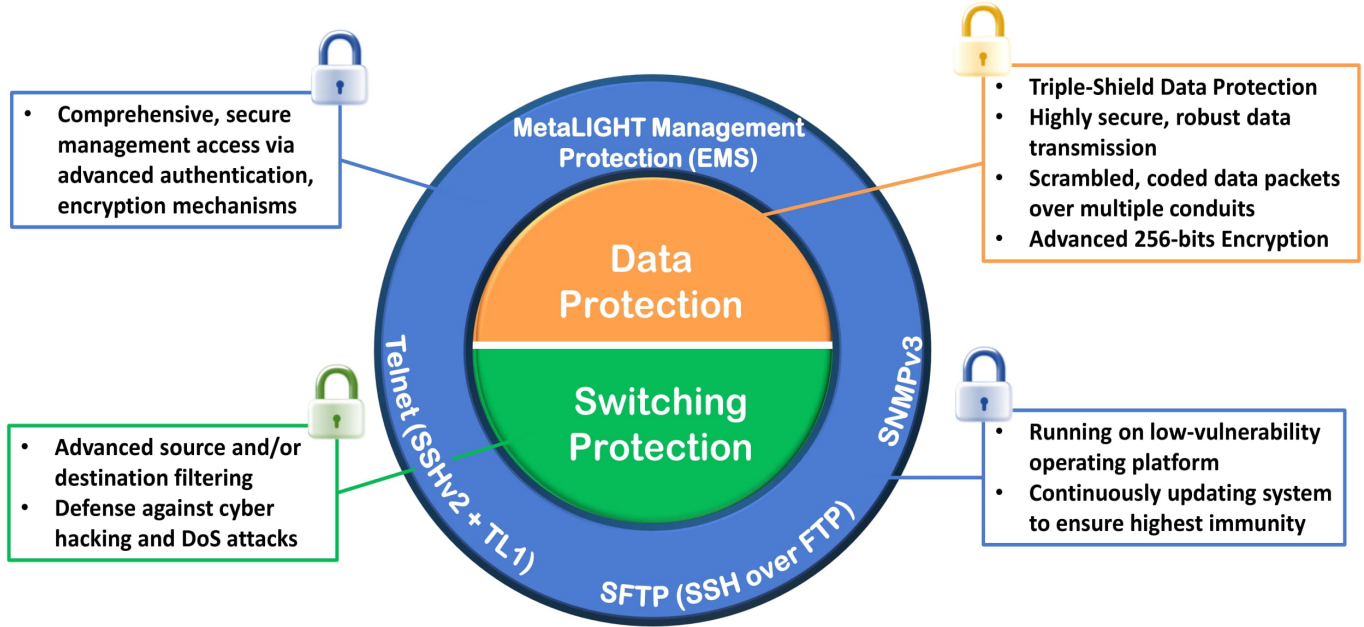


(1), (2), (3) – Components of Triple Shield Protection
 (4) – 10Gbps available in 2023
 (5) – Vs. single wire performance in cable

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MetaLIGHT Software 360⁰ System Level Security

Approved for Deployment by US DoD

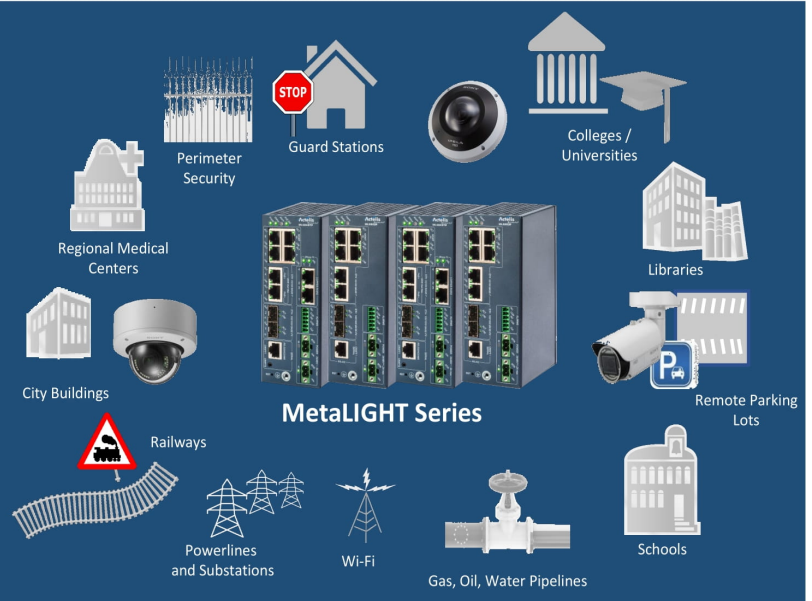


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Copper-Fiber Signal Processing + Security + Hardened Networking







MetaLIGHT offers Compact, Safe, Universal Building Blocks

- **CONNECTIVITY:** High Performance, mix of Fiber, Copper, 5G
- **CYBER SAFETY:** Triple Shield Data Protection; and 360⁰ System Security Software
- **UBIQUITY:** Supports all cameras, sensors, meters on new IP or legacy networks
- **HIGH DENSITY:** Packs up to 11 network functions in one device; saving space, power and cost
- **REMOTE POWERING Over Copper:** For cameras, sensors, 5G base stations, saving power connection cost
- **LOW-TOUCH NETWORK MANAGEMENT SW:** Automated Configuration, Zero touch provisioning



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Actelis Growth Milestones in All IoT Market Verticals

- 
2018:
 Introduction of MetaLIGHT Universal building blocks for hybrid IoT networks
- 
2020:
 Launch of 100% encrypted building blocks for hybrid IoT networks
- 
2018:
 Deployments with Smart Cities, Utilities, Traffic, Rail
- 
2020:
 Deployed by US armed forces in navy, airforce and ground applications
- 
2019:
 Approved for deployment by US DoD
 Selected for Highways England project
- 
2021:
 Selected for deployment in Airports in 40 countries
 4 years of >20% IoT growth on average



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Select IoT Customers

SMART GRID



SMART CAMPUS



SMART TRANSPORTATION



SMART CITY



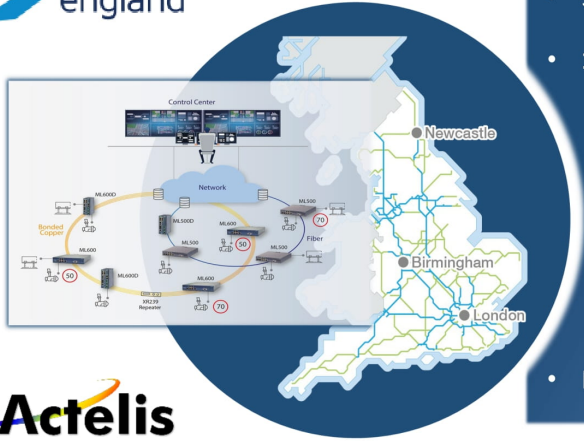
Gov, MILITARY & POLICE



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Example: Highways England National Road System

Modernizing with Actelis' Secure Hybrid Technology starting 2019



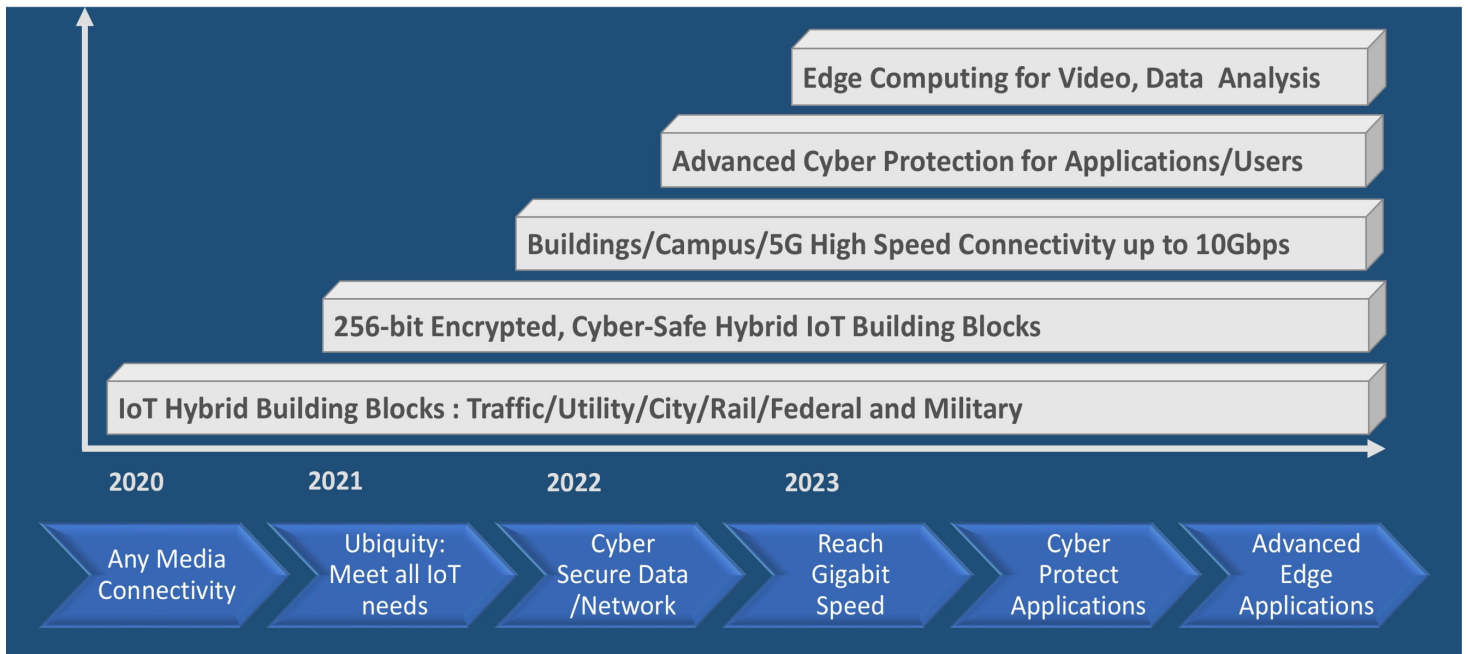
- 30,000 roadside assets, 4,400 miles of strategic road network
- **1/3 of network on existing copper, 2/3 on new Fiber**
 - Fiber and copper must be integrated without compromising service levels, reliability, or security
 - Both must provide reliable high bandwidth over vast distances
 - Advanced Quality of Service (QoS) must ensure minimum delay for real-time alerts
- Network security and advanced troubleshooting tools are paramount

- \$6M booked 2020-2021
- Next phases expected to continue for 9 years and budgeted at ~\$20M

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2020-2023 Product Strategy

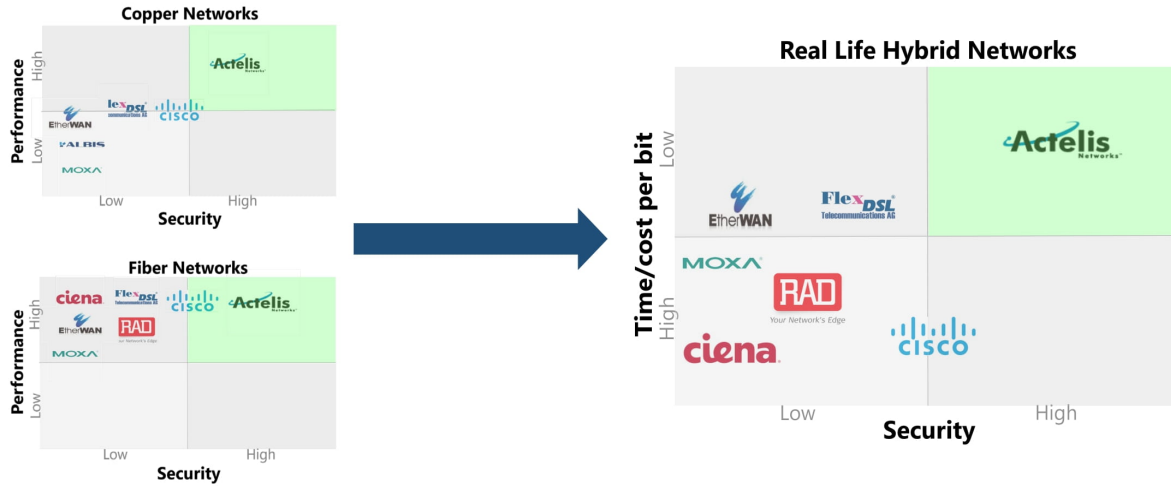
Be Everywhere, then Climb Up the Food Chain



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Competitive Landscape

Leading Unique Real-Life Hybrid Offering



Actelis' solutions offer significant competitive advantages in performance and security layers in both Fiber and copper. When combined into real-life hybrid copper-fiber networks, they offer higher security, faster deployment and lower cost.

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Financial Results 2020-2021

STATEMENTS OF OPERATIONS DATA:

	For the Year Ended December 31, 2021	For the Year Ended December 31, 2020
<i>(U.S. dollars in thousands, except share and per share data)</i>		
Revenues	\$ 8,545	\$ 8,532
Cost of revenues	4,575	3,550
Research and development, net	2,443	2,147
Sales and marketing, net	2,204	1,848
General and administrative, net	1,183	1,118
Financial expenses, net	3,391	1,374
Loss from operations	(5,251)	(1,505)
Income tax provision	—	—
Net loss	\$ (5,251)	\$ (1,505)
Net loss	(5,251)	(1,505)
Non-GAAP Adjusted EBITDA [®]	(1,097)	50

(U.S. dollars in thousands)

	Year Ended December 31, 2021	Year Ended December 31, 2020
Revenues	\$ 8,545	\$ 8,532
Backlog of Open Orders [®]	\$ 4,602	\$ 1,735

The sum of Revenues and end of year Open Orders grew 28% from 2020 to 2021

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Actelis is Positioned for Success With IoT Growth



Addressing a pain point of many major growth verticals, totaling >\$1T



4 years of >20% Ave. growth in IOT



Proven cyber-hardened hybrid technology, strong differentiated offering
Protected by >30 patents



Expanding from a strong, multi-national customer base



>\$4M Strong backlog into 2022



Experienced, committed, highly efficient management team with unique industry knowledge

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Offering Summary

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