

# **Executive Summary**

Delancey Street Partners ("DSP") is pleased to present our Connectivity Sector Review for December 2022. Connectivity companies remain at the forefront of product innovation for industrial automation and the flow of mission-critical data and information. With the exponential growth in connected devices and machines, the demand for advanced wired and wireless connectivity solutions has never been greater. Hardware, software, and service solutions that improve connectivity and increase operating efficiencies will continue to fuel strong market growth.







# **Topics of Discussion**

- Tenor of the Connectivity Landscape
- Connectivity Sector Investment Themes
- Review of Public Company Performance
- Notable M&A Activity
- Recent DSP Connectivity Transaction Experience

# **Tenor of the Connectivity Landscape**

The network of connected devices, machines, capital equipment, and vehicles that communicate seamlessly over the Internet continues to explode in size. The increasing adoption of the Internet of Things ("IoT"), the rising demand for predictive maintenance and real-time data analytics, and the intense focus on safety and security are driving the underlying growth of global industrial IoT ("IIoT") markets. Advanced connectivity technologies are deployed across large scale systems of diverse endpoints to analyze data more intelligently, optimize supply chain management, and increase productivity. These trends drive significant investment and product innovation centered around reliability, speed, and performance.

We believe the Connectivity sector offers a number of investment attributes, particularly with the growth in demand for high-reliability hardware, software, and service solutions that enable the connection, monitoring, and control of local or remote physical assets by electronic means. The Connectivity sector is large and fragmented. Over the past 25+ years, M&A has played a critical role as large strategics seek opportunities for inorganic growth and private equity has capitalized on the fragmented nature of the industry through platform investments and highly successful buy and builds. With no demand slowdown in sight for all forms of connectivity, middle market niche leaders in the sector continue to emerge.

Public company stock performance and M&A activity was very strong through mid-year 2022. With inflation, increased levels of inventory, supply chain disruptions, concerns of a recession, and a higher cost of capital, equity indices have declined and M&A activity has slowed in the back half of 2022. That said, M&A appetite remains high for great companies in the space. There are a significant number of middle market privately held companies that possess product design expertise, IP / technology leadership, and/or service excellence that continue to capitalize on positive long-term industry trends.



# Lookback: SOX Index<sup>(1)</sup> —Index: PHLX Semiconductor Sector \$4,000 \$3,000 \*3,000 \*>\$100 billion in semi device and cap equipment M&A in 2015 and 2016; massive consolidation \$2,000 \*>3x increase in SOX index from 2017 to 2021 17 Years Nov-94 Nov-98 Nov-02 Nov-06 Nov-10 Nov-14 Nov-18 Nov-22



## **Investment Themes**

The rapidly evolving wireless and wired connectivity landscape has sustained industry tailwinds as the real-time need for information and data continues to compound across sectors. Investments in infrastructure and innovative product applications underpin the long-term favorable outlook for the space. DSP believes there is a compelling investment thesis for the Connectivity sector that is substantiated by broad-based technological advancements and increasing demand. Strategic buyers and financial investors have been drawn to a number of attributes that make the space attractive for building platforms of scale.

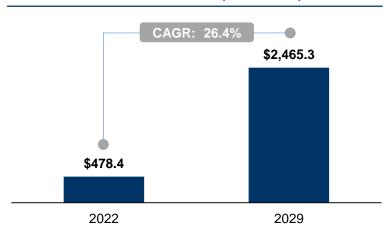
#### **Proliferation of Electronic Devices**

Connectivity is at the forefront of data-driven product and application innovation. A critical catalyst of this "innovation revolution" is IoT. The global IoT market is projected to grow from \$478.4 billion in 2022 to \$2.5 trillion in 2029, representing a 26.4% CAGR.<sup>(3)</sup> With the continued proliferation of electronic components and devices and the increased speed and capacity of 5G networks, the demand for IoT-connected devices is the driving force behind the investment in digital infrastructure. The number of IoT-connected devices has increased significantly. The global number of IoT-connected devices is projected to grow from 12.2 billion in 2021 to 27.0 billion in 2025, representing a 22.0% CAGR.<sup>(4)</sup>

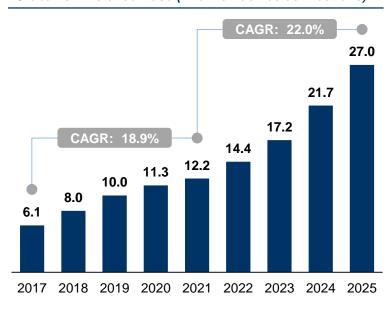
As IoT connections are broadly increasing, the industrial environment is quickly adopting technology to develop IIoT, or "Industry 4.0". IIoT is intended to synchronize each element of the manufacturing process in order to efficiently manage overall operations. IIoT enables each machine to collect data for each of its own functions and its contributions to the broader manufacturing network. This data is used for conducting predictive analytics and reducing operational disruptions. IIoT has transformed the "typical" manufacturing environment by providing real-time feedback at the device / machine level to ensure efficiency at the system level. In order for this system to operate smoothly, industrial automation equipment needs to be equipped with sensors, connectors, antennas and other components that are capable of operating in harsh environments. These high-reliability components are able to perform in the most challenging conditions on a factory floor or in the field. As industrial automation continues to evolve, demand for components such as sensors, connectors and antennas is expected to increase on a large scale.

A significant investment in 5G networks has been made in parallel with the explosive growth of IoT-connected devices. Since 5G was launched, service providers have invested more than \$121.0 billion into networks. Investment has increased for four consecutive years, with an all-time high of \$35.0 billion invested in 2021. (5) The widespread implementation of 5G networks unleashes a vast IoT ecosystem of new high-performance devices that are needed to support the scalability, capability, and efficiency of modern technologies. This presents a multi-year growth opportunity.

# Global IoT Market Size (\$ in billions)(3)



# Global IoT Installed Base (in billion device connections)(4)



### Continued 5G Investment<sup>(5)(6)</sup>

\$121.0bn \$35.0bn

Combined All-Time High of Investment in 5G 5G Investment in 2021

MB of Wireless Data Traffic in 2021

53.4tn

41.7% of All Wireless Connections Were Data-Only Devices in 2021 \$297.1bn Projected 5G IoT Market Size by 2030



# Investment Themes (cont'd)

## **Democratization of IoT**

With expanded IoT connectivity, there is a "long tail" of IoT applications that have yet to be rolled out or are deemed as not "traditional" applications. These applications are beyond smartphone connections; they enable large-scale wireless connectivity of devices and machines in commercial and industrial settings. These applications have not yet been adopted on a large scale, but will connect a significant amount of low-complexity, low-cost computing hardware with software / algorithms and lead to more connected devices and machines. Many of these "long tail" devices have faced challenges due to remote or complex environments, leading to expensive implementation. The accelerated adoption of Low-Power Wide-Area Network ("LPWAN") technology enables connections for these challenging technologies and is at the forefront of the democratization of IoT.

LPWAN enables reliable connections in complex, remote, or harsh environments. NarrowBand-IoT ("NB-IoT"), in particular, is an LPWAN technology developed to enable a wider range of IoT use cases. NB-IoT improves the power consumption and overall system reliability of connected devices, especially at wider ranges. NB-IoT applications include: smart utility metering, agricultural automation and monitoring, and industrial automation.

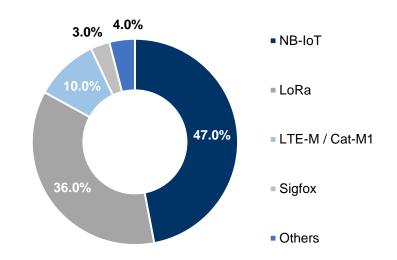
As "long tail" IoT applications are adopted, LPWAN technologies are projected to be the market leader in coming years, driven in large part by NB-IoT technologies. From 2021 to 2026, machine-to-machine ("M2M") long-term evolution ("LTE") applications, such as NB-IoT, are expected to increase from 255.0 million to 853.0 million units, representing a 27.3% CAGR.(7)

## **Revitalization of Onshore Manufacturing**

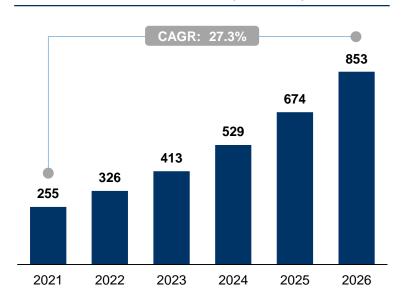
Recent supply chain challenges have elevated the need to onshore or reshore manufacturing in the Connectivity sector. According to the 2021 Thomas State of North American Manufacturing Report, 83.0% of manufacturers are planning to increase or add North American suppliers to their supply chains through the end of 2022, an increase from 54.0% in March 2020.(8) This surge of onshore manufacturing is estimated to potentially inject up to \$443.0 billion into the U.S. economy.(8)

On August 9, 2022, the CHIPS and Science Act was signed into law to promote the growth of domestic manufacturing and to strengthen domestic supply chains. The legislative package will provide \$52.7 billion in federal funding for U.S. government agencies to allocate to U.S. semiconductor manufacturers to build new plants, increase manufacturing capacity, and support R&D.

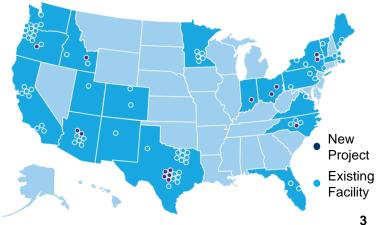
# LPWAN Installed Base Application Share<sup>(9)</sup>



# Global M2M LTE Units (in millions)(7)



## Semiconductor Manufacturing Across the U.S. (10)





# **Investment Themes (cont'd)**

# Revitalization of Onshore Manufacturing (cont'd)

Since 2021, 642,000 manufacturing jobs have been created and approximately \$80.0 billion of investments in U.S. semiconductor fabrication have been announced (through 2025). According to the Semiconductor Industry Association, select investments include: i) \$17 billion from Samsung in Texas; ii) \$30 billion from Texas Instruments in Texas; and iii) \$40 billion from Micron Technology in New York.<sup>(11)</sup>

# A Shortage of Engineering Talent

The Connectivity sector has been impacted by a worldwide shortage of engineers. Taiwan, a global center for semiconductor manufacturing, does not have enough engineers to keep up with demand. According to the Center for Strategic & International Studies, Taiwan reportedly had a shortfall of more than 30,000 semiconductor-focused engineers in Q4 2021, up 77.0% from Q2 2020.<sup>(12)</sup>

Radio frequency ("RF") engineers are in high demand, and there is a significant shortage of talent. The limited availability of RF engineers highlights the value proposition of easy-to-use, low-cost "long-tail" loT applications. Most original equipment manufacturers ("OEMs") do not have inhouse RF domain expertise and rely on the RF expertise of the supplier, catalog house, or value-added distributor.

As part of the CHIPS and Science Act, \$13 billion in federal funds will be allocated for semiconductor research and training. This funding will also include a National Semiconductor Technology Center and a Department of Defense program geared towards university-based educational programs. These programs are designed to expand the domestic talent pool of trained engineers.

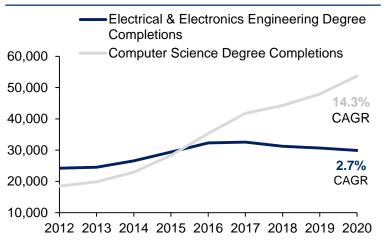
# Integration of the IoT Ecosystem

The IoT ecosystem requires a breadth of components to enable connectivity. Increasingly, industry participants are complementing hardware product offerings with software and service offerings to increase recurring revenues and to expand their addressable market. In IIoT applications, significant growth opportunities exist for companies that facilitate M2M interoperability through both hardware and software.

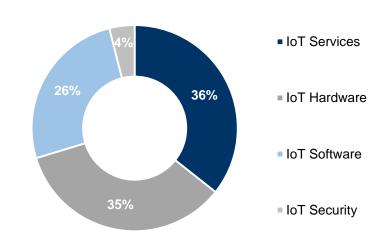
A diversified platform taps into the existing hardware installed base and supplements new and existing product applications with "as-a-service" solutions. Software offerings support application development and operational management. Services support design, development, and ongoing maintenance and certification.

These one-stop-shop IoT solutions are well-positioned to capture the next evolution of Industry 4.0 as smart buildings and smart cities become the focal point of investment and represent potential market share gains.

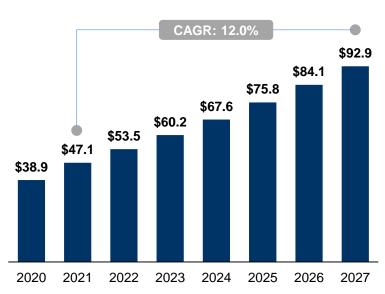
# U.S. Engineering Talent Shortage<sup>(13)</sup>



# IIoT Market Opportunity (% of Global Spending)(14)



# Global Market for IoT Smart Buildings (\$ in billions)(15)

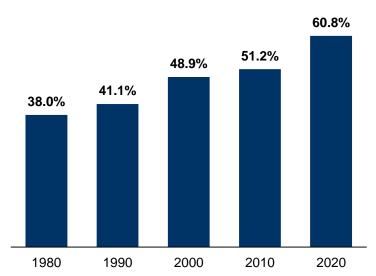




# Public Company Valuation Multiples – EV / 2022E EBITDA(1)



Rank	1980	1990	2000	2010	2020	
1	Amp	Amp	Tyco Electronics	Tyco Electronics	TE Connectivity	
2	Amphenol	Molex	Molex	Molex	Amphenol	
3	ITT Cannon	n LPL / FCI		Amphenol	Molex	
4	Berg Electronics	ITT Cannon	Delphi	Yazaki	Luxshare	
5	3M	3M	Amphenol	FCI	Aptiv	
6	Augat	Burndy	Yazaki	J.S.T.	FIT	
7	Winchester	Berg Electronics	ITT Cannon	Foxconn	Yazaki	
8	Cinch	J.S.T.	3M	Delphi	JAE	
9	Burndy	Hirose	JAE	Hirose	J.S.T.	
10	Molex	JAE	J.S.T.	JAE	Hirose	



The Connectivity sector is large and fragmented, and over the past 40+ years M&A has played a critical role in the evolution of the industry landscape. Smaller companies have been able to carve out niche positions by offering differentiated product and service offerings. Well-capitalized buyers have consolidated the industry over time to enhance core competencies and expand market reach. The consolidation that has occurred is evident in the connector industry. Former top 10 companies Berg Electronics, Augat, Cinch, and Burndy were acquired by large strategics looking to consolidate market share. According to Bishop & Associates Inc., of the top 10 companies in 1980, only three (TE Connectivity, Amphenol, and Molex) were still top 10 companies in 2020, due in large part to the aggressive M&A strategies deployed over the time period. (16) Despite the consolidation that has occurred, the sector still remains fragmented with attractive acquisition targets and new entrants developing novel products and services.

# Representative Strategic M&A<sup>(1)</sup>

November 2021: Ventus Holdings May 2021: NSI-MI Technologies July 2021: Ctek April 2021: Abaco Systems March 2021: Haxiot September 2022: Integrated Cable Assembly July 2022: Custom Design Technologies Amphenol June 2022: NPI Solutions September 2021: Antenova discoveriE December 2021: Halo Technology September 2021: Beacon EmbeddedWorks December 2022: Intercable Automotive Solutions December 2021: Keyssa Wireless Connector mole APTIV• April 2022: El-Com Systems Technology May 2021: Ulti-Mate Connector KOCH December 2020: Fiberguide Industries April 2022: Communication Associates July 2022: Linx Technologies

March 2022: NetModule BELDEN

January 2021: OTN Systems



October 2021: Antenna Business of Laird

Connectivity

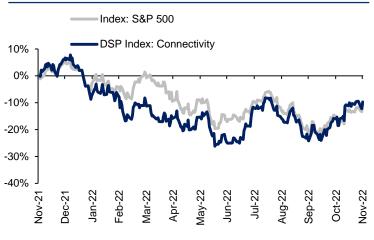
July 2021: ERNI Group

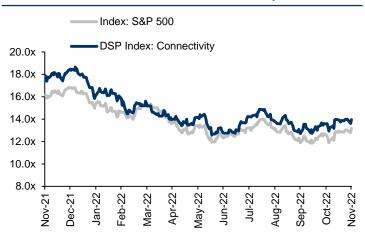
# **Review of Public Company Stock Performance**

The DSP Connectivity Index declined 9.7% over the last twelve months ended November 2022. As a point of reference, the S&P declined by 10.7% over the same time period. Primary factors driving the sector decline include: i) overall market declines; ii) recession concerns; and iii) supply chain disruptions. With the challenging conditions, EV / EBITDA multiples have also declined.

### 1-Year Stock Performance<sup>(1)</sup>

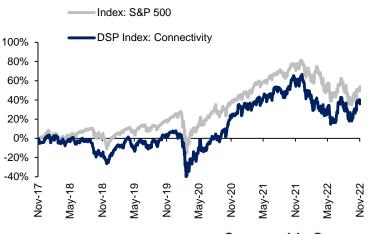
# 1-Year EV / LTM EBITDA Multiple<sup>(1)</sup>

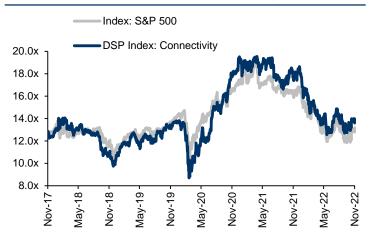




# 5-Year Stock Performance<sup>(1)</sup>

5-Year EV / LTM EBITDA Multiple<sup>(1)</sup>





# Comparable Company Analysis: Connectivity<sup>(1)</sup>

COMPANY	S	TOCK PERFO	RMANCE AND	COMPANY DAT	Α	MARGINS VALUATION D			UATION DA	ATA
Company	Price 11/30/2022	30 Day % Change	YTD %Change	Market Value (\$mm)	Enterprise Value (\$mm)	Gross Profit % Margin	EBITDA % Margin	EV / Rev 2022	EV / EBITDA 2022	P/E 2022
AMETEK, Inc.	\$142.42	10.2%	-3.1%	\$32,707.4	\$34,921.6	34.9%	29.4%	5.79x	19.3x	25.3x
Amphenol Corporation	80.43	5.2%	-8.0%	47,863.5	51,442.7	31.7%	23.7%	4.15x	17.3x	27.1x
Aptiv PLC	106.67	17.8%	-35.3%	28,902.2	31,011.2	14.3%	11.2%	1.83x	13.9x	31.8x
Belden Inc.	80.44	14.6%	22.4%	3,443.3	4,014.2	36.8%	16.2%	1.51x	9.1x	12.7x
Carlisle Companies Incorporated	263.11	9.9%	6.0%	13,566.2	15,872.5	32.4%	22.6%	2.44x	10.1x	13.2x
CommScope	8.88	-33.8%	-19.6%	1,850.1	12,574.0	30.0%	12.3%	1.38x	10.1x	5.3x
Digi International Inc.	42.47	6.8%	72.9%	1,510.1	1,733.3	57.1%	19.1%	4.46x	22.5x	27.1x
discoverIE Group plc	9.90	10.7%	-28.7%	953.6	1,033.9	20.8%	12.4%	1.90x	14.1x	25.4x
Huber+Suhner AG	91.68	1.4%	-3.9%	1,770.1	1,620.2	36.6%	14.4%	1.65x	11.6x	20.8x
Methode Electronics, Inc.	45.68	11.6%	-7.1%	1,670.7	1,744.6	22.1%	13.7%	1.51x	10.9x	19.7x
Smiths Group plc	18.96	6.1%	-11.4%	6,706.1	6,863.6	37.5%	16.6%	2.03x	11.1x	19.8x
Spectris plc	37.88	7.8%	-23.5%	3,966.7	4,171.0	56.4%	16.7%	2.37x	13.8x	20.0x
TE Connectivity Ltd.	126.12	2.8%	-21.8%	40,009.1	43,656.1	32.2%	23.0%	2.68x	12.2x	18.5x
Overall Group Mean		5.5%	-4.7%	14,224.5	16,204.5	34.1%	17.8%	2.59x	13.5x	20.5x
Overall Group Median		7.8%	-8.0%	3,966.7	6,863.6	32.4%	16.6%	2.03x	12.2x	20.0x
Overall Group Max		17.8%	72.9%	47,863.5	51,442.7	57.1%	29.4%	5.79x	22.5x	31.8x
Overall Group Min		-33.8%	-35.3%	953.6	1,033.9	14.3%	11.2%	1.38x	9.1x	5.3x



# **Recent M&A and Strategic Commentary**



"We're excited to have each of our new investments in Navitar and RTDS Technologies as each fits perfectly in with our acquisition strategy. They are leaders in niche markets, each has very strong technology differentiation positions that are backed by excellent engineering capabilities, and they expand our presence in attractive growth markets. We've continued to shift our portfolio to exposures in attractive growth markets such as automation, healthcare, and power."

(David Zapico, Chairman of the Board & CEO, 11/1/22)

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"We continue to want to grow the portfolio both organically and inorganically. From an M&A perspective, we're still very much interested in the types of transactions such as Intercable Automotive Solutions that strengthen bolt-on transactions and larger bolt-on transactions that strengthen the Signal and Power Solutions portfolio around key growth areas. We are also interested in software opportunities that can help accelerate the organic plan around the software-defined vehicle."

(Joseph Massaro, Senior VP of Business Operations & CFO, 11/3/22)



"The compelling vision to achieving our goal of \$100mm EBITDA is providing a more complete IoT solution. It's no longer set it and forget it; it is about managing the life cycle of that deployment."

(Ronald E. Konezny, President, CEO & Director 11/10/22)

"We're continuing to integrate Ventus Holdings, a global provider of internet of things connectivity products and services, which has been a fantastic acquisition for Digi as the teams have really collaborated well."

(Jamie Loch, Executive VP, CFO & Treasurer, 11/10/22)



"We focus on selling into sustainable markets. The reason our organic growth is strong is because ~75.0% of our revenue is in these high-quality structural growth markets such as renewable energy, medical, transportation and industrial connectivity. These are great markets with fantastic short, medium, and long-term prospects. And we focus intently on getting design wins and creating new revenue streams organically in these markets, and it's paying off." (Nicholas Jefferies, Group Chief Executive, 11/27/22)



"Our breadth of support of wireless technologies, ecosystems, applications, and markets is the largest in the world. Our depth and domain expertise is driving leading wireless performance, battery life, security, and ease of use in the adoption of our products, and our 100% focus and commitment on driving phenomenal growth in IoT wireless connectivity has enabled us to double our revenue over the last couple of years in the middle of the supply chain crisis."

(R. Matthew Johnson, CEO, President & Director of Silicon Laboratories, 10/26/22)

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"M&A remains a key aspect of our strategy, and we've announced around GBP 100 million worth of acquisitions in the first half of 2022. For HBK, we announced the acquisition of Dytran Instruments, which is a leading designer and manufacturer of accelerometers and sensors and is expected to enhance HBK's customer offering in the space, aerospace and automotive industries. To expand its industrial IoT portfolio, Red Lion acquired MB connect line GMBH, which has a full complement of products in industrial cybersecurity and provides customers with a portal for remote monitoring and configuration."

(Andrew Heath, CEO & Executive Director, 8/1/22)



"To support our efforts towards the cloud and IIoT, we completed a smaller bolt-on that could help to build out our RF resources. I think you're going to continue to see us do bolt-on acquisitions to strengthen our position. With our free cash flow over the long term, 2/3 will go back to owners between dividends and share repurchases, and 1/3 will be used for bolt-ons."

(Terrence Curtin, CEO & Executive Director, 6/2/22)



# Representative M&A Transactions(1)

Date	Target	Acquiror	EV (\$mm)	EV/ Revenue	EV/EBITDA
12/1/2022	Intercable Automotive Solutions S.R.L.	Aptiv PLC (NYSE:APTV)	\$616.6	2.4x	
10/28/2022	MaxPower Semiconductor, Inc. (post \$57.5mm earn-out)	Vishay Intertechnology, Inc. (NYSE:VSH)	107.5	10.8x	
9/30/2022	Integrated Cable Assembly Holdings, Inc.	Amphenol Corporation (NYSE:APH)	213.7	2.4x	
9/2/2022	Dytran Instruments Inc.	Spectris plc (LSE:SXS)	82.0		15.8x
7/28/2022	Exxelia International (IK Partners)	HEICO Corporation (NYSE:HEI)	453.0	2.4x	
7/19/2022	C&K Switches (Sun Capital Partners)	Littelfuse (NASDAQ: LFUS)	540.0	2.7x	13.5x
6/30/2022	NPI Solutions Inc.	Amphenol Corporation (NYSE:APH)	74.5	1.1x	
6/27/2022	Telephonics Corporation (Griffon Corporation (NYSE:GFF))	TTM Technologies, Inc. (NASDAQGS:TTMI)	330.0		9.0x
1/5/2022	Royal Power Solutions (Industrial Growth Partners)	Eaton Corporation plc (NYSE:ETN)	612.0		13.6x

#### **Select Transaction Notes**

Target	Acquiror	Notes			
		Intercable Automotive Solutions is a manufacturer of high-voltage power			





- Intercable Automotive Solutions is a manufacturer of high-voltage power distribution, and high-precision connection technologies
- Intercable's automated manufacturing, product design, and relationships with key European automotive OEMs will enhance Aptiv's vehicle architecture systems





- MaxPower Semiconductor is a manufacturer of discrete semiconductors and passive electronic components
- The acquisition supports high voltage electrification applications and provides opportunity for Vishay Intertechnology to cross-sell its portfolio to new customers



# **Amphenol**

- Integrated Cable Assembly is a manufacturer of a broad array of cable assemblies for a diversified range of industrial and other applications
- The acquisition expands Amphenol's offering of high-technology, value-added interconnect products in the diversified industrial market





- Dytran Instruments is a manufacturer of sensors, cable assemblies, connectors, and electronic components for measuring dynamic force, pressure, and vibration
- The acquisition strengthens the piezo-electric offering, adds new micro electro mechanical system ("MEMS") capability, and expands sales into North America





- Exxelia International is a manufacturer of hi-rel, complex, passive electronic components and rotary joint assemblies
- The acquisition adds ~2,100 employees and 11 advanced locations in France, the U.S., India, Morocco, and Vietnam





- C&K Switches is a manufacturer of high-performance electromechanical switches and interconnects in industrial, transportation, aerospace, and datacom markets
- The acquisition adds micro stamping engineering capabilities and differentiated products such as power semiconductors, fuses, relays, and switches



# **Amphenol**

- NPI Solutions is a manufacturer of industrial cable assemblies and value-add interconnect assemblies, especially for semiconductor manufacturing equipment
- The company adds U.S., China, and Singapore facilities with cable & harness, electromechanical assembly, engineering, and other capabilities to Amphenol





- Telephonics Corporation is a manufacturer of custom integrated circuits and surveillance, communications, analysis, and integration solutions
- The acquisition builds upon TTM's previous acquisition of Anaren with the addition of RF-based integrated systems for key defense mission areas





- Royal Power Solutions ("RPS") is a manufacturer of high-precision electrical connectivity components used in electric vehicles, energy, industrials, and mobility
- RPS adds i) ~450 employees; ii) manufacturing facilities in Carol Stream, IL and Queretaro, Mexico; and iii) a sales & engineering office in Canton, MI



# Notable M&A Activity – HEICO Corporation's Electronic Technologies Group Completes Five Acquisitions

20%

- 1 On March 14, 2022, HEICO (NYSE:HEI) completed its acquisition of Flight Microwave Corporation, a manufacturer of custom high power filters and filter assemblies used in space and defense applications
- On July 28, 2022, HEICO completed its acquisition of Exxelia International, a manufacturer of hi-rel, complex, passive electronic components, and rotary joint assemblies from IK Partners for €453mm
- 3 On August 9, 2022, HEICO completed its acquisition of Charter Engineering, a manufacturer of RF and microwave coaxial switches for the aerospace and defense ("A&D"), automated test equipment, and instrumentation markets
- 4 On August 11, 2022, HEICO completed its acquisition of Sensor Systems, a manufacturer of airborne antennas for commercial and military applications for \$163mm
- 5 On September 1, 2022, HEICO completed its acquisition of Ironwood Electronics, a manufacturer of high performance test sockets, adapters, and turn-key component manufacturing and assembly for PCBs

# **Overview of HEICO Corporation**

- HEICO Corporation is a manufacturer and a distributor of aerospace and electronics products to the aviation, defense, space, medical, telecommunications and electronics industries
- The company operates through its Hollywood, FLbased Flight Support Group and its Miami, FL-based Electronic Technologies Group

## **Overview of Exxelia International**

- Exxelia International is a manufacturer of hi-rel, complex, passive electronic components and rotary joint assemblies
- The company was founded in 2009 and is headquartered in Paris, France. The company produces over 50,000 discrete part numbers, which it provides to over 3,000 customers worldwide

## **Overview of Sensor Systems**

- Sensor Systems is a manufacturer of airborne antennas for commercial and military applications
- The company was founded in 1961 and is headquartered in Chatsworth, CA. The company's antennas are found on nearly all large commercial transport aircraft built in the last 50 years, along with numerous business and military aircraft



(NYSE:HEI): HEICO Corporation

Index: S&P 500

- Flight Microwave Corporation is a manufacturer of
- custom high power filters and filter assemblies used in space and defense applications
- The company was founded in 2004 and is headquartered in El Segundo, CA. The company provides high power, space-borne filter payload assemblies for GPS programs FLIGHT MICROWAVE

## **Overview of Charter Engineering**

- Charter Engineering is a manufacturer of RF and microwave coaxial switches for the A&D, automated test equipment, and instrumentation markets
- The company was founded in 1990 and is headquartered in Pinellas Park, FL. The company is known for being the only RF switch manufacturer that offers low passive intermodulation on every switch



# **Overview of Ironwood Electronics**

- Ironwood Electronics is a manufacturer of high performance test sockets, adapters, and turn-key component manufacturing and assembly for PCBs
- The company was founded in 1986 and is headquartered in Eagan, MN. The company's products are utilized by semiconductor designers and manufacturers for critical validation and testing, and other applications Ironwood

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# **Select Private Equity Platforms: 2022 Transactions**

In addition to strategic M&A activity, private equity firms continue to find attractive opportunities in the space. There are a significant number of highly successful investments and exits by financial sponsors in the Connectivity sector. The following are examples of private equity owned platforms (investments in 2022):

**Financial Sponsor** 

**Portfolio Company** 

**Business Description** 





Manufactures timing, RF & antenna, and inductor & connectivity solutions for the industrial, A&D, communication, consumer, transportation, and medical markets. Abracon was acquired by Genstar Capital from The Riverside Company in July 2022





Provides value-added distribution of wireless modules, sensors, connectors, and products for IoT, RF, fiber optics, and other applications. Acal BFi was acquired by H2 Equity Partners in a divestiture from discoverIE (LSE: DSCV) in March 2022





Manufactures radiation hardened components, mission processing, cabling, wave guides, antennas, and power management solutions. CAES Space Systems was originally a unit of Advent International's investment in Cobham, and Veritas Capital signed a definitive agreement to acquire the unit in October 2022





Manufactures silicon diodes, RF & microwave modules, isolators & circulators, filters & duplexers, waveguides, and sub-systems. Cobham Microwave was originally a unit of Advent International's investment in Cobham, and Consolidation et Développement acquired the unit in May 2022





Designs and assembles cable assemblies and wire harnesses in addition to its valueadd manufacturing services. Golden State Assembly was acquired by Auxo Investment Partners in March 2022





Provides asset health monitoring solutions that offer an integrated platform of proprietary, enterprise SaaS, highly-engineered IoT devices, and high-touch engineering support. KCF Technologies received an investment from Graham Partners in June 2022





Manufactures wireless connectivity solutions, including WiFi modules, bluetooth modules, IoT devices, and other solutions enabling wireless connectivity. Laird Connectivity received an investment from Audax Private Equity in July 2022





Manufactures high-performance proprietary advanced tubular ceramics and components for mission-critical applications. McDanel Advanced Ceramics Technologies was acquired by Artemis Capital Partners in October 2022





Manufactures highly engineered electronic interconnect solutions for high-density and high-speed applications of leading original equipment manufacturers. Qnnect was formed through the acquisition of Custom Interconnects in July 2022, joining the company with Arcline's Meritec and Joy Signal Technology investments





Manufactures automatic dependent surveillance-broadcast ADS-B transceivers, receivers, transponders, panel displays, and navigation tools for unmanned and manned aircraft. uAvionix was acquired by DC Capital Partners in March 2022

Platform Profile: Abracon (Genstar Capital)

#### Abracon

- Founded in 1992 and headquartered in Spicewood, Texas, Abracon is an industry leader in passive components, providing timing, RF & antenna, and inductor & connectivity solutions
- Abracon powers the Ecliptek, Fox, and the ProAnt brands to enable innovative, connected IoT solutions for the industrial, A&D, communication, consumer, transportation, and medical markets

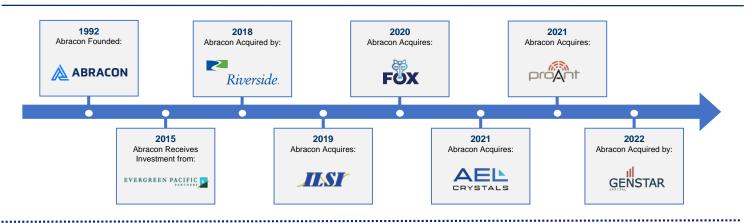
# **Genstar Capital**

- Genstar Capital is a private equity firm that was founded in 1988 and is based in San Francisco, CA
- Genstar currently has approximately \$35 billion of assets under management and targets the software, financial services, industrials, and healthcare industries
- Genstar Capital's relevant connectivity experience includes its previous ownership of Infinite Electronics (exit in March 2021)

**GENSTAR** 



# **Private Equity and M&A History**



# **Platform Profile: Qnnect (Arcline Investment Management)**

# Qnnect

# Qnnect is a manufacturer of highly engineered electronic interconnect solutions for high-density and high-speed applications

- The company's connector and interconnect businesses have 100+ years of combined experience in the A&D, hi-rel, consumer electronics, and other markets
- The company was formed in 2022 and is headquartered in Painesville, OH

# **Q**innect

## **Arcline Investment Management ("Arcline")**

- Arcline is a private equity firm with \$4.4 billion in committed capital and is based in Nashville, TN
- Arcline invests in niche, technology driven businesses in high value industries such as defense, aerospace, industrial technology, life sciences, energy transition and specialty materials
- Arcline's relevant connectivity experience includes its current portfolio company, Quantic Electronics, formed in January 2021
   ARCLINE

# **Private Equity and M&A History**





# Select M&A Transactions(1)

Date	Target (Seller)	Acquiror	Target Business Description
Announced	Cable Connectivity Group (Torqx Capital & TKH Group)	Infinite Electronics (Warburg Pincus)	Cable Connectivity Group is manufacturer, distributor, and assembler of cable connectivity solutions
Announced	CAES Space Systems (Advent International)	Veritas Capital	CAES Space Systems is a manufacturer of radiation hardened components, mission processing, cabling, wave guides, antennas, and power management solutions
Announced	Rochester Wire and Cable (TE Connectivity (NYSE:TEL))	Hexatronic Group AB (publ) (OM:HTRO)	Rochester Wire and Cable is a manufacturer of harsh environment electro-optical cables
12/8/2022	Boundary Devices Inc.	Laird Connectivity (Audax Private Equity)	Boundary Devices is a manufacturer of system-on-modules and single board computers
11/17/2022	Testco Inc.	PEI-Genesis	Testco is a distributor of passive, electromechanical, and interconnect components
11/2/2022	Hermetic Solutions Group (Windjammer Capital)	Qnnect (Arcline Investment Management)	Hermetic Solutions Group is a manufacturer of hermetic interconnect products, RF / microwave connectors, hermetic electronic packaging, and other products
10/31/2022	Phoenix Dynamics Limited	Huber+Suhner AG (SWX:HUBN)	Phoenix Dynamics is a high performance RF, fiber optic, and low frequency cable assemblies
10/17/2022	McDanel Advanced Ceramic Technologies	Artemis Capital Partners	McDanel Advanced Ceramic Technologies is a manufacturer of high-performance proprietary advanced tubular ceramics and components for mission-critical applications
10/3/2022	Connectronics, Inc. (HEICO (NYSE:HEI))	Qnnect (Arcline Investment Management)	Connectronics is a manufacturer of RF connectors
9/23/2022	Intelliconnect (Europe) Limited	Trexon (Audax Private Equity)	Intelliconnect is a manufacturer of RF connectors, adapters, and cable assemblies
9/1/2022	Ironwood Electronics Inc.	HEICO Corporation (NYSE:HEI)	Ironwood Electronics is a manufacturer of high performance test sockets, adapters, and turn-key component manufacturing and assembly for PCBs
8/11/2022	Sensor Systems	HEICO Corporation (NYSE:HEI)	Sensor Sytems is a manufacturer of airborne antennas for commercial and military applications
8/9/2022	Charter Engineering, Inc.	HEICO Corporation (NYSE:HEI)	Charter Engineering is a manufacturer of RF and microwave coaxial switches
8/9/2022	Microfab, Inc.	Naprotek (Edgewater Capital Partners)	Microfab, Inc. is a provider of precision RF circuit fabrication and atomic-level micro machining services
7/12/2022	Electro Enterprises, Inc.	Fastener Distribution Holdings (Audax Private Equity)	Electro Enterprises is a distributor of interconnect, wire, cable & harness, and electromechanical products
7/11/2022	Laird Connectivity (Advent International)	Audax Private Equity	Laird Connectivity is a manufacturer of wireless connectivity solutions, including WiFi modules, bluetooth modules, IoT devices, and other solutions enabling wireless connectivity
7/7/2022	Custom Interconnects	Arcline Investment Management	Custom Interconnects is a manufacturer of high performance interconnect components
7/6/2022	Custom Design Technologies	discoverIE Group plc (LSE:DSCV)	Custom Design Technologies is a manufacturer of customized plastic enclosures for circuit boards, membrane keypads, and associated electronics components
7/6/2022	Abracon (The Riverside Company)	Genstar Capital	Abracon is a manufacturer of timing, RF & antenna, and inductor & connectivity solutions
7/1/2022	Linx Technologies, Inc. (Argosy Private Equity)	TE Connectivity Ltd. (NYSE:TEL)	Linx Technologies is a manufacturer of wireless antennas, RF connectors, RF modules, and remote controls
6/22/2022	KCF Technologies	Graham Partners	KCF Technologies is a provider of asset health monitoring solutions that offers an integrated platform of proprietary, enterprise SaaS, highly-engineered IoT devices, and high-touch engineering support
6/21/2022	Custom Microwave	Vitesse Systems (Trive Capital)	Custom Microwave is a manufacturer of high-performance antennas
6/14/2022	Microwave Dynamics	Quantic Electronics (Arcline Investment Management)	Microwave Dynamics is a manufacturer of free running and phase-locked oscillators, amplifiers, frequency converters, and frequency multipliers
6/6/2022	Vanguard Electronics Company	iNRCORE (The Jordan Company)	Vanguard Electronics Company is a manufacturer of hi-rel RF & microwave inductors and transformers and other products
5/26/2022	Cobham Microwave (Advent International)	Consolidation et Développement Gestion SAS	Cobham Microwave is a manufacturer of silicon diodes, RF & microwave modules, isolators & circulators, filters & duplexers, waveguides and sub-systems
5/17/2022	PAAL Technologies, Inc.	Micross Components (Behrman Capital)	PAAL Technologies is a manufacturer of RF & wideband transformers, MIL-STD-1553 data bus couplers, and harnesses
5/17/2022	Sub U Systems Incorporated	Sigma Defense Systems (Sagewind Capital)	Sub U Systems is a manufacturer of deployable tactical edge-of-network route, switch, and computing technology
5/4/2022	Royal Circuit Solutions	Summit Interconnect, Inc. (Lindsay Goldberg)	Royal Circuit Solutions is a manufacturer of quick-turn, advanced technology prototype printed circuit boards
4/19/2022	Meritec Inc.	Arcline Investment Management	Meritec is a manufacturer of high-performance interconnect embedded systems and connectors
4/15/2022	Communication Associates, Inc.	Belden Inc. (NYSE:BDC)	Communication Associates is a manufacturer of RF plug-in attenuators and signal conditioning modules
4/4/2022	MB connect line GmbH Fernwartungssysteme	Red Lion Controls, Inc. (Spectris plc (LSE:SXS))	MB connect line is a manufacturer of routers and solutions for the secure connection of machines and plants for remote access, data collection, and M2M-communication
3/24/2022	Spectrum Integrated Technologies Sdn Bhd	Pulse Electronics (Yageo Corporation (TWSE:2327))	Spectrum Integrated Technologies is a manufacturer of PCBs
3/14/2022	Flight Microwave Corporation	HEICO Corporation (NYSE:HEI)	Flight Microwave Corporation is a manufacturer of custom high power filters and filter assemblies used in space and defense applications
3/11/2022	Golden State Assembly	Auxo Investment Partners	Golden State Assembly is a designer and assembler of cable assemblies and wire harnesses in addition to its value-add manufacturing services
3/9/2022	uAvionix Corporation	DC Capital Partners	uAvionix Corporation is a manufacturer of automatic dependent surveillance–broadcast ADS-B transceivers, transponders, panel displays, and navigation tools for unmanned and manned aircraft
3/3/2022	Acal BFi UK Limited (discoverIE (LSE:DSCV))	H2 Equity Partners	Acal BFi UK is a provider of value-added distribution of wireless modules, sensors, connectors, and products for IoT, RF, fiber optics, and other applications
3/3/2022	NetModule AG	Belden Inc. (NYSE:BDC)	NetModule is a manufacturer of antennas, switches, routers & gateways, and other communication products for M2M and IoT
1/4/2022	Power Connector, Inc.	Trexon (Audax Private Equity)	Power Connector is a manufacturer of tactical communications interconnect for military applications



# **Recent DSP Connectivity Transaction Experience**



Delancey Street Partners served as exclusive financial advisor to Linx Technologies ("Linx" or the "Company"), a portfolio company of Argosy Private Equity ("Argosy"), on its sale to TE Connectivity (NYSE: TEL) ("TE"). Delancey Street Partners managed a competitive process and negotiated the terms of the transaction.

### **About Linx Technologies**

Founded in 1997, Linx Technologies is a leading provider of wireless technology solutions to device manufacturers in the commercial, government, consumer, agricultural, and industrial segments. Linx is an antenna design and manufacturing company focused on serving OEMs that require wireless functionality for their products.

The Company's antennas are engineered for industrial, scientific and medical ("ISM"), Wi-Fi, cellular, and global navigation satellite system ("GNSS") bands for numerous IoT applications. Linx complements its antenna product lines with RF connectors, RF modules, remote controls, and sub-GHz data modules.

#### **About TE Connectivity**

TE Connectivity is a global industrial technology leader creating a safer, sustainable, productive, and connected future. TE's broad range of connectivity and sensor solutions, proven in the harshest environments, enable advancements in transportation, industrial applications, medical technology, energy, data communications, and the home. With more than 85,000 employees, including over 8,000 engineers, working alongside customers in approximately 140 countries, TE ensures that every connection counts.



"Combining TE's wireless connectivity portfolio breadth, manufacturing scale and distribution with Linx Technologies' market-leading RF portfolio and deep understanding of IoT customers' behaviors, we can significantly enhance the value we bring to our customers. This acquisition is a critical milestone in our strategic vision to expand in the high-growth Edge Access and IoT markets."

Sudhakar Sabada, Senior Vice President and General Manager of TE's Data and Devices business unit



Delancey Street Partners served as exclusive financial advisor to PEI-Genesis, Inc. ("PEI-Genesis" or the "Company") in the acquisition of Testco, Inc. ("Testco"). Delancey Street conducted a targeted search and qualification process based on Company strategic priorities, sourced Testco as an acquisition opportunity, provided buy-side M&A advisory services to PEI-Genesis, negotiated the terms and assisted with the closing of the transaction.

# About PEI-Genesis

PEI-Genesis is one of the world's fastest assemblers of interconnect solutions. From the largest connector component inventory in the world, the Company develops engineered solutions that support the military, industrial, medical, aerospace, transportation, and energy sectors worldwide. Headquartered in Philadelphia, PA, PEI-Genesis has production facilities in South Bend, IN; Southampton, UK; and Zhuhai, China as well as sales offices throughout the Americas, Europe, and Asia.

PEI-Genesis will operate Testco as a separate company, continuing to work with Testco as an authorized supplier partner. Testco's President and management team will remain in place to help grow and integrate its operations into PEI-Genesis. The Company will continue to support the existing Testco distributors and rep network.

#### **About Testco**

Headquartered in Silicon Valley, Testco supplies passive, electromechanical, and interconnect components with superior technical expertise and broad product knowledge. Serving technology companies worldwide for over 40 years, Testco offers creative supply chain solutions to meet customer requirements. With flexible blanket orders, bonded inventory, consolidated shipments, and annual pricing programs, Testco can solve the most difficult supply challenges.



"We consider ourselves to be the industry's Trusted Advisors focused on solving our customers' interconnect problems. This acquisition enhances that capability, further encouraging our customers to partner with us for a broader range of products and services."

- Steven Fisher, President & CEO of PEI-Genesis



# **Delancey Street Partners: Transaction Experience**

# **Business Services & Technology**













**Healthcare** 





















# **Industrial & Industrial Technology**















Infrastructure





















# **Delancey Street Partners**

Delancey Street Partners is an independent, industry-focused investment bank. We serve CEOs, Entrepreneurs, Shareholders, and Boards of Directors of high growth and middle market private and public companies. Our services include strategic advisory, capital raising, and independent board advice. We advise on sell-side and buy-side M&A, growth capital financings, and recapitalizations. Our focus sectors include Business Services & Technology, Healthcare, Industrial & Industrial Technology, and Infrastructure.

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# DELANCEY STREET

# CONNECTIVITY SECTOR REVIEW

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