

MPG | MADISON PARK GROUP

Insights

Market Update
Engineering Software

March 2023

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Engineering Software Market Update

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I.



Industry Trends


Trusted Advisor to the Industrial Software Market

History of Successful Transactions Supported by Broad Coverage Model


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Growing Momentum with Tier-1 Clients

PE-Backed



Strategic Sale



Founding Team



Growth Investment




PE-Backed




Financial Sale




Founding Team




Strategic Sale



PE-Backed



Strategic Sale



Founding Team



Strategic Sale



Continuous Dialogue with Market Leaders & Key Executives within the Industrial Tech Ecosystem

Supply Chain



Manufacturing




Construct Tech



EHSQ



Engineering



Market Drivers

Increasing Product Complexity Continues to Demand Improved Collaboration Capabilities and Specialized Engineering Knowledge

Select Identified Underlying Trends

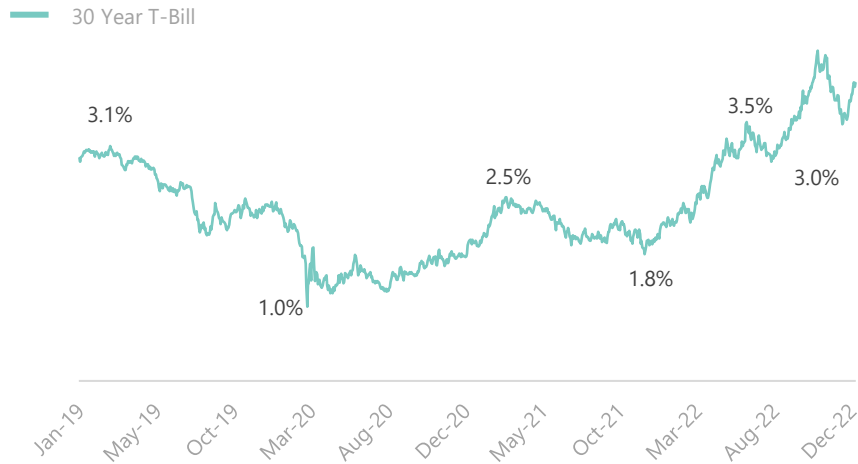
- 1 Industrial equipment manufacturers are folding EHSQ guidelines into their designs and looking for products to help them address these needs. This introduces opportunities, as well as challenges for engineering software providers. The same is true as manufacturers look for ways to aggregate and analyze carbon roll-up and sustainability as part of their designs.
- 2 Private equity firms across the spectrum are expanding their thesis and interest in the engineering software space. Many are looking for a base platform on which they can provide a broad product offering using acquisitions.
- 3 There continues to be significant interest and discussion around the concept of digital twin and the real-life applications of this technology. However, many components are still required to make digital twins truly effective for predictive maintenance and repair. This is an interesting opportunity for those in the market.
- 4 The management of downstream supplier quality is at the forefront of the initiatives of many software providers, and most are addressing this through acquisition.
- 5 Artificial Intelligence and Machine Learning offerings are beginning to be a component of product offerings, however, they have yet to significantly impact the offerings or revenue of companies in the space.
- 6 The need for products for complex battery simulation, thermal simulation of batteries, and the unique requirements for protective structure for batteries is opening up a new set of challenges and opportunities in engineering software industry. Many solutions to these problems are coming from smaller players within the ecosystem.
- 7 All the providers of traditional design, PLM, and CAE tools are pursuing acquisition strategies to expand out of their traditional (e.g., structural, CFD, etc.) markets. Broad themes of expansion include electronics, supply chain management, and general data analytics.

Deal Activity Remains Strong

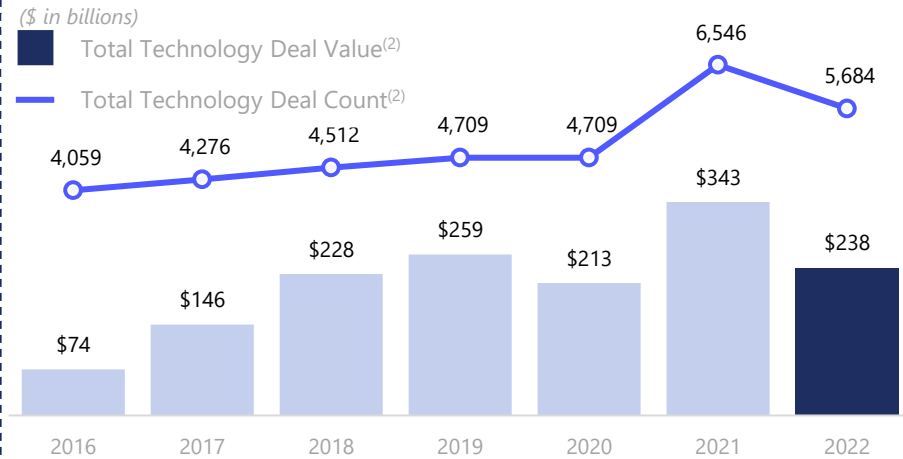
Strategics and Investors Still Continue to Pursue Opportunities in the Space

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Due to the continuous interest rate increases throughout the year...

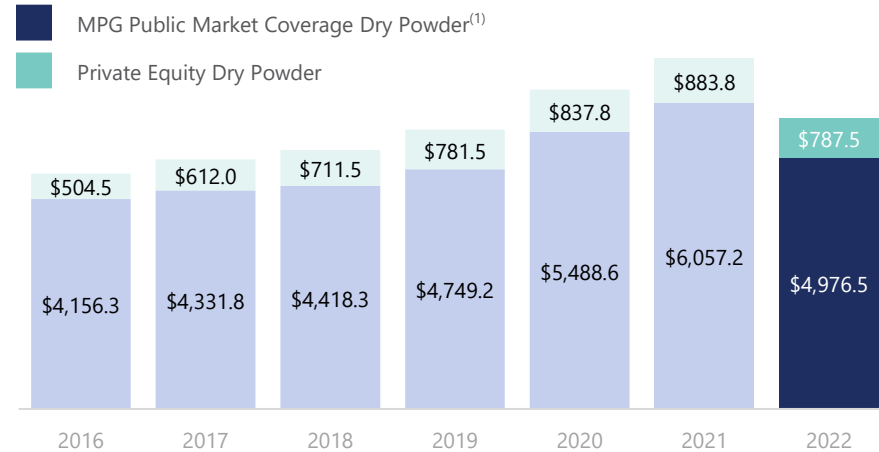


...2022 transaction activity returns closer to pre-pandemic levels...



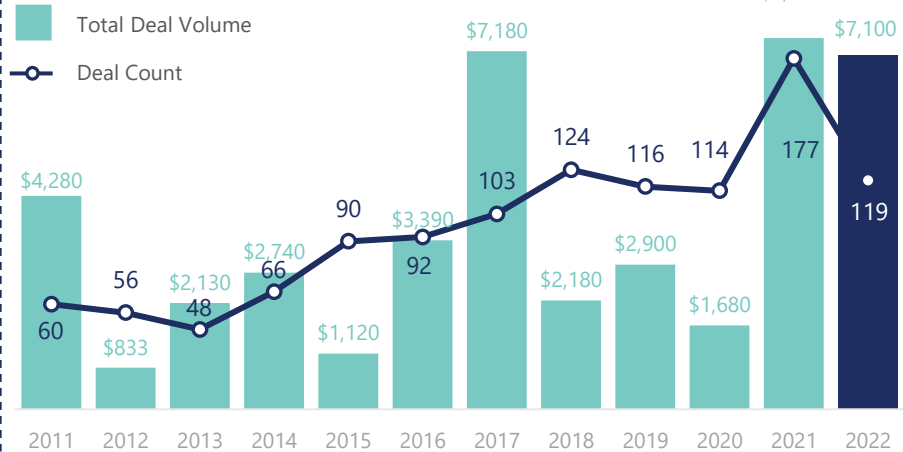
...PE's and strategics still remain active with dry powder near historic levels...

As of December 31 (\$ in billions)



...so engineering software transaction activity should continue upward

(\$ in millions)



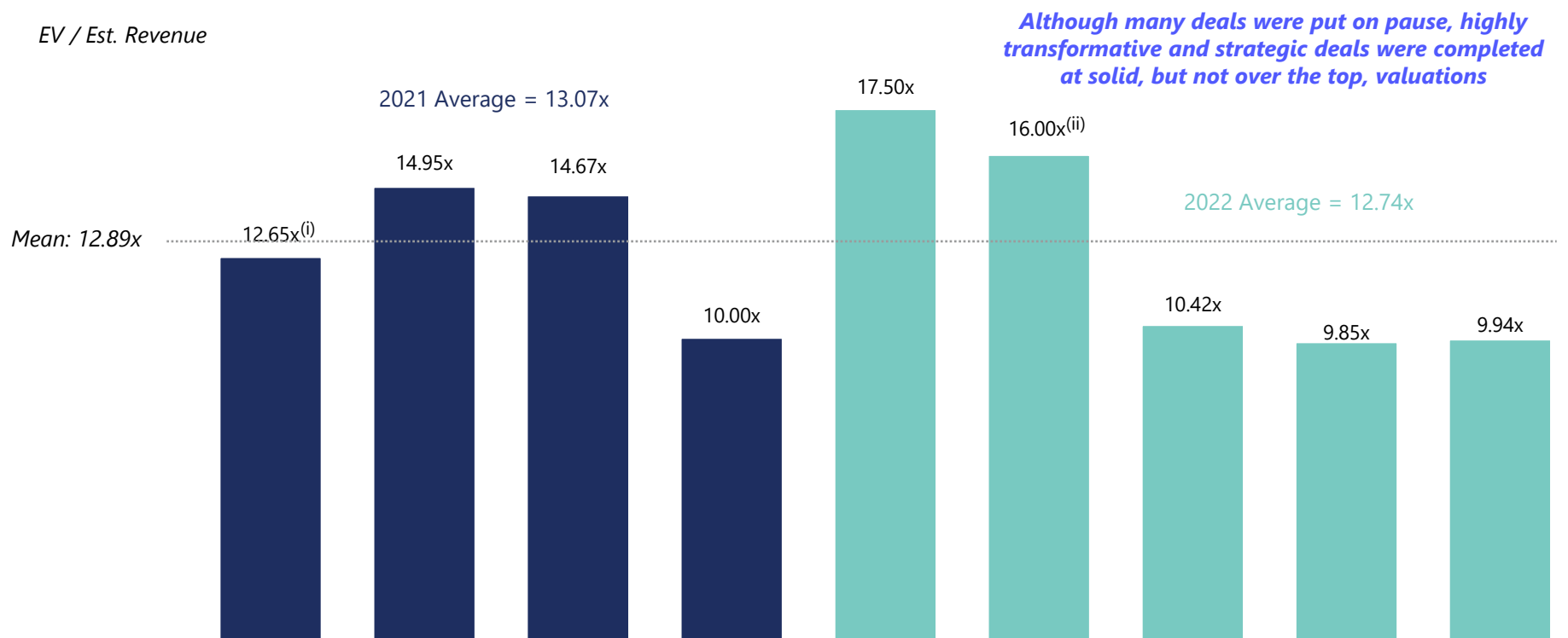
Aggressive Offensive Acquisitions

M&A Slowed in the Latter Part of 2022, However Game-Changing Acquisitions Continue to Close, Regardless of Market Uncertainty

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Representative Engineering and Manufacturing Software Acquisitions Since June 2021

EV / Est. Revenue



| Target | SEEQUENT | infor EAM | PLEX | Supplyframe | POWER LINE SYSTEMS INC. | etq | Brightly | SERVICE MAX | TRANSPOREON |
|------------|----------|-----------|---------------------|-------------|-------------------------|---------|----------|-------------|-------------|
| Buyer | Bentley | HEXAGON | Rockwell Automation | SIEMENS | Bentley | HEXAGON | SIEMENS | ptc | Trimble |
| Date | Jun-21 | Jul-21 | Aug-21 | Aug-21 | Jan-22 | Feb-22 | Aug-22 | Dec-22 | Dec-22 |
| Size (\$M) | \$1,050 | \$2,750 | \$2,220 | \$700 | \$700 | \$1,200 | \$1,875 | \$1,460 | \$1,980 |

Source: Pitchbook, Capital IQ, corporate websites, press releases, MPG proprietary knowledge

(i) Estimates based on "10% of Bentley Systems' key financial metrics (ARR, annual revenue, EBITDA)" in transaction PR derived as 10% of Bentley's LTM Mar-21 revenue of \$828.9m and EBITDA of \$245.9m

(ii) Estimated \$40m total revenue assumes "\$30m of subscription revenue" reported in transaction PR represents 75% of total revenue

Engineering & Manufacturing M&A in 2022

Tracking Large and Under-the-Radar Strategic Acquisitions with Market-Moving Impacts

















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| Date | Acquirer | Target | Relevant Industrial Technology Transactions |
|----------------|---|---|---|
| December 2022 |  |  | Schneider Electric acquired remaining share of Aveva <i>Engineering design, information management, and software solutions</i> |
| December 2022 |  |  | Faro acquired SiteScope <i>LiDAR 3D scanning software solutions for the AEC and O&M markets</i> |
| December 2022 |  |  | Lectra acquired TextileGenesis <i>Traceability platform for textile ecosystem</i> |
| October 2022 |  |  | Stratasys acquired Riven <i>3D scanning and proprietary algorithms providing manufacturing insights</i> |
| October 2022 |  |  | Aspentech acquired inmation <i>Industrial information management system solutions</i> |
| September 2022 |  |  | CADMATIC acquired CLA <i>Construction management and engineering data management software</i> |
| September 2022 |  |  | Tech Soft 3D acquires Redway3D <i>Photo-realistic visualization software</i> |
| July 2022 |  |  | Ensono acquired AndPlus <i>Data engineering & digital transformation services</i> |
| July 2022 |  |  | Signia Aerospace acquired Mezzo Technologies <i>Manufacturer of microtube heat exchangers</i> |
| July 2022 |  |  | Matterport acquired VHT, Inc <i>Convenient photography and image management services</i> |
| June 2022 |  |  | NOTE acquired Dynamic Precision Solutions <i>R&D Development of software & hardware designs</i> |
| June 2022 |  |  | NAFEMS acquired ASSESS <i>Software for Engineering Simulation</i> |
| June 2022 |  |  | Altair acquired Concept Engineering <i>Electronic system visualization software</i> |
| June 2022 |  |  | Altair acquired Gen3D <i>Software and consulting systems</i> |

Engineering & Manufacturing M&A in 2022

Tracking Large and Under-the-Radar Strategic Acquisitions with Market-Moving Impacts

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| Date | Acquirer | Target | Relevant Industrial Technology Transactions |
|---------------|---|---|--|
| June 2022 |  ZEBRA |  MATROX IMAGING | Zebra Technologies acquired Matrox Imaging Division <i>Software solutions for OEMs and integrators in imaging</i> |
| May 2022 |  Schneider Electric |  xcelgo <small>Virtual Automation Technologies</small> | Schneider Electric acquired Xcelgo <i>3D Modeling software</i> |
| May 2022 |  CT |  infodream | CT Engineering Group acquired Infodream <i>Manufacturing execution system (MES) software</i> |
| May 2022 |  ptc |  INTLAND SOFTWARE | PTC acquired Intland Software <i>Application lifecycle management platform</i> |
| April 2022 |  software AG |  StreamSets | Software AG acquired StreamSets <i>Data ops & integration platform</i> |
| March 2022 |  Inceptra |  NobleTek | Inceptra acquired NobleTek <i>Aerospace engineering services</i> |
| February 2022 |  AUTODESK |  prodsmart | Autodesk acquired Prodsmart <i>Real-time tracking application</i> |
| January 2022 |  VDA |  telkonet | VDA Group acquired Telkonet <i>IIoT platform for intelligent automation solutions</i> |

Reference Investment Transactions

Investor Interest in Engineering Software Spans Early-Stage Growth to Late-Stage Buyout

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(\$ in millions)

| Target | Lead Investor | Date | Comments & Observations | Deal Type | Amount Raised ⁽ⁱ⁾ | Pre-Money Valuation ⁽ⁱ⁾ | Amount Raised To-Date ⁽ⁱ⁾ |
|---|---|--------|---|-------------|------------------------------|------------------------------------|--------------------------------------|
|  ELECTRA VEHICLES |  united ventures | Feb-23 | <ul style="list-style-type: none"> Electra will use the funds to support scaling operations and to deploy software technology to solve several problems in the electrification industry | Later Stage | \$21.3 | - | \$25.8 |
|  snaptrude |  Accel | Jan-23 | <ul style="list-style-type: none"> Snaptrude is attempting to disrupt Autodesk in the building design space, giving customers modern and broader sets of features at a more affordable cost | Seed | \$6.6 | - | - |
|  XSCAPE PHOTONICS |  ALTAIR | Dec-22 | <ul style="list-style-type: none"> The investment allows Altair to collaborate with the innovators at Xscape and make further advancements in high-performance computing (HPC) hardware | Seed | \$10.0 | \$20.0 | \$5.0 |
|  SAMP |  Turenne GROUPE | Oct-22 | <ul style="list-style-type: none"> Samp plans to use the funds it just raised to expand outside of France | Early VC | \$3.9 | - | - |
|  CloudNC |  AUTODESK | Jun-22 | <ul style="list-style-type: none"> The additional capital raised will be used to further develop CloudNC's AI manufacturing technology | Series B | \$66.7 | \$92.3 | \$108.9 |
|  AKSELOS |  Shell Ventures | May-22 | <ul style="list-style-type: none"> With this investment Akselos acquires an investor base to support their ongoing global growth, enabling it to scale both its team and solutions | Series A | \$17.1 | \$46.1 | \$27.8 |
|  MORAI |  Atinum INVESTMENT | Feb-22 | <ul style="list-style-type: none"> MORAI will use new capital to focus on hiring quality talent and enhance technological edge for global competitiveness | Series C | \$20.9 | - | \$22.6 |
|  GAMMA TECHNOLOGIES |  INSIGHT PARTNERS | Feb-22 | <ul style="list-style-type: none"> Insight joins existing investors TA Associates and Cove Hill, who made a significant new investment in the business | Minority | - | - | - |
|  QbD Vision |  S3 VENTURES | Feb-22 | <ul style="list-style-type: none"> The funding round will accelerate QbD Vision's mission to shape the digital future of life science manufacturing and drive expansion of its commercial market | Series A | \$15.0 | - | - |

Source: Pitchbook, Capital IQ, corporate websites, press releases, MPG proprietary knowledge

(i) \$ in millions

Electric Vehicles are Changing Engineering Design

New Physical Assets and Technologies Present Challenges for Engineers and Engineering Software Providers

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Simulation software is being utilized to solve the complex problems which arise from designing and deploying electric vehicles at scale



Battery Simulation

- ✓ EVs rely on complex battery systems that require sophisticated modeling which can simulate performance under different stresses including loads, temperature, battery chemistries, and mileage
- ✓ The batteries which power EVs are susceptible temperature variations, and can generate significant amounts of heat, ultimately affecting the vehicles range and performance and requiring new types of CFD analysis
- ✓ Simulation software aims to understand how to better insulate batteries from outdoor temperatures and create adequate heatsinks which dissipate heat from vulnerable pieces of electronics and protect the battery



Crash Simulation

- ✓ Due to the structural differences between EVs and traditional vehicles, engineers are actively looking for, and creating, better methods of ensuring the safety of passengers
- ✓ EVs primary difference is the large battery and electric engine which react differently during a collision than a combustible engine
- ✓ These challenges create unique problems for FEA and simulation software solutions



Charging Infrastructure

- ✓ With increased public and private demand for EVs, countries and private organizations are investing in charging infrastructure
- ✓ In order to manage the shift away from traditional combustible engines, engineers are modeling the power flow between EVs and charging stations, accounting for power ratings, vehicles' battery levels, and charging rates
- ✓ By integrating simulation software with charging infrastructure, engineers can design EVs that are optimized for fast, efficient, and safe charging. This will help accelerate the adoption of electric vehicles globally



Environmental Impact

- ✓ EVs are generally considered more environmentally friendly than alternatives because they produce fewer tailpipe emissions. However, they still generate emissions during the manufacturing process, the disposal of the battery, and through the electricity use to charge them
- ✓ Simulation software is being utilized to evaluate the overall environmental of a vehicle, and identifying opportunities to improve sustainability while minimizing its carbon footprint



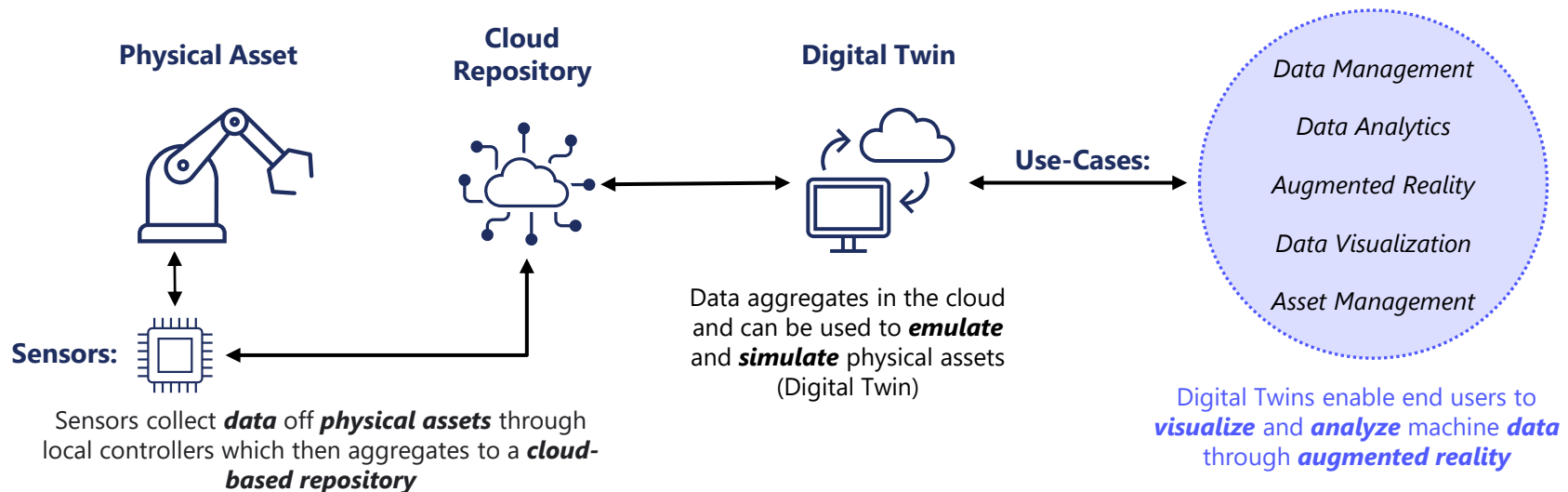
Cost Simulation

- ✓ EVs require several rare earth commodities which are sensitive to economic and geopolitical factors that ultimately affect the bottom-line during production
- ✓ Cost simulators are being utilized to obtain a more granular and accurate understanding of the quantity of materials necessary during manufacturing, optimizing the production process and the overall cost to consumer

Digital Twin Ecosystem

Digital Twins Enhance Workplace Efficiencies Through Unparalleled Data Visibility, But Rely Heavily On Domain Expertise And Planning

Visualizing the Digital Twin Integration



Key Features:

Real-time monitoring: Digital twins provide real-time data regarding a physical system which allows for continuous monitoring and analysis of a system's performance. This can help identify issues or inefficiencies that would otherwise go unnoticed

Predictive Maintenance: By analyzing data collected through digital twins, the user can identify underlying issues and resolve them before they interrupt a process, saving costly machine downtime

Simulation & Optimization: Digital twins are used to enumerate through different potential scenarios and optimize the performance of a system, leading to decreased costs and improved efficiency

Design & Testing: Digital twins are used to design and test new systems and products within a virtual environment, ultimately reducing the need for physical prototypes and accelerating the design and engineering phases of production

Digital Twin and Predictive Maintenance Ecosystem

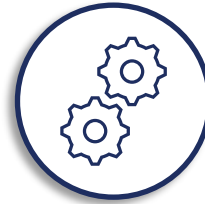
Successful Implementation of Predictive Maintenance Using Digital Twins Requires a Broad Ecosystem of Integrated Technologies

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Transportation & Logistics Management

- ✓ To optimize enterprise integration and usage of digital twins and predictive maintenance capabilities, a strong transportation and logistics management system tracking physical assets is required
- ✓ A strong logistics management system enables companies to ensure necessary parts are on site when a digital twin alerts of potential failures or production flaws
- ✓ The predictive maintenance capabilities of a digital twin are not effective without this essential component of the value chain



Inventory Management

- ✓ Once necessary parts have been transported to the engineering and manufacturing floor on-site, the company must have the capability to keep accurate records of quantity, location, and price
- ✓ The inventory management system plays a pivotal role with digital twins and their predictive maintenance capabilities. When a machine is on the verge of failure, the right part needs to be in stock and locatable
- ✓ The digital twin's alerts and capabilities provide little value without an inventory management system which ensures parts with a high probability of failure are readily available



Employee Management & Training

- ✓ While transporting and storing spare parts is necessary to complementing and completing a digital twin's capabilities, having the right people in place at the right time is just as critical
- ✓ Organizations must ensure that when a system fails, an employee with the right training and expertise is on-sight to address these failure
- ✓ Without the proper physical assets and sufficiently trained employees, digital twins serve little purpose for an organization's efficiency because predictive maintenance capabilities require the coordination of multiple complementary systems

II.



Featured Companies

Altair

Business Overview

(\$ in millions)

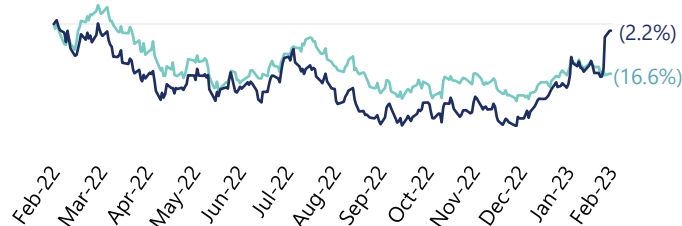
| | |
|------------------------------------|---|
| Headquarters: | Troy, MI |
| LinkedIn Employees (1-Yr. Growth): | 3,465 (▲9%) |
| Website: | altair.com |
| Ownership Status: | Public (NasdaqGS: ALTR) |
| Acquisitions: | 38 |
| Enterprise Value (EV): | \$4,901.8 |
| TTM Revenue: | \$524.8 |
| LTM EBITDA: | \$46.2 |
| EV / TTM Revenue: | 9.34x |
| EV / TTM EBITDA: | 106.10x |

Description:

Provider of software and cloud solutions in the areas of product development, high performance computing (HPC), and data analytics

TTM January 2023 Market Pricing

— NASDAQ — ALTR



« Acquisition Provides Altair with General Data Set Analytics and Design Technology Expansion

- In [September 2022](#), Altair announced the completion of the acquisition of RapidMiner, a low-code platform for data analytics and machine learning
 - This acquisition expands Altair's offering into general analytics of large, complex data sets
 - Although we expect Altair to initially point this offering to its traditional analysis markets, we expect it to be offered as a general analytics tool for a variety of domains
- In [June 2022](#), Altair announced the acquisition of Concept Engineering, a provider of software for visualizing electronic systems for the design, production, and maintenance of intricate electronic and electrical systems
 - With the acquisition of Concept Engineering, Altair will offer customers visual representations of complex system models and debug capabilities for electronic systems
- In [June 2022](#), Altair acquired Gen3D, expanding design technology for additive manufacturing
 - Gen3D's technology provides a means for creating geometry using implicit modeling methods which traditional boundary representation (BREP) solid methods cannot achieve
- In [March 2022](#), Altair expanded its electronic system design technology with the acquisition of Powersim
 - PSIM, which is Powersim's main product provides tools for electronics and motor drive simulation and design software, delivers unrivaled simulation speed and precise system-level results
- In [February 2022](#), Altair acquired CassiniPLM to advance development of digital thread technology
 - The comprehensive view of digital thread activities in the simulation portion of the PLM value chain is strengthened by incorporating Cassini's solution via the Altair One cloud platform
 - The acquisition also provides a broader foundation for Altair's expansion in Simulation Lifecycle Management

« Altair Eyes HPC Advancements with Xscape Photonics Investment

- In [December 2022](#), Altair led a seed funding round for Xscape Photonics with a \$10M investment
 - Photonic chips made by Xscape Photonics feature patent-pending technology for ultrahigh-bandwidth connections in data centers and high-performance computing (HPC) systems

Altium

Business Overview

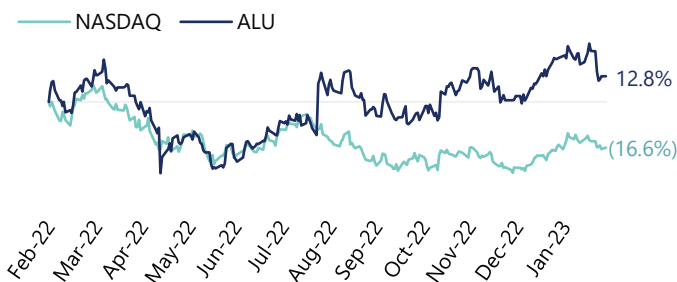
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | La Jolla, CA |
| LinkedIn Employees (1-Yr. Growth): | 891 (▲8%) |
| Website: | altium.com |
| Ownership Status: | Public (ASX:ALU) |
| Total Acquisitions: | 12 |
| Enterprise Value (EV): | \$3,522.2 |
| TTM Revenue: | \$220.5 |
| TTM EBITDA: | \$83.56 |
| EV / TTM Revenue: | 15.97x |
| EV / TTM EBITDA: | 42.2x |

Description:

Printed circuit board (PCB) design software products and electronic component data management

TTM January 2023 Market Pricing



« Altium Focused on Executing Next Generation of Electronic Designers

- In [March 2022](#), Altium launched Electronic Design Program for university students
 - With this new program, Altium intends to prepare students to advance industry-level printed circuit board design and manufacturing careers
- In [January 2022](#), Nexar, a business unit of Altium, announced a new partnership with SiliconExpert
 - The partnership aims to address component lifecycle issues faced by PCB designers by integrating part data from SiliconExpert into the Altium PCB design tool workflows
- In [January 2022](#), Altium and MacroFab partnered to launch integrated PCB “Design WITH Manufacturing” application
 - Altitude, which is available on MacroFab's fully digital, elastic manufacturing platform and is connected directly to the Altium 365 cloud platform, enables customers to get an instant quote and place an order to produce their PCB assembly without ever leaving their design environment

« Altium’s Business Unit, Nexar, Launches New Product in 2022

- In [July 2022](#), Nexar, a business unit of Altium, announced the launch of the Octopart CAD Model Marketplace
 - Nexar is a free database made up of a repository of computer aided design (CAD) models for electronic components
 - Octopart, part of the Nexar ecosystem, is an electronic component search engine powered by part data and intelligence from the Nexar API
 - Octopart’s new CAD Model Marketplace streamlines PCB design and part selection workflows to create a single unified user experience that aggregates CAD models

Ansys

Business Overview

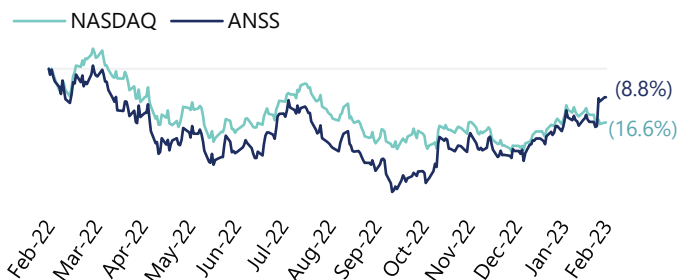
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Canonsburg, PA |
| LinkedIn Employees (1-Yr. Growth): | 6,628 (▲9%) |
| Website: | ansys.com |
| Ownership Status: | Public (NasdaqGS: ANSS) |
| Acquisitions Since 2010: | 39 |
| Enterprise Value (EV): | \$24,609.2 |
| TTM Revenue: | \$2,027.1 |
| TTM EBITDA: | \$835.3 |
| EV / TTM Revenue: | 12.25x |
| EV / TTM EBITDA: | 28.7x |

Description:

Engineering simulation software solutions for product design and development across aerospace & defense, automotive, electronics, semiconductors, energy, and more

TTM January 2023 Market Pricing



« Ansys Continues to Build Out Simulation Capabilities

- In [January 2023](#), Ansys acquired particle dynamics simulation software Rocky
 - RockyDEM provides tools to aid in resolving design issues involving discrete solids and intricate multi-physics interactions
 - Rocky DEM's representation of application-specific particle shapes is focused on the engineering of bulk materials handling equipment
- In [December 2022](#), Ansys and automotive simulation company DYNAmore signed a definitive acquisition agreement
 - DYNAmore is a longtime channel and software development partner of Livermore Software Technology Corporation (LSTC), which Ansys acquired in 2019
 - According to ANSYS, the company's software and services are used by more than 150 universities and has nearly 800 industrial customers
- In [May 2022](#), Ansys acquired Motor Design Limited, a provider of design and simulation tools for motors and electric machines
 - The acquisition of Motor Design Limited (MDL) builds on the existing partnership and collaboration between the two companies
 - Ansys and Motor Design are quite familiar with one another as they were previously distribution partners for a number of years prior to the acquisition
- In [April 2022](#), Ansys signed a definitive agreement to acquire OnScale, a provider of cloud simulation technology
 - OnScale will help provide a cloud-native, web-based user interface (UI) for device-independent access to Ansys' extensive array of simulation technologies once it is incorporated into the company's existing cloud portfolio

« CFO of Teradata Joins Ansys Board of Directors

- In [December 2022](#), Ansys appointed Claire Bramley to the board of directors
 - Claire is the current Chief Financial Officer at Teradata Corporation, a data platform for enterprise analytics company

Aras

Business Overview

(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Andover, MA |
| LinkedIn Employees (1-Yr. Growth): | 544 (▲ 13%) |
| Website: | aras.com |
| Ownership Status: | PE-backed (GI Partners) |
| Total Acquisitions: | 4 |
| Enterprise Value (EV): | n/a |
| TTM Revenue: | n/a |
| TTM EBITDA: | n/a |
| EV / TTM Revenue: | n/a |
| EV / TTM EBITDA: | n/a |

Description:

Open product lifecycle management platform that connects users in all disciplines and functions to critical product data and processes across the lifecycle and throughout the extended supply chain

Select Funding / Transaction History

| Date | Lead Investor | Amount |
|--------|---|---------------------------|
| Apr-21 | GI PARTNERS | n/a (buyout) |
| Nov-18 |  | \$70.0 million (Series D) |
| Oct-18 |  | \$1.5 million (Series C?) |
| Sep-17 | SILVERLAKE | \$39.5 million (Series C) |
| Nov-17 |  | \$2.79 million (Series B) |

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 1/31/2023

« Merger Focused on Industry-Specific Applications for Medical Technology

- In [January 2022](#), Aras announced the merger with Minerva for PLM Functionality focused on the Medical Devices and High-Tech Electronics industries
 - The merger provides vertical industry knowledge in the production of automotive, aerospace, defense, and industrial equipment, and will provide Aras a direct, local presence in the Netherlands and the Nordics
 - Minerva's products were already built on the Aras platform

« AVEVA Partnership Leads to Innovative Cloud-Based Asset Lifecycle Management Solutions

- In [September 2022](#), Aras announced a Strategic Licensing Partnership with AVEVA
 - This partnership will integrate Aras's portfolio of applications with AVEVA Unified Engineering and AVEVA Asset Information Management
 - The partnership brings Aras' PLM product closer to meeting the needs of Asset Lifecycle Management

« Digital Twin Deployment

- In [June 2022](#), Bureau Veritas and Aras Deploy Digital Twin Pilots
 - The maritime industry will benefit from this collaboration, which will provide Aras customers with a more advanced and enhanced digital experience for all services

Autodesk

Business Overview

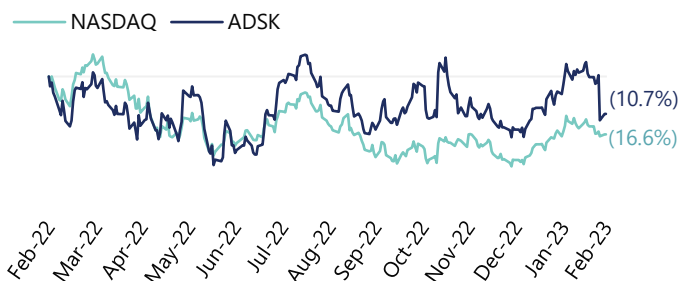
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | San Rafael, CA |
| LinkedIn Employees (1-Yr. Growth): | 13,965 (▲3%) |
| Website: | autodesk.com |
| Ownership Status: | Public (NasdaqGS: ADSK) |
| Total Acquisitions: | 110 |
| Enterprise Value (EV): | \$50,473.5 |
| TTM Revenue: | \$4,898.4 |
| TTM EBITDA: | \$1,784.9 |
| EV / TTM Revenue: | 10.30x |
| EV / TTM EBITDA: | 28.1x |

Description:

Computer-aided design software for architecture, engineering, construction, manufacturing, and media

TTM January 2023 Market Pricing



« Autodesk Enters New Era of AI-Powered Design Tools

- In [October 2022](#), Autodesk AI Lab continued to expand their efforts within AI-powered design tools
 - Formed in 2018 as a part of Autodesk Research, the Autodesk AI Lab conducts fundamental and applied research in AI and machine learning with an aim to unlock a new era of AI-powered design tools for Autodesk customers
 - In [September 2022](#), Autodesk announced advancements in cloud-based solutions that extend the digital thread and drive sustainability
 - With Autodesk Tandem, iOffice + SpacelQ, and Innovyze, Autodesk is expanding its support for the building lifecycle downstream into the owner-operators' market
 - In [February 2022](#), Autodesk acquired Prodsmart, a real-time system of record for data collection, management, and analysis
 - Prodsmart provides production managers with information from order to shipping
 - This address a critical need of manufacturers by providing them insight into and management of their supply chain, which affects overall manufacturing efficiency
- In [February 2022](#), Autodesk also acquired the IP assets of CIMCO, best known for its industry-leading machine communication software and G-Code Visualization
- This technology provides Autodesk the ability to enhance machinists' connection to the larger product development cycle

« Enhanced Requirements Capabilities Through Partnerships

- In [September 2022](#), Autodesk announced Fusion 360 extensions, partnerships, broader online availability announced at AU 2022
 - Extending Fusion 360's capabilities will meet requirements throughout the entire product design and manufacturing process

« New Addition to Board of Directors

- In [August 2022](#), Autodesk appointed Rami Rahim to Board of Directors
 - Rahim is the Chief Executive Officer at Juniper Networks, a market leader in secure, AI-driven networks that provides solutions and insight into automation, and security

Bentley Systems

Business Overview

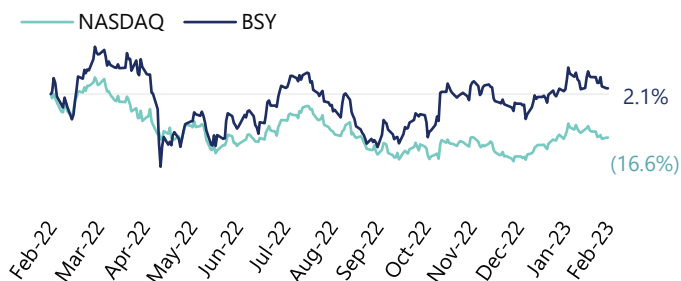
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Exton, PA |
| LinkedIn Employees (1-Yr. Growth): | 4,674 (▲4%) |
| Website: | bentley.com |
| Ownership Status: | Public (NasdaqGS: BSY) |
| Total Acquisitions: | 44 |
| Enterprise Value (EV): | \$13,942.9 |
| TTM Revenue: | \$1,079.9 |
| TTM EBITDA: | \$348.6 |
| EV / TTM Revenue: | 12.87x |
| EV / TTM EBITDA: | 39.6x |

Description:

Software solutions for engineers, architects, geospatial professionals, constructors and owner-operators for the design, construction, and operations of infrastructure

TTM January 2023 Market Pricing



« Bentley Eyes Expansion into IoT Space

- In [February 2023](#), Bentley acquired EasyPower, an electrical engineering design and analysis software maker
 - This broadens Bentley's comprehensiveness in infrastructure engineering by expanding integrated and iterative power system design and analysis for all kinds of infrastructure digital twins
- In [December 2022](#), Seequent, a Bentley company, acquired DRIVER, an innovative solution for 3D analysis of geochemical data for insights and anomaly detection from Minerva Intelligence
 - Seequent's acquisition of DRIVER adds to the portfolio's growing technological capability by utilizing data science to provide deeper data insights, workflow optimization, and improved project outputs
- In [August 2022](#), Bentley Acceleration Initiative announced the acquisition of eagle.io, a cloud-based environmental Industrial Internet of Things (IIoT) platform
 - With this acquisition, Bentley will be able to enhance its infrastructure IIoT offerings and expand its presence in Australia, New Zealand, and the Asia-Pacific
- In [April 2022](#), Bentley Systems announced the acquisition of ADINA, developer of finite element analysis software
 - The acquisition will extend nonlinear simulation throughout infrastructure engineering
 - With the ability to simulate the entire behavior of structures, users of infrastructure digital twins will have a more complete analysis than designs that are simply analyzed to meet prescribed code standards

« 2022 Product Focus on Infrastructure Lifecycle and Value Chain

- In [November 2022](#), Bentley Systems launched iTwin Experience, iTwin Capture, and iTwin IoT to Extend iTwin platform
 - The iTwin platform is a platform of APIs and libraries for digital twin applications
 - The platform handles data integration, visualization, change tracking, security, and analytics of digital twins for infrastructure assets

Cadence Design Systems

Business Overview

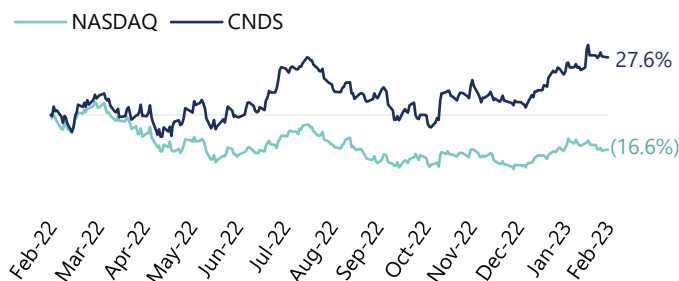
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | San Jose, CA |
| LinkedIn Employees (1-Yr. Growth): | 8,619 (▲2%) |
| Website: | cadence.com |
| Ownership Status: | Public (NasdaqGS: CDNS) |
| Total Acquisitions: | 49 |
| Enterprise Value (EV): | \$51,667.8 |
| LTM Revenue: | \$3,434.9 |
| LTM EBITDA: | \$1,453.7 |
| EV / LTM Revenue: | 15.05x |
| EV / LTM EBITDA: | 35.5x |

Description:

Cadence is a full-service contract manufacturing partner, providing initial product design and development through complete manufacturing. The Company also provides electronic design automation (EDA) tools, IP portfolio for chip designs, and comprehensive suite of verification tools and hardware to verify the chip, package, board, and design

TTM January 2023 Market Pricing



« Acquisitions Provide Cadence with Medical Device and Commercial Components

- In [January 2023](#), Cadence announced the acquisition of Utitec, Inc. a manufacturer specializing in miniature, deep drawn medical device and commercial components
 - This acquisition positions Cadence to enter the medical device contract manufacturing market
- In [November 2022](#), Cadence closed its acquisition of Antrim Design Systems, maker of analog design tools
 - Thanks to the Antrim acquisition, Cadence's Analog Design Environment now supports behavioral characterization, modeling, and rapid analog prototyping
- In [July 2022](#), Cadence acquired computational molecular design company OpenEye Scientific for \$500M
 - The deal is expected to add approximately \$40M revenue in fiscal 2023 and will close in Q3 2022
 - This acquisition is another data point of Cadence's expansion out of its traditional markets
- In [July 2022](#), Cadence completed the acquisition of Future Facilities, a company focused on CFD and operational management of data centers for \$100M
 - The Cadence Intelligent System Design strategy supports its multi-physics system analysis and computational fluid dynamics (CFD) portfolios are expanded by the addition of Future Facilities' technologies and expertise

« Major Partnership with McLaren Formula 1 Team

- In [May 2022](#), Cadence was named an Official Technology Partner of the McLaren Formula 1 Team
 - McLaren plans to leverage Cadence's simulation technology in the area of CFD

Dassault Systèmes

Business Overview

(\$ in millions)

| | |
|------------------------------------|---------------------------------------|
| Headquarters: | Vélizy-Villacoublay, France |
| LinkedIn Employees (1-Yr. Growth): | 23,146 (▲9%) |
| Website: | 3ds.com |
| Ownership Status: | Public (PAR: DSY) |
| Total Acquisitions: | 54 |
| Enterprise Value (EV): | \$49,106.7 |
| TTM Revenue: | \$5,895.7 |
| TTM EBITDA: | \$2,232.8 |
| EV / TTM Revenue: | 8.33x |
| EV / TTM EBITDA: | 21.9x |

Description:

3D modeling applications, simulation applications creating virtual twins of products or production systems, social and collaborative applications, and information intelligence applications

TTM January 2023 Market Pricing

— NASDAQ — DSY



« Bringing Augmented Reality and Field Control Technology to its Manufacturing Customers

- In [September 2022](#), Dassault Systèmes acquired Diota, developer of assembly assistance and quality control software solutions for manufacturing and operations
 - The acquisition will enhance Dassault Systèmes' 3DEXPERIENCE platform with shop floor-based actionable virtual twin experiences, enabling other industries, including aerospace and defense, industrial equipment, transportation and mobility, and others, to improve the efficiency of intricate industrial processes
 - Dassault Systèmes will integrate Diota's solutions into its DELMIA applications

« Significant Partnerships Shape 2022 for Dassault Systèmes

- In [November 2022](#), Dassault Systèmes announced that Blue Spirit Aero, an aviation startup utilizing the power of hydrogen fuel cell technology, is utilizing the cloud-based Dassault Systèmes 3DEXPERIENCE platform to accelerate the development of its hydrogen-electric light aircraft and advance the certification of accessible clean aviation
 - From concept to certification, the aircraft's development on the 3DEXPERIENCE platform will support the hydrogen economy and demonstrate the viability of cleaner aviation solutions
- In [October 2022](#), Dassault Systèmes Partnered with Sanofi to Optimize Tech Transfer and Industrialization at Its Future "EVolutive Facilities"
 - Sanofi will use the 3DEXPERIENCE platform to design, implement, qualify, and operate modular production lines at its new "EVolutive Facilities" (EVF) in Singapore and France

Gamma Technologies

Business Overview

(\$ in millions)

| | |
|------------------------------------|--|
| Headquarters: | Westmont, IL |
| LinkedIn Employees (1-Yr. Growth): | 213 (▲ 16%) |
| Website: | gtisoft.com |
| Ownership Status: | PE-backed (TA , Insight) |
| Acquisitions: | 3 |
| Enterprise Value (EV): | n/a |
| TTM Revenue: | n/a |
| TTM EBITDA: | n/a |
| EV / TTM Revenue: | n/a |
| EV / TTM EBITDA: | n/a |

Description:

Multi-physics CAE system simulation software spanning fluid flow, thermal, mechanical, electrical, magnetic, chemistry, and controls primarily for engines, vehicle systems & components, and more

Select Funding / Transaction History

| Date | Lead Investor | Amount |
|--------|---|-----------------------------|
| Feb-22 |  | n/a (minority transaction) |
| May-18 |  | n/a (secondary transaction) |
| Jun-15 |  | n/a (buyout) |

« GT Acquisitions Center Around High Efficiency, Decarbonization, and Zero-Emissions

- In [November 2021](#), Gamma Technologies announced it has entered into an agreement to acquire FEMAG Software
 - FEMAG technologies, integrated within the GT-SUITE system simulation platform, enable optimization of motor performance and propulsion efficiency
 - Gamma will establish a Global Center of Excellence for Electric Machines in Basel, Switzerland to extend the FEMAG software technologies and related industry solutions
- In [November 2021](#), Gamma Technologies acquired Exothermia S.A.
 - The acquisition of GT enables the development of next-generation systems with a focus on high efficiency, decarbonization, and zero-emission vehicles

« Insight Partners Provides Key Investment to Continue Growth Mission

- In [February 2022](#), Gamma Technologies received a strategic growth investment from Insight Partners
 - Insight Partners joins existing investors TA Associates and Cove Hill Partners
 - The majority shareholder in Gamma Technologies is still TA, which made its initial investment in the business in 2015; Cove Hill, an investor since 2018, and Insight Partners will each hold significant minority stakes

« GT and KULR Technology Partners Ink Partnership

- In [October 2022](#), Gamma Technologies announced a partnership with KULR Technology Partners
 - As a result of the partnership, KULR will incorporate Gamma Technologies' GT-SUITE multi-scale, multi-physics analysis platform into its robust, all-encompassing product and service portfolio. Using GT-SUITE's simulation capabilities, KULR can create highly optimized designs for the next generation of batteries to ensure that its customers have access to cutting-edge solutions

Hexagon

Business Overview

(\$ in millions)

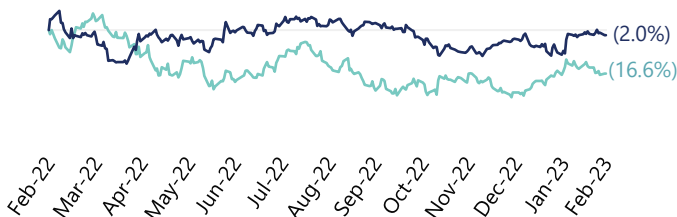
| | |
|------------------------------------|---|
| Headquarters: | Stockholm, Sweden |
| LinkedIn Employees (1-Yr. Growth): | 3,461 (▲ 10%) |
| Website: | hexagon.com |
| Ownership Status: | Public (STO: HEXA-B) |
| Acquisitions: | 108 |
| Enterprise Value (EV): | \$34,719.1 |
| TTM Revenue: | \$5,376.2 |
| TTM EBITDA: | \$2,040.9 |
| EV / TTM Revenue: | 6.46x |
| EV / TTM EBITDA: | 17.0x |

Description:

Global leader in sensor, software, and autonomous solutions for industrial, manufacturing, infrastructure, safety, and mobility applications

TTM January 2023 Market Pricing

— NASDAQ — HEXA B



« Hexagon Goes On Acquisition Spree Under New CEO

- In [January 2023](#), Hexagon purchased Projectmates to expand its construction offering
 - Projectmates recently reinvented itself as a SaaS-based platform to manage planning through handover in one central repository
- In [December 2022](#), Hexagon announced the acquisition of Oognify, provider of Physical Security and Enterprise Incident Management software solutions
 - Oognify was formed in 2015 when Battery Ventures acquired the physical security division of NICE Systems
- In [April 2022](#), Hexagon completed the acquisition of ETQ
 - ETQ provides a platform for automating the collection and delivery of manufacturing quality control data, non-conformance reports, customer feedback
 - ETQ will operate within Hexagon's Manufacturing Intelligence division
- In [April 2022](#), Hexagon furthered its commitment to innovation in the Operations & Maintenance segment with the acquisition of Innovatia Accelerator
 - Procedure Lifecycle Management (PLCM), a Connected Worker Platform (CWP), a Learner Experience Platform (LXP), and a Component Content Management System (CCMS) are all components of the AcceleratorKMS solution
- In [January 2022](#), Hexagon announced the acquisition of Minnovare, provider of drilling technology that improves the speed, cost and accuracy of underground drilling
 - A crucial strategic fit exists between the cutting-edge mining solutions offered by Minnovare and Hexagon's solid core technical expertise

« Hexagon Appoints New President and CEO

- In [January 2022](#), Hexagon appointed Paolo Guglielmini as new President and CEO of Hexagon
 - Paolo Guglielmini succeeded Ola Rollén as President and CEO of Hexagon AB, effective 31 December 2022

Jama Software

Business Overview

(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Portland, OR |
| LinkedIn Employees (1-Yr. Growth): | 252 (▲9%) |
| Website: | jamasoftware.com |
| Ownership Status: | PE-backed (Insight) |
| Total Acquisitions: | 1 |
| Enterprise Value (EV): | n/a |
| LTM Revenue: | n/a |
| LTM EBITDA: | n/a |
| EV / LTM Revenue: | n/a |
| EV / LTM EBITDA: | n/a |

Description:

Global leader in sensor, software, and autonomous solutions for industrial, manufacturing, infrastructure, safety, and mobility applications




« Jama Software and Sterling PLM Form Partnership

- In [December 2022](#), Jama software partnered with Sterling PLM
 - This partnership expands Jama's Lifecycle Management and Live Traceability expertise offerings

« Jama Connect Gets New Face Lift

- In [December 2022](#), Jama Software launched Jama Connect for robotics
 - Jama Connect for Robotics is a comprehensive collection of frameworks, example projects, and procedural, export, and configuration documentation that aids teams in accelerating deployment, ensuring best practices are adopted, and increasing innovation success rates
- In [October 2022](#), Jama Software released Jama Connect Advisor, the industry's first native Natural Language Processing (NLP) Advisor to improve and manage requirements
 - Leveraging NLP Jama is working towards making the definition of requirements more straightforward and efficient.
 - Additionally, as part of this offering, Jama is providing a subset of the INOSE (International Council on Systems Engineering) Guide for Writing Requirements v3 recommended guidelines

Select Funding / Transaction History

| Date | Lead Investor | Amount |
|--------|--|----------------------------|
| Jun-18 |  INSIGHT PARTNERS | \$200.0 million (majority) |
| May-17 | n/a | \$10.0m (Series B2) |
| Mar-15 |  updatea PARTNERS | \$19.5 million (Series B1) |
| Aug-13 |  Trinity VENTURES | \$2.79 million (Series B) |

PTC

Business Overview

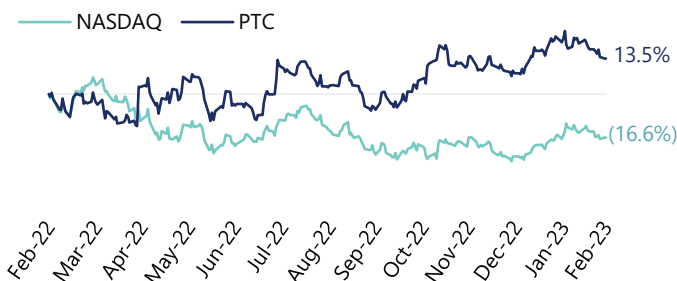
(\$ in millions)

| | |
|------------------------------------|---------------------------------------|
| Headquarters: | Boston, MA |
| LinkedIn Employees (1-Yr. Growth): | 6,958 (▼3%) |
| Website: | ptc.com |
| Ownership Status: | Public (NasdaqGS: PTC) |
| Total Acquisitions: | 40 |
| Enterprise Value (EV): | \$16,796.4 |
| TTM Revenue: | \$1,941.5 |
| TTM EBITDA: | \$791.9 |
| EV / TTM Revenue: | 8.65x |
| EV / TTM EBITDA: | 21.2X |

Description:

Portfolio of computer-aided design (CAD) modeling, product lifecycle management (PLM), service lifecycle management (SLM) and industrial-focused AR / VR and IoT solutions

TTM January 2023 Market Pricing



« Extending The Digital Thread To Outside The Factory Floor Through Acquisition

- In [November 2022](#), PTC announced the acquisition of field service management provider ServiceMax for \$1.5B
 - ServiceMax provides a suite of cloud-native FSM capabilities for servicing complex long-lifecycle products, including managing information about serviced products, creating and managing work orders, and scheduling and dispatching technicians
 - The acquisition adds field service management (FSM) capabilities PTC's PLM and IIoT capabilities
- In [May 2022](#), PTC completed the acquisition of Intland Software for \$278.1M
 - PTC's Application Lifecycle Management (ALM) footprint will be expanded by Intland's Software across safety-critical and regulated industries like automotive, life sciences, consumer electronics, and aerospace and defense
 - PTC intends to offer its Windchill and Arena PLM products alongside the Intland Codebeamer ALM suite

« PTC and Schaeffler Ink Partnership

- In [January 2022](#), PTC announced a strategic alliance with Schaeffler, a global automotive and industrial supplier
 - PTC's solutions will be used by Schaeffler to standardize the IT landscape and develop digitally advanced capabilities for product development

« Various Executive Changes Within PTC

- In [May 2022](#), PTC expanded roles for executive team members
 - Mike DiTullio, a veteran PTC executive who is currently the president of PTC's Velocity group, will take over as the president of the larger Digital Thread group
 - In addition, Catherine Kniker, who is currently in charge of strategy at PTC, will take on a new position as chief strategy and sustainability officer, which will allow her to broaden the scope of her charter
 - After a period of transition, Troy Richardson, who has led PTC's Digital Thread group for the past year, will leave the company

Revalize

Business Overview




(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Jacksonville, FL |
| LinkedIn Employees (1-Yr. Growth): | 350 (▲1%) |
| Website: | revalizesoftware.com |
| Ownership Status: | PE-backed (TA) |
| Acquisitions: | 11 |
| Enterprise Value (EV): | n/a |
| LTM Revenue: | n/a |
| LTM EBITDA: | n/a |
| EV / LTM Revenue: | n/a |
| EV / LTM EBITDA: | n/a |

Description:

Configure, price, quote, and supply chain software helping manufacturers streamline and accelerate their revenue processes

Select Funding / Transaction History

| Date | Lead Investor | Amount |
|--------|--|----------------|
| Nov-21 |  Hg | \$25.5 million |
| Jun-21 |  TA ASSOCIATES | n/a (buyout) |
| Dec-18 |  Luminate CAPITAL PARTNERS | n/a (buyout) |

« New Platform Completes Ten Acquisitions in Debut Year

- In [August 2021](#), Revalize announced the acquisition of four companies that extends the reach of the Company's solution portfolio and increases their global customer base to 9,000+ users
 - **Attainia** a medical equipment planning solution, connecting hospitals, suppliers, consultants, and group purchasing organizations (GPOs) with a catalog that includes over 70,000 medical devices and healthcare equipment
 - **BCA Technologies** a platform connecting building product manufacturers to the architecture, engineering, and construction (AEC) value chain
 - **LeadMethod** a lead management solution that strengthens distributor engagement
 - **MicroD** a platform with eCommerce, CPQ, and visualization capabilities, that connects home furnishing manufacturers with distribution channels

This expands on the previous acquisitions of:

- **AutoQuotes**, a CPQ (configure, price, quote) and product design analytics software platform, ultimately forming a new cloud-based platform for manufacturers
- **Procad Group** a developer of a product and document lifecycle management platform designed to digitalize business processes in product development and management
- **SpecPage** is a developer of PLM and quality assurance solutions for recipe-based, process manufacturers
- **Tenado** provider of computer-aided design (CAD) software solutions for the metal and wood fabrication trades, mechanical engineering, fire protection and traffic management sectors
- **Sofon** provider of Guided Selling and CPQ software solutions

Siemens

Business Overview

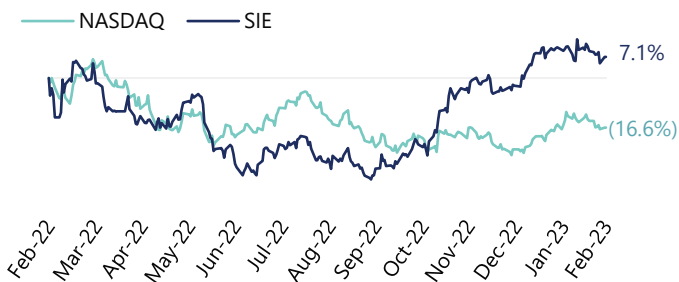
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Munich, Germany |
| LinkedIn Employees (1-Yr. Growth): | 206,223 (▲7%) |
| Website: | siemens.com |
| Ownership Status: | Public (ETR: SIE) |
| Total Acquisitions: | 68 |
| Enterprise Value (EV): | \$168,246.3 |
| TTM Revenue: | \$77,875.3 |
| TTM EBITDA: | \$10,844.4 |
| EV / TTM Revenue: | 2.16x |
| EV / TTM EBITDA: | 15.5x |

Description:

Silicon chip design, verification, IP integration, and application security testing solutions

TTM January 2023 Market Pricing



« Siemens Expands Its Integrated Circuit Portfolio

- In [November 2022](#), Siemens acquired Avery Design Systems, enabling system and SOC design teams to achieve functional verification productivity improvements
 - As part of its suite of electronic design automation (EDA) integrated circuit (IC) verification offerings, Siemens intends to include Avery's technology in the Siemens Xcelerator portfolio

« New Products With a Heavy Focus on Simulation Capabilities

- In [November 2022](#), Siemens expanded access to advanced simulation with Simcenter Cloud HPC
 - Simcenter Cloud HPC software brings scalable, on-demand, high-performance simulation capabilities to Siemens Xcelerator as a Service (XaaS)
 - New Simcenter Cloud HPC provides instant on, rapidly scalable cloud-based high performance computing (HPC) for complex simulation studies, hosted on AWS

« Siemens Launches Partnership for ESG Data

- In [September 2022](#), Siemens announced its collaboration with Sustamize GmbH, a company providing professional technology, data and software solutions enabling companies to measure, optimize and manage CO2 emissions
 - Siemens and Sustamize collaborate to add carbon emissions data to Siemens Xcelerator
- In [March 2022](#), Siemens announced a strategic partnership with Roboze, a machine vendor for high-end finished 3D printed parts for the industrial, aerospace, and automotive sectors
 - The partnership brings together the expertise of both companies to create comprehensive workflows for the industrialization of 3D printing and to broaden production opportunities for companies in the energy, mobility, and aerospace industries

« Siemens Opens New Technology Hub in Charlotte

- In [April 2022](#), Siemens opened a new technology hub in Charlotte, NC
 - Siemens' customers' plans for the industrialization of additive manufacturing (AM) will be aided by this brand-new strategic research and development center, which is now independently operated and led by Siemens Digital Industries, Siemens Technology, and Siemens Energy

Synopsys

Business Overview

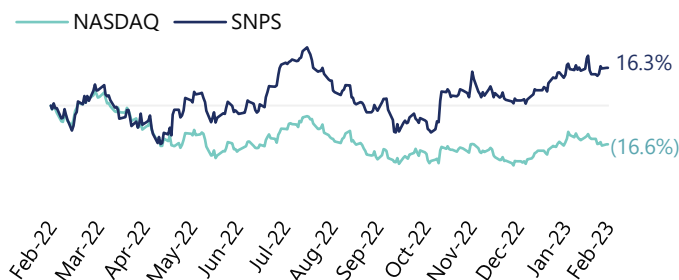
(\$ in millions)

| | |
|------------------------------------|---|
| Headquarters: | Mountain View, CA |
| LinkedIn Employees (1-Yr. Growth): | 17,206 (▲ 13%) |
| Website: | synopsys.com |
| Ownership Status: | Public (NasdaqGM: SNPS) |
| Total Acquisitions: | 80 |
| Enterprise Value (EV): | \$49,342.4 |
| TTM Revenue: | \$4,204.2 |
| TTM EBITDA: | \$921.8 |
| EV / TTM Revenue: | 11.74x |
| EV / TTM EBITDA: | 53.5x |

Description:

Silicon chip design, verification, IP integration, and application security testing solutions

TTM January 2023 Market Pricing



« Synopsys Makes Key Acquisition from NTT

- In [April 2022](#), Synopsys acquired WhiteHat Security from NTT
 - Synopsys will now offer a complete portfolio for application security testing thanks to WhiteHat Security's significant SaaS capabilities and market-leading dynamic application security testing (DAST) technology

« Partnerships Further Semiconductor and System-Level Innovation

- In [October 2022](#), Synopsys and TSMC worked together to create the most comprehensive multi-die design solutions for TSMC's cutting-edge technologies, enabling system innovation
 - In order to help mutual customers, meet the stringent power and performance requirements for complex multi-die systems, Synopsys collaborates with TSMC on the 3Dblox™ standard and 3DFabric™ technologies to provide a system-wide strategy that includes production-tested solutions
- In [June 2022](#), Synopsys and Arm expanded their partnership to advance Arm's total compute solutions' Next-Gen Mobile SoCs
 - In accordance with Arm Total Compute's principles, Synopsys and Arm continue to deepen and broaden their collaboration activities to accelerate time-to-market through silicon-ready, highly optimized system design and implementation solutions
- In [April 2022](#), Synopsys and Juniper Networks closed a deal to form a new, separate company that will offer an open silicon photonics platform to the industry to meet the growing demand for photonics
 - Integrated lasers, optical amplifiers, and a comprehensive collection of photonic components will make up the new company's open silicon photonics platform, which will be accessible through a Process Design Kit (PDK)

« Synopsys Introduces Industry's First Board-Scale SaaS Solution

- In [March 2022](#), Synopsys launched industry's first Broad-Scale Cloud SaaS solution to transform chip development landscape
 - This will drive significantly greater productivity and efficiency for increasingly complex chip designs

Other Companies Our Engineering Practice is Tracking

MADISON PARK GROUP

Limited Deal Activity in 2022, but Still on Our Radar

menschmaschine

CAD as CAD can

(\$ in millions)

Business Overview

| | |
|------------------------------------|------------------------------------|
| Headquarters: | Wessling, Germany |
| LinkedIn Employees (1-Yr. Growth): | 161 (▲6%) |
| Website: | mum.de |
| Ownership Status: | Public (ETR: MUM) |
| Total Acquisitions: | 6 |
| Enterprise Value (EV): | \$868.9 |
| LTM Revenue: | \$325.0 |
| LTM EBITDA: | \$54.4 |
| EV / LTM Revenue: | 2.67x |
| EV / LTM EBITDA: | 15.9x |

Description:

Computer Aided Design, Manufacturing and Engineering, Product Data Management and Building Information Modelling/Management solutions

esi

(\$ in millions)

Business Overview

| | |
|------------------------------------|--|
| Headquarters: | Paris, France |
| LinkedIn Employees (1-Yr. Growth): | 1,780 (▼2%) |
| Website: | esi-group.com |
| Ownership Status: | Public (PAR: ESI) |
| Total Acquisitions: | 19 |
| Enterprise Value (EV): | \$475.3 |
| TTM Revenue: | \$158.8 |
| TTM EBITDA: | \$56.6 |
| EV / TTM Revenue: | 3.03x |
| EV / TTM EBITDA: | 8.4x |

Description:

Virtual prototyping software that simulates a product's behavior during testing, manufacturing, and real-life use

NEMETSCHEK GROUP

(\$ in millions)

Business Overview

| | |
|------------------------------------|--|
| Headquarters: | Munich, Germany |
| LinkedIn Employees (1-Yr. Growth): | 3,019 (▲9%) |
| Website: | nemetschek.com |
| Ownership Status: | Public (ETR: NEM) |
| Total Acquisitions: | 14 |
| Enterprise Value (EV): | \$6,580.0 |
| LTM Revenue: | \$850.2 |
| LTM EBITDA: | \$290.8 |
| EV / LTM Revenue: | 7.73x |
| EV / LTM EBITDA: | 22.6x |

Description:

Global leader in sensor, software, and autonomous solutions for industrial, manufacturing, infrastructure, safety, and mobility applications

ZUKEN®

(\$ in millions)

Business Overview

| | |
|---------------------------|--|
| Headquarters: | Yokohama, Japan |
| Employees (1-Yr. Growth): | 407 (▲5%) |
| Website: | zuken.com |
| Ownership Status: | Public (TKS: 6497) |
| Acquisitions: | 3 |
| Enterprise Value (EV): | \$337.6 |
| TTM Revenue: | \$257.8 |
| TTM EBITDA: | \$41.4 |
| EV / TTM Revenue: | 1.31x |
| EV / TTM EBITDA: | 8.2x |

Description:

Software products and consulting services for electrical and electronic engineering design processes

III.



Market Comparables

Public Companies

Engineering & Design

MADISON PARK GROUP

| Company(1) | Share Price 2/28/2023 | % 52-Wk High | Market Cap | Enterprise Value | Revenue Metrics ⁽²⁾ | | | | Profitability Margins ⁽²⁾ | | | EV / Revenue | | EV / EBITDA ⁽³⁾ | | Dry Powder(4) | Last 24M Acqs. |
|------------------------|--------------------------|-----------------|---------------|---------------------|--------------------------------|----------|-------|-------|--------------------------------------|------------|-------|--------------|--------|----------------------------|-------|------------------|-------------------|
| | | | | | CY22E | CY23E | Y/Y | % Rec | TTM GM | TTM EBITDA | CY22E | CY22E | CY23E | CY22E | CY23E | | |
| Altair Engineering | \$64.06 | 93.0% | \$5,397 | \$5,421 | \$558 | \$619 | 10.9% | 74.7% | 78.5% | 5.0% | 20.5% | 9.71x | 8.76x | n/m | 42.7x | \$1,772 | 7 |
| Altium | \$25.88 | 92.5% | \$3,407 | \$3,205 | \$233 | \$275 | 18.1% | 60.0% | 53.0% | 34.7% | 37.4% | 13.76x | 11.64x | 38.6x | 31.1x | \$1,276 | - |
| ANSYS | \$303.61 | 90.9% | \$26,570 | \$26,845 | \$2,026 | \$2,289 | 13.0% | 46.2% | 91.2% | 34.7% | 43.8% | 13.25x | 11.73x | 31.2x | 26.8x | \$9,037 | 3 |
| Autodesk | \$198.69 | 84.5% | \$42,871 | \$43,590 | \$4,948 | \$5,389 | 8.9% | 91.8% | 91.6% | 21.6% | 37.8% | 8.81x | 8.09x | 23.8x | 21.4x | \$15,290 | 6 |
| Bentley Systems | \$40.46 | 88.5% | \$12,685 | \$14,438 | \$1,094 | \$1,208 | 10.4% | 91.9% | 78.4% | 25.5% | 34.0% | 13.20x | 11.95x | 39.7x | 35.2x | \$3,836 | 6 |
| Cadence Design Systems | \$192.94 | 95.1% | \$52,989 | \$53,031 | \$3,547 | \$4,035 | 13.8% | 94.5% | 89.6% | 34.1% | 44.5% | 14.95x | 13.14x | 34.5x | 29.5x | \$17,410 | 4 |
| Dassault Systèmes | \$38.83 | 78.6% | \$51,386 | \$52,022 | \$6,024 | \$6,387 | 6.0% | 71.8% | 83.8% | 33.8% | 35.8% | 8.64x | 8.15x | 22.7x | 22.7x | \$20,462 | 2 |
| ESI | \$81.32 | 100.0% | \$470 | \$485 | \$144 | \$150 | 4.2% | 82.7% | 76.3% | 10.2% | 22.8% | 3.37x | 3.23x | 16.9x | 14.2x | \$265 | - |
| Hexagon | \$11.14 | 82.8% | \$29,970 | \$33,627 | \$5,502 | \$5,616 | 2.1% | 40.0% | 65.1% | 33.8% | 37.0% | 6.11x | 5.99x | 17.0x | 16.2x | \$13,294 | 12 |
| Mensch Maschine | \$50.42 | 77.1% | \$855 | \$873 | \$336 | \$352 | 4.6% | - | 51.3% | 16.6% | 17.5% | 2.60x | 2.48x | 15.7x | 14.2x | \$441 | - |
| Nemetschek Group | \$56.99 | 56.6% | \$6,582 | \$6,551 | \$860 | \$897 | 4.3% | - | 54.5% | 27.2% | 30.6% | 7.62x | 7.30x | 23.6x | 23.9x | \$2,533 | - |
| PTC | \$125.33 | 89.6% | \$14,822 | \$15,985 | \$1,967 | \$2,169 | 10.3% | 87.9% | 80.1% | 29.5% | 40.5% | 8.13x | 7.37x | 22.3x | 18.2x | \$5,291 | 3 |
| Siemens | \$153.61 | 95.1% | \$121,742 | \$169,428 | \$72,183 | \$82,207 | 13.9% | - | 36.2% | 13.9% | 17.4% | 2.35x | 2.06x | 14.9x | 11.9x | \$42,812 | 2 |
| Synopsys | \$363.76 | 93.0% | \$55,904 | \$55,482 | \$5,204 | \$5,915 | 13.7% | 84.0% | 80.3% | 24.4% | 36.8% | 10.66x | 9.38x | 29.9x | 25.5x | \$18,650 | 5 |
| Zuken | \$25.75 | 90.3% | \$599 | \$402 | \$253 | \$263 | 4.1% | - | 68.8% | 15.7% | n/m | 1.59x | 1.53x | 40.5x | n/a | \$461 | - |
| Mean | | 87.2% | \$28,417 | \$32,092 | \$6,992 | \$7,851 | 9.2% | 55.0% | 71.9% | 24.0% | 32.6% | 8.32x | 7.52x | 26.5x | 23.8x | \$10,189 | 5 |
| Median | | 90.3% | \$14,822 | \$15,985 | \$1,967 | \$2,169 | 10.3% | 71.8% | 78.4% | 25.5% | 36.3% | 8.64x | 8.09x | 23.7x | 23.3x | \$5,291 | 5 |

Source: CapitalIQ

(1) Currency normalized to USD, on share price date

(2) Wall Street consensus estimates

(3) EV / Revenue and EV / EBITDA multiples in excess of 50.0x or less than 0.0x are considered not meaningful

(4) Dry Powder - Greater of: [(125% of Rec. Rev. less Debt) + (50% of Cash & C.E.) + (20% of Mkt. Cap.)) or [(6x EBITDA less Debt) + (50% of Cash & C.E.) + 20% of Mkt. Cap.]]

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | Target Overview | | | | Transaction Statistics | |
|-----------|--------------------|------------------|---|--|-------------|-------------------|------------------------|--------------------------------|
| | | | Date | Target | Description | Estimated Revenue | Estimated EBITDA | Deal Value / Estimated Revenue |
| Altair | Gamma Technologies | Altair | Total Disclosed M&A Deal Value: \$382.2 Million | | | | | |
| Altium | Hexagon | Sep-22 | RapidMiner | Low-code platform for data analytics and machine learning | n/a | n/a | \$100.0 | n/a |
| | | Jun-22 | Concept Engineering | Visualization software for design, production, & maintenance systems | n/a | n/a | \$27.3 | n/a |
| | | Jun-22 | Gen3D | Software and consulting system for additive manufacturing | n/a | n/a | n/a | n/a |
| | | Mar-22 | Powersim | Electronic system design technology | n/a | n/a | \$4.3 | n/a |
| | | Feb-22 | Magnitogorsk Iron & Steel Works | Russian steel producer | n/a | n/a | n/a | n/a |
| | | Feb-22 | Cassini | Unified cloud product lifecycle management platform | n/a | n/a | n/a | n/a |
| Ansys | Jama Software | Dec-21 | World Programming | Data analytics software | n/a | n/a | n/a | n/a |
| | | Aug-21 | S-Frame Software | Structural analysis and design software solutions | n/a | n/a | n/a | n/a |
| | | Feb-21 | GE Aviation (Flow Simulator Software) | Integrated flow, heat transfer, and combustion design software | n/a | n/a | n/a | n/a |
| | | Oct-20 | M-Base | Material information systems | n/a | n/a | n/a | n/a |
| | | Sep-20 | Ellexus | Input/output (I/O) analysis | n/a | n/a | n/a | n/a |
| | | Sep-20 | Univa | Enterprise-grade workload management | n/a | n/a | n/a | n/a |
| Aras | PTC | Jul-20 | S&WISE | Polyurethane foaming simulation software | n/a | n/a | n/a | n/a |
| | | May-20 | WRAP | Spectrum management and radio network planning | n/a | n/a | n/a | n/a |
| | | Jan-20 | newFASANT | Electromagnetic simulation software | n/a | n/a | n/a | n/a |
| | | Oct-19 | Polliwog Co. | EDA verification and evaluation | n/a | n/a | n/a | n/a |
| | | Apr-19 | Cambridge Collaborative | High-frequency noise and vibration simulation | n/a | n/a | n/a | n/a |
| | | Nov-18 | Datawatch | Enterprise data preparation & visualization | \$41.7 | (\$9.3) | \$183.43 | 4.40x |
| Autodesk | Revalize | Oct-18 | SIMSOLID | Structural analysis simulation software | n/a | n/a | \$22.1 | n/a |
| | | May-18 | FluidDyna GmbH | Fluid dynamics simulation software | n/a | n/a | \$2.7 | n/a |
| | | Mar-18 | CANDI Controls | Real-time device control and data management | n/a | n/a | \$2.4 | n/a |
| | | Sep-17 | Runtime | EDA software optimizing application computing | n/a | n/a | \$25.5 | n/a |
| | | Sep-17 | Componeeering | Composites analysis and design software | n/a | n/a | n/a | n/a |
| | | Jun-17 | Carriots | IoT device enablement platform | n/a | n/a | \$6.7 | n/a |
| Bentley | Siemens | May-17 | MODELiiS | EDA for circuit modelling & systems design | n/a | n/a | \$2.0 | n/a |
| | | Sep-16 | Solid Iris Technologies | Rendering software for architecture applications | n/a | n/a | n/a | n/a |
| | | May-16 | CEDRAT | Simulation software for mechatronic systems | n/a | n/a | \$5.1 | n/a |
| | | Mar-16 | Awe Communications | Product design software for cellular devices | n/a | n/a | n/a | n/a |
| | | Sep-15 | Click2Cast | Casting process simulation software | n/a | n/a | \$0.7 | n/a |
| | | Apr-15 | Multiscale Design Systems | Modeling, simulation, and testing software | n/a | n/a | n/a | n/a |
| Cadence | Synopsys | Jul-14 | Visual Solutions | Commercial simulation software | n/a | n/a | n/a | n/a |
| | | Dec-13 | EM Software & Systems | Consulting services for electromagnetic analysis | n/a | n/a | n/a | n/a |
| | | Nov-12 | Synopsis Consulting | Business consulting services for product dev. | n/a | n/a | n/a | n/a |
| | | Jan-11 | ACUSIM Software | Computation fluid dynamics software | n/a | n/a | n/a | n/a |
| | | Oct-10 | SimLab Corporation | Auto industry modeling and simulation software | n/a | n/a | n/a | n/a |
| | | Jan-07 | solidThinking | Integrated rendering engine design software | n/a | n/a | n/a | n/a |
| Dassault | Zuken | Jan-07 | Hiqube | Simulation-driven business analytics suite | n/a | n/a | n/a | n/a |
| | | Mar-03 | PBS Works | Secure workload management for computing | n/a | n/a | n/a | n/a |
| | | Altium | Total Disclosed M&A Deal Value: \$54.1 Million | | | | | |
| | | Apr-19 | Gumstix | Hardware development and manufacturing | \$2.3 | n/a | \$4.9 | 2.13x |
| | | Jul-18 | PCB:NG | PCB manufacturing | n/a | n/a | \$4.8 | n/a |
| | | May-18 | FluidDyna | Predictive aerodynamic simulation tools | n/a | n/a | n/a | n/a |
| ESI Group | | May-18 | CANDI Controls | Data protocol management for edge devices | n/a | n/a | n/a | n/a |
| | | Feb-18 | TES International | Thermal solutions for complex flow mapping | n/a | n/a | n/a | n/a |
| | | Aug-17 | Upverter | Online circuit design platform | n/a | n/a | \$5.6 | n/a |
| | | Jan-17 | Premier EDA Solutions | Electronic design automation | n/a | n/a | \$4.0 | n/a |
| | | Sep-16 | Transfer | Electronics design software | n/a | n/a | \$1.8 | n/a |
| | | Aug-16 | Perception Software | Engineering productivity application | n/a | n/a | \$7.9 | n/a |
| | | Aug-15 | Octopart | Electronics parts search | n/a | n/a | \$18.0 | n/a |
| | | Aug-15 | Ciiva | Electronic component management | n/a | n/a | \$4.0 | n/a |
| | | Sep-10 | Morfik Technology | Cloud application development | n/a | n/a | \$3.1 | n/a |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | | Transaction Statistics | |
|-----------|--------------------|------------------|--------|-----------------|-------------------|------------------|------------|------------------------|------------------|
| | | Date | Target | Description | Estimated Revenue | Estimated EBITDA | Deal Value | Deal Value / Revenue | Estimated EBITDA |
| Altair | Gamma Technologies | | | | | | | | |
| Altium | Hexagon | | | | | | | | |
| Ansys | Jama Software | | | | | | | | |
| Aras | PTC | | | | | | | | |
| Autodesk | Revalize | | | | | | | | |
| Bentley | Siemens | | | | | | | | |
| Cadence | Synopsys | | | | | | | | |
| Dassault | Zuken | | | | | | | | |
| ESI Group | | | | | | | | | |

| ANSYS | | Total Disclosed M&A Deal Value: \$4.5 Billion | | | | | | | |
|------------------|----------------------------|--|---------|--------|-----------|--------|-------|-----|-----|
| Jan-23 | Rocky DEM | Particle dynamics simulation software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Dec-22 | DYNAmore | Automotive simulation | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Oct-22 | C&R Technologies | Thermal-centric software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| May-22 | Motor Design | Design and simulation tools for motors & electric machines | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| May-22 | OnScale | Cloud simulation technology | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Oct-21 | Zemax | Optical imaging and photonics simulation | n/a | n/a | \$411.5 | n/a | n/a | n/a | n/a |
| May-21 | Phoenix Integration | Process integration and design optimization | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Oct-20 | Analytical Graphics Inc. | Mission-driven simulation, testing, and analysis | \$80.0 | n/a | \$722.5 | 9.03x | n/a | n/a | n/a |
| Mar-20 | Lumerical | Photonic simulation software | \$11.3 | n/a | \$107.5 | 9.49x | n/a | n/a | n/a |
| Oct-19 | Dynardo | Process integration and design tools | n/a | n/a | \$33.2 | n/a | n/a | n/a | n/a |
| Sep-19 | Livermore Software | Multi physics simulation software | \$62.5 | n/a | \$777.8 | 12.44x | n/a | n/a | n/a |
| May-19 | DFR Solutions | EDA design reliability analysis software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Feb-19 | Granta Design | Engineering materials information management | \$20.0 | \$2.0 | \$208.7 | 10.44x | n/m | n/a | n/a |
| Jan-19 | Helic | Electro-magnetic cross-talk analysis software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Mar-18 | Optis World | Optics engineering & simulation software | \$24.7 | n/a | \$291.0 | 11.78x | n/a | n/a | n/a |
| Nov-17 | 3DSIM | Additive manufacturing process software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Jul-17 | Computational Engineering | Scientific data visualization software | n/a | n/a | \$6.0 | n/a | n/a | n/a | n/a |
| Mar-17 | CLK Design Automation | Static timing and power analysis software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Nov-16 | KPIIT | Automotive engineering software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Sep-15 | Delcross | CEM & RF analysis software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Jul-15 | Gear Design | Semiconductor & electric design solutions | n/a | n/a | \$30.0 | n/a | n/a | n/a | n/a |
| Feb-15 | Newmerical | In-flight icing simulation software | n/a | n/a | \$10.9 | n/a | n/a | n/a | n/a |
| Nov-14 | Parsec Holdings | Technology-driven engineering services | n/a | n/a | \$8.4 | n/a | n/a | n/a | n/a |
| May-14 | SpaceClaim | 3D direct modeling software | \$18.0 | n/a | \$85.0 | 4.72x | n/a | n/a | n/a |
| Jan-14 | Reaction Design | Chemical modeling & simulation software | n/a | n/a | \$19.1 | n/a | n/a | n/a | n/a |
| May-13 | Tedaka Technologies | Telecom transmission & networking | n/a | n/a | \$2.8 | n/a | n/a | n/a | n/a |
| Apr-13 | Evolutionary Engineering | Aerospace and mechanical engineering | n/a | n/a | \$8.1 | n/a | n/a | n/a | n/a |
| Jul-12 | Esterel Technologies | Embedded software design | \$21.0 | n/a | \$58.2 | 2.77x | n/a | n/a | n/a |
| Jun-11 | Apache Design | Semiconductor design and verification | \$44.0 | n/a | \$314.0 | 7.13x | n/a | n/a | n/a |
| Aug-08 | Ansoft | Electronic design automation software | \$103.4 | \$41.7 | \$823.8 | 7.97x | 19.7x | n/a | n/a |
| Nov-07 | Emerging Signals | Railway signaling services | n/a | n/a | \$2.2 | n/a | n/a | n/a | n/a |
| May-06 | Fluent | Computational fluid dynamics | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Feb-06 | Aavid Thermal Technologies | Thermal management software solutions | n/a | n/a | \$565.0 | n/a | n/a | n/a | n/a |
| Dec-05 | Harvard Thermal | Thermal management software solutions | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Jan-05 | Century Dynamics | Hydro-dynamics simulation | n/a | n/a | \$10.0 | n/a | n/a | n/a | n/a |
| Feb-03 | CFX Group | Computational fluid dynamics software | \$19.0 | n/a | \$21.7 | 1.14x | n/a | n/a | n/a |
| Mar-02 | IceBreaker | Online informational management software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Nov-01 | Cadoc | CAD & acoustic testing | n/a | n/a | \$3.9 | n/a | n/a | n/a | n/a |
| Aug-00 | ICEM CFD | Aeronautics & automobile design | \$6.8 | n/a | \$12.4 | 1.82x | n/a | n/a | n/a |
| Aras Corporation | | Total Disclosed M&A Deal Value: n/a | | | | | | | |
| Jan-22 | Minerva Group | PLM for medical devices and high-tech electronics companies | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Sep-18 | Comet Solutions | Process automation for CAE / simulation | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Aug-18 | SoftTech (Italy) | Public administration information systems | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Jan-18 | Info Spectrum (Impressa) | MRO management suite | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Autodesk | | Total Disclosed M&A Deal Value: \$4.5 Billion | | | | | | | |
| Mar-22 | The Wild | Collaboration platform designed to create and share VR/AR experiences | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Feb-22 | Prodsmart | Real-time system of record for data collection, management, and analysis | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Jan-22 | Moxion | Digital media platform for filmmaking process | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Dec-21 | ProEst | Construction estimating and digital takeoff software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Nov-21 | Tangent Labs | Production software pipeline tool for artists and studios | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Sep-21 | iOFFICE | Workplace experience and asset management software | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| May-21 | Upchain | Cloud product lifecycle management | n/a | n/a | \$139.8 | n/a | n/a | n/a | n/a |
| Mar-21 | Innovyze | Business analytics and performance monitoring software | n/a | n/a | \$1,038.3 | n/a | n/a | n/a | n/a |
| Nov-20 | Spacemaker | Generative design for real estate project sites | n/a | n/a | \$252.9 | n/a | n/a | n/a | n/a |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | | Transaction Statistics | |
|-----------|--------------------|------------------|----------------------------|---|---|--------|------------|------------------------|------------------|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Revenue | Estimated EBITDA |
| Altair | Gamma Technologies | Autodesk | | | | | | | |
| | | | | | Total Disclosed M&A Deal Value: \$4.5 Billion | | | | |
| Altium | Hexagon | Aug-20 | Pype | Construction data ingestion | n/a | n/a | n/a | n/a | n/a |
| | | Jan-19 | BuildingConnected | Preconstruction planning solutions | n/a | n/a | \$253.2 | n/a | n/a |
| | | Nov-18 | PlanGrid | Digital blueprint solutions | \$100.0 | n/a | \$777.6 | 7.78x | n/a |
| | | Jul-18 | Assemble Systems | BIM solutions for construction management | n/a | n/a | \$93.6 | n/a | n/a |
| | | Nov-17 | BioLite | Carbon credit license permits | n/a | n/a | n/a | n/a | n/a |
| Ansys | Jama Software | Nov-16 | Seebo | IoT development modules | n/a | n/a | n/a | n/a | n/a |
| | | Jun-16 | CadSoft | PCB Design | n/a | n/a | n/a | n/a | n/a |
| | | Apr-16 | Solid Angle | Animation & visual effects rendering | n/a | n/a | n/a | n/a | n/a |
| | | Feb-16 | Monolith | Voxel modeling | n/a | n/a | n/a | n/a | n/a |
| | | Jan-16 | Autodesk Substation Design | AutoCAD software developer | n/a | n/a | n/a | n/a | n/a |
| Aras | PTC | Jan-16 | SDS | AutoCAD software systems | n/a | n/a | n/a | n/a | n/a |
| | | Oct-15 | Configure One | CPQ software | n/a | n/a | n/a | n/a | n/a |
| | | Oct-15 | Indeeo | Apple graphic design applications | n/a | n/a | n/a | n/a | n/a |
| | | Sep-15 | NetFabb | 3D printing software and services | \$18.6 | n/a | \$44.5 | 2.39x | n/a |
| | | Aug-15 | SeeControl | IoT business applications platform | n/a | n/a | n/a | n/a | n/a |
| Autodesk | Revalize | Feb-15 | Tweak Software | PLM software hosting | n/a | n/a | n/a | n/a | n/a |
| | | Jan-15 | Syntheticity | Urban planning data processing | n/a | n/a | n/a | n/a | n/a |
| | | Dec-14 | Magestic Systems | 3D nesting of composites | \$3.0 | n/a | \$10.0 | 3.33x | n/a |
| | | Nov-14 | Terrible Labs | Mobile and web application development | n/a | n/a | n/a | n/a | n/a |
| | | Nov-14 | TeamUp Technologies | Three dimensional cloud platform | n/a | n/a | \$60.0 | n/a | n/a |
| Bentley | Siemens | Nov-14 | Lagoa | 3D rendering platform | n/a | n/a | \$60.0 | n/a | n/a |
| | | Oct-14 | Modio | Character animation software | n/a | n/a | n/a | n/a | n/a |
| | | Oct-14 | Robobat Polska | Structural engineering software | n/a | n/a | n/a | n/a | n/a |
| | | Jun-14 | Shotgun Software | Animation & creative software | n/a | n/a | \$54.5 | n/a | n/a |
| | | Jun-14 | The Living | Building design studio | n/a | n/a | n/a | n/a | n/a |
| Cadence | Synopsys | Jun-14 | Bitsquid | Mobile game engine | n/a | n/a | n/a | n/a | n/a |
| | | May-14 | Within Technologies | Engineering design optimization | n/a | n/a | \$88.8 | n/a | n/a |
| | | May-14 | NEI Nastran Solver | Engineering analysis and simulation | n/a | n/a | n/a | n/a | n/a |
| | | Apr-14 | Ilesfay Technology | PLM data replication | n/a | n/a | n/a | n/a | n/a |
| | | Mar-14 | Creative Market Labs | Digital content design marketplace | n/a | n/a | n/a | n/a | n/a |
| Dassault | Zuken | Feb-14 | Delcam | Automated multi-vertical CAD/CAM | \$75.6 | n/a | \$285.4 | 3.78x | n/a |
| | | Jan-14 | Schrauwen Bruneel | Electronic circuits design software | n/a | n/a | n/a | n/a | n/a |
| | | Jan-14 | Circuits.io | Application for designing electronic circuits | n/a | n/a | n/a | n/a | n/a |
| | | Jan-14 | Majestic Systems | Industrial manufacturing software | n/a | n/a | n/a | n/a | n/a |
| | | Dec-13 | Azaliient | Traffic simulation modeling | n/a | n/a | n/a | n/a | n/a |
| ESI Group | | Dec-13 | Graitec Innovation | Structural building construction CAD | n/a | n/a | \$88.1 | n/a | n/a |
| | | Nov-13 | Virtual Shape | Automotive modeling & design | n/a | n/a | n/a | n/a | n/a |
| | | Oct-13 | for-each | Software focused on mobile development | n/a | n/a | n/a | n/a | n/a |
| | | Aug-13 | Betech Systems | Bridge span analysis | n/a | n/a | n/a | n/a | n/a |
| | | Aug-13 | Savoy Computing | Transportation path analysis | n/a | n/a | n/a | n/a | n/a |
| | | May-13 | Tinkercad | Cloud-based 3D design tools | n/a | n/a | n/a | n/a | n/a |
| | | Mar-13 | Firehole Technologies | Composite materials design | n/a | n/a | \$10.0 | n/a | n/a |
| | | Jan-13 | Allpoint | 3D data processing | n/a | n/a | n/a | n/a | n/a |
| | | Jan-13 | PI-VR | Automotive visualization | n/a | n/a | \$49.3 | n/a | n/a |
| | | Oct-12 | Qontext | Enterprise social collaboration | n/a | n/a | \$26.0 | n/a | n/a |
| | | Oct-12 | HSMWorks | Computer aided manufacturing | n/a | n/a | n/a | n/a | n/a |
| | | Aug-12 | Inforbix | Product data searching | n/a | n/a | n/a | n/a | n/a |
| | | Aug-12 | Exotic Matter | 3D fluid solver and dynamics framework | n/a | n/a | n/a | n/a | n/a |
| | | Jul-12 | Socialcam | Video data capture | n/a | n/a | \$60.0 | n/a | n/a |
| | | Jun-12 | Vela Systems | Construction field software | n/a | n/a | \$76.0 | n/a | n/a |
| | | Dec-11 | T-Splines | Surface modeling software | n/a | n/a | n/a | n/a | n/a |
| | | Dec-11 | Horizontal Systems | BIM platform | n/a | n/a | n/a | n/a | n/a |
| | | Nov-11 | GRIP Entertainment | Artificial intelligence games | n/a | n/a | n/a | n/a | n/a |
| | | Oct-11 | Micro Application | CAD/CAM for fabrication & construction | n/a | n/a | \$23.0 | n/a | n/a |
| | | Aug-11 | Numenus | High-end visualization | n/a | n/a | n/a | n/a | n/a |
| | | Aug-11 | Darwin Dimensions | 3D character modeling | n/a | n/a | n/a | n/a | n/a |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | Transaction Statistics | | | |
|-----------|--------------------|------------------|--------|-----------------|--|------------------------|------------------|------------|--------------------------------|
| | | Date | Target | Description | | Estimated Revenue | Estimated EBITDA | Deal Value | Deal Value / Estimated Revenue |
| Altair | Gamma Technologies | | | | | | | | |
| | | | | | | | | | |
| Altium | Hexagon | | | | | | | | |
| | | | | | | | | | |
| Ansys | Jama Software | | | | | | | | |
| | | | | | | | | | |
| Aras | PTC | | | | | | | | |
| | | | | | | | | | |
| Autodesk | Revalize | | | | | | | | |
| | | | | | | | | | |
| Bentley | Siemens | | | | | | | | |
| | | | | | | | | | |
| Cadence | Synopsys | | | | | | | | |
| | | | | | | | | | |
| Dassault | Zuken | | | | | | | | |
| | | | | | | | | | |
| ESI Group | | | | | | | | | |
| | | | | | | | | | |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | |
|-----------|--------------------|------------------|-------------------------------|--|---|--------|------------------------|----------------------------------|------------------|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Revenue / Estimated Revenue | Estimated EBITDA |
| Altair | Gamma Technologies | Bentley | | | Total Disclosed M&A Deal Value: \$1.8 Billion | | | | |
| Altium | Hexagon | Apr-21 | Inro Consultants | Mobility simulation and modeling for transport sector | n/a | n/a | n/a | n/a | n/a |
| | | Feb-21 | E7 | Field-based construction delivery solutions | n/a | n/a | n/a | n/a | n/a |
| | | Jul-20 | Cohesive Solutions | IBM Maximo reseller | n/a | n/a | n/a | n/a | n/a |
| | | Jun-20 | Notevault | Voice-based field automation application | n/a | n/a | n/a | n/a | n/a |
| | | Mar-20 | GroupBC | Document and information management tools | n/a | n/a | n/a | n/a | n/a |
| | | Oct-19 | Citilabs | Mobile analytics platform | n/a | n/a | n/a | n/a | n/a |
| Ansys | Jama Software | Oct-19 | Orbit GeoSpatial Technologies | Geospatial 3D mapping software | n/a | n/a | n/a | n/a | n/a |
| | | May-19 | Keynetix | Geotechnical data management software | n/a | n/a | n/a | n/a | n/a |
| | | Feb-19 | SignCAD Systems | Traffic sign design software | n/a | n/a | n/a | n/a | n/a |
| | | Nov-18 | Alworx | Machine learning & IoT technologies | n/a | n/a | n/a | n/a | n/a |
| | | Oct-18 | Agency9 | Advanced digital twin modelling | n/a | n/a | n/a | n/a | n/a |
| | | Oct-18 | Legion | Pedestrian simulation software | n/a | n/a | n/a | n/a | n/a |
| Aras | PTC | Jun-18 | Synchro Software | 4D building information modelling | n/a | n/a | n/a | n/a | n/a |
| | | Apr-18 | Plaxis | Geotechnical software tools | n/a | n/a | n/a | n/a | n/a |
| | | Apr-18 | SoilVision Systems | Software database for geotechnical engineers | n/a | n/a | n/a | n/a | n/a |
| | | Jan-18 | S-Cube Futuretech | Structural engineering management tools | n/a | n/a | n/a | n/a | n/a |
| | | Oct-17 | ACTION Modulers | Water Modeling Software Business | n/a | n/a | n/a | n/a | n/a |
| | | Nov-16 | Comply Serve | Infrastructure compliance management | n/a | n/a | n/a | n/a | n/a |
| Autodesk | Revalize | Sep-15 | E-On Software | 3D system simulation | n/a | n/a | n/a | n/a | n/a |
| | | Mar-15 | EADOC | Construction project management software | n/a | n/a | n/a | n/a | n/a |
| | | Feb-15 | Acute3D | High-resolution 3D modelling | n/a | n/a | n/a | n/a | n/a |
| | | Jan-15 | C3 Global | Asset performance improvement applications | n/a | n/a | n/a | n/a | n/a |
| | | Sep-14 | BLUERIDGE Analytics | 3D civil / site design software | n/a | n/a | n/a | n/a | n/a |
| | | Nov-13 | Engineering Systems | Structural analysis & design software | n/a | n/a | n/a | n/a | n/a |
| Bentley | Siemens | Nov-12 | EuResearch | Software for pressure vessels & exchangers | n/a | n/a | n/a | n/a | n/a |
| | | Sep-12 | IVARA Corporation | Asset performance management software | n/a | n/a | n/a | n/a | n/a |
| | | May-12 | InspectTech Systems | Mobile inspection & asset management solutions | n/a | n/a | n/a | n/a | n/a |
| | | Mar-12 | Hannappel Software | CAD software for electrical installations | n/a | n/a | n/a | n/a | n/a |
| | | Nov-11 | Pointtools | Point cloud conversion applications and plug-ins | n/a | n/a | n/a | n/a | n/a |
| | | Nov-11 | Formation Design Systems | 3D modelling & analysis software | n/a | n/a | n/a | n/a | n/a |
| Cadence | Synopsys | Mar-11 | Engineering Dynamics | Offshore simulation software | n/a | n/a | n/a | n/a | n/a |
| | | Jul-10 | BLUERIDGE Analytics | 3D civil / site design software | n/a | n/a | n/a | n/a | n/a |
| | | Feb-10 | Enterprise Informatics | Document and records management software | n/a | n/a | n/a | n/a | n/a |
| | | Feb-10 | Exor Corporation | Infrastructure asset management software | n/a | n/a | n/a | n/a | n/a |
| | | Oct-09 | gINT Software | Environmental and geotechnical software | n/a | n/a | n/a | n/a | n/a |
| | | Cadence Design | | | Total Disclosed M&A Deal Value: \$4.4 Billion | | | | |
| Dassault | Zuken | Jan-23 | Utitec, Inc. | Manufacturer specializing in miniature medical device & components | n/a | n/a | n/a | n/a | n/a |
| | | Nov-22 | Antrim Design Systems | Analog design software | n/a | n/a | n/a | n/a | n/a |
| | | Aug-22 | OpenEye Scientific Software | Computational molecular design | \$40.0 | n/a | \$474.5 | 11.86x | n/a |
| | | Jul-22 | Future Facilities | Simulation software for data center design | n/a | n/a | \$100.1 | n/a | n/a |
| | | Nov-21 | Verifytyer | Automatic debugger platform for software & hardware failure | n/a | n/a | n/a | n/a | n/a |
| | | Apr-21 | Pointwise | Mesh generation software | n/a | n/a | \$31.4 | n/a | n/a |
| ESI Group | | Jan-21 | NUMECA | Computational fluid dynamics software | n/a | n/a | \$198.8 | n/a | n/a |
| | | Aug-20 | InspectAR | Augmented reality platform for circuit board mfgs. | n/a | n/a | n/a | n/a | n/a |
| | | Feb-20 | Integrand Software | RF solution for analysis and abstraction based | n/a | n/a | n/a | n/a | n/a |
| | | Jan-20 | AWR Corp | Electronic design automation software | n/a | n/a | \$160.0 | n/a | n/a |
| | | Nov-17 | nusemi | Communications IP Developer | n/a | n/a | n/a | n/a | n/a |
| | | Jul-16 | Rocketick | Chip verification software | n/a | n/a | \$38.0 | n/a | n/a |
| | | Jan-16 | Sibridge Technologies | Media software designer | n/a | n/a | n/a | n/a | n/a |
| | | Jun-14 | Jasper Design Automation | Electronic design automation technology | n/a | n/a | \$139.4 | n/a | n/a |
| | | Feb-14 | Forte Design Systems | Semiconductor design software | n/a | n/a | n/a | n/a | n/a |
| | | Feb-14 | TranSwitch | Intellectual Property Service | n/a | n/a | n/a | n/a | n/a |
| | | Jun-13 | Evatronix | Mixed signal intellectual property developer | n/a | n/a | n/a | n/a | n/a |
| | | May-13 | Cosmic Circuits | Silicon based IP cores manufacturer | n/a | n/a | \$48.0 | n/a | n/a |
| | | Apr-13 | Tensilica | Provider of controllers, CPU, and specialty DSP processor cores | n/a | n/a | \$326.0 | n/a | n/a |

Source: Pitchbook, Capital IQ, corporate websites, press releases

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | Transaction Statistics | | |
|-----------|--------------------|------------------|---------------------------|--|---------|------------------------|------------|--------------------------------|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Estimated Revenue |
| Altair | Gamma Technologies | | | | | | | |
| Altium | Hexagon | Jul-12 | Sigrity | Signal and power integration technology provider | n/a | n/a | \$78.5 | n/a |
| | | Jul-11 | Azuro | Electronic design automation software | n/a | n/a | n/a | n/a |
| | | May-11 | Altos Design Automation | Electronic data automation service | n/a | n/a | n/a | n/a |
| | | Jun-10 | Denali Software | Electronic design automation software | \$41.9 | n/a | \$309.4 | 7.39x |
| | | Mar-10 | Taray | Computer system designer | n/a | n/a | n/a | n/a |
| Ansys | Jama Software | Mar-08 | Chip Estimate | Integrated circuit prediction technology | n/a | n/a | n/a | n/a |
| | | Aug-07 | Clear Shape Technologies | DFM software | n/a | n/a | \$41.3 | n/a |
| | | Jul-07 | Invarium | Advanced layout print service | n/a | n/a | n/a | n/a |
| | | Jan-06 | CommandCAD | Integrated circuits layout optimization | n/a | n/a | \$25.8 | n/a |
| | | Apr-05 | Verisity | Verification process automation | \$58.0 | (\$5.6) | \$325.4 | 5.61x |
| Aras | PTC | Apr-04 | Neolinear | Analog silicon design software | n/a | n/a | \$78.1 | n/a |
| | | Jan-04 | Q Design Automation | Integrated circuit layout provider | n/a | n/a | n/a | n/a |
| | | Aug-03 | Verplex Systems | Functional verification software | n/a | n/a | \$85.1 | n/a |
| | | May-03 | K2 Technologies | Semiconductor design software | n/a | n/a | n/a | n/a |
| | | Apr-03 | Get2Chip | Architectural platform for chip manufactures and IP Provider | n/a | n/a | n/a | n/a |
| Autodesk | Revalize | Mar-03 | SpinCircuit | B2B e-commerce portal operator | n/a | n/a | n/a | n/a |
| | | Jan-03 | Celestry | Physical design software | n/a | n/a | \$64.4 | n/a |
| | | Nov-02 | Antrim Design Systems | Analog design software | n/a | n/a | n/a | n/a |
| | | Jun-02 | Simplex Solutions | Electronic chip design and verification software | n/a | n/a | \$329.7 | n/a |
| | | Apr-02 | Plato Design Systems | Routing and physical design optimization solution | n/a | n/a | \$75.0 | n/a |
| Bentley | Siemens | Dec-01 | Silicon Perspective | Electronic design automation software | n/a | n/a | n/a | n/a |
| | | Feb-01 | CadMos Design Technology | Noise analysis products | n/a | n/a | \$105.3 | n/a |
| | | Mar-00 | Westport Technology | IP Development Services | n/a | n/a | \$3.5 | n/a |
| | | Dec-99 | Diablo Research Company | High tech product development services | n/a | n/a | \$80.8 | n/a |
| | | Jul-99 | OrCAD | Electronic design software | \$11.6 | \$17.2 | \$122.2 | 10.55x |
| Cadence | Synopsys | May-99 | Quickturn Design Systems | Level verification solutions | n/a | n/a | \$253.0 | n/a |
| | | Sep-98 | Ambit Design Systems | EDA software for electronic design | n/a | n/a | \$255.0 | n/a |
| | | May-97 | Cooper & Chyan Technology | Semiconductor designer | n/a | n/a | \$422.0 | n/a |
| | | Dec-91 | Valid Logic | CAD Equipment Manufacturer | n/a | n/a | \$200.0 | n/a |
| | | Oct-89 | Gateway Design Automation | CAE Software | n/a | n/a | n/a | n/a |
| Dassault | Zuken | | | | | | | |
| | | Oct-22 | StyleSage | Image recognition & retail analytics platform | n/a | n/a | n/a | n/a |
| | | Sep-22 | Diota | Assembly assistance & quality control software | n/a | n/a | n/a | n/a |
| | | Jul-22 | Wave Six | Noise simulation & vibration analysis software for aerospace | n/a | n/a | n/a | n/a |
| | | Nov-21 | Armonica Retail | Cloud retail planning software | n/a | n/a | n/a | n/a |
| ESI Group | | Jul-21 | Iterop | Business process management software | n/a | n/a | n/a | n/a |
| | | Nov-20 | NuoDB | Cloud-based SQL database platform | \$6.0 | n/a | n/a | n/a |
| | | Jul-20 | Proxem | Big data semantic analysis | n/a | n/a | n/a | n/a |
| | | Jun-19 | Medidata Solutions | Cloud-based solutions for clinical development | \$661.0 | \$85.4 | \$5,763.8 | 8.72x |
| | | Mar-19 | Argosim | System requirements validation software | n/a | n/a | n/a | n/a |
| | | Feb-19 | Trace Software (Assets) | Electrical design and automation software | n/a | n/a | n/a | n/a |
| | | Dec-18 | IQMS | Mid-market manufacturing ERP / MES | \$56.0 | n/a | \$425.0 | 7.59x |
| | | Jun-18 | Centric Software | Lifecycle management software | \$61.0 | n/a | n/a | n/a |
| | | Oct-17 | No Magic | Model-based systems for engineering design | n/a | n/a | n/a | n/a |
| | | Sep-17 | Exa Corporation | Simulation software for vehicle manufacturers | \$72.7 | \$1.5 | \$400.3 | 5.51x |
| | | Jun-17 | Outscale | Cloud security and operations management | n/a | n/a | n/a | n/a |
| | | Jun-17 | AITAC | Marine and offshore engineering software | n/a | n/a | n/a | n/a |
| | | Dec-16 | Xflow CFD | Dynamic fluid flow simulation | n/a | n/a | n/a | n/a |
| | | Jul-16 | Computer Simulation | Multiphysics simulation | \$51.2 | n/a | \$247.3 | 4.83x |
| | | Jun-16 | Ortems | Production scheduling and dispatching | \$5.4 | n/a | n/a | n/a |
| | | Apr-16 | 3DPLM Software | Product development and QA | n/a | n/a | n/a | n/a |
| | | Apr-15 | Modelon | Transportation & mobility modeling | n/a | n/a | n/a | n/a |
| | | Sep-14 | Quintiq | Production, logistics, and workforce | \$97.6 | n/a | \$322.7 | 3.31x |
| | | Jul-14 | Simpack | Multi-body industrial simulation | n/a | n/a | n/a | n/a |
| | | Jan-14 | Accelrys | Process discovery & simulation | \$168.5 | (\$2.2) | \$750.0 | 4.45x |

Source: Pitchbook, Capital IQ, corporate websites, press releases

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | | |
|--------------------|--------------------|-------------------|------------------------------|---|---------|----------|-------------------------------------|----------------------|--|--|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Revenue | Estimated EBITDA | |
| Altair | Gamma Technologies | Dassault Systemes | | | | | | | Total Disclosed M&A Deal Value: \$11.0 Billion | |
| Altium | Hexagon | Dec-13 | RTT | 3D visualization technology | \$111.1 | \$9.0 | \$274.1 | 2.47x | n/m | |
| | | Sep-13 | Safety Technology | Product durability simulation | n/a | n/a | \$1.0 | n/a | n/a | |
| | | Jul-13 | SFE | Transportation & mobility modeling | n/a | n/a | n/a | n/a | n/a | |
| | | Jul-13 | Apriso | Manufacturing operations execution | n/a | n/a | \$205.0 | n/a | n/a | |
| | | Apr-13 | Archivideo | 3D images & maps | n/a | n/a | n/a | n/a | n/a | |
| Ansys | Jama Software | Apr-13 | Fe-Design | Non-parametric optimization | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-13 | Simpoe | Plastic injection-molding simulation | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-13 | SquareClock | 3D space planning | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-12 | Tuscany Design Automation | Visualization services for circuit design | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-12 | Pinpoint | Semiconductor design collaboration | n/a | n/a | n/a | n/a | n/a | |
| Aras | PTC | Jul-12 | Gemcom | Supply chain planning and optimization | \$80.4 | n/a | \$354.9 | 4.41x | n/a | |
| | | Feb-12 | Netvibes | Personalized dashboard publishing | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-11 | Elsys | Electrical engineering schematics | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-11 | Simulayt | Draping simulation technology | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-11 | Enginuity PLM | Chemical product development | n/a | n/a | n/a | n/a | n/a | |
| Autodesk | Revalize | Mar-11 | Intercim | Supply chain operations management | n/a | n/a | \$36.5 | n/a | n/a | |
| | | Oct-10 | Inceptra LLC | Product lifecycle management solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-10 | Geensoft | Embedded systems development | n/a | n/a | \$6.7 | n/a | n/a | |
| | | Jun-10 | Exalead | Unified search platform | n/a | n/a | \$164.9 | n/a | n/a | |
| | | Apr-10 | IBM (PLM) | PLM sales & support operations | n/a | n/a | \$600.0 | n/a | n/a | |
| Bentley | Siemens | Jul-08 | Engineous | Process integration & design software | n/a | n/a | \$40.0 | n/a | n/a | |
| | | Jan-08 | Deneb Robotics | Multi-computer manufacturing CAD | n/a | n/a | \$105.0 | n/a | n/a | |
| | | Sep-07 | Seemage | Automotive & aerospace ALM | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-07 | ICEM | Automotive & industrial visualization | n/a | n/a | \$108.2 | n/a | n/a | |
| | | May-06 | MatrixOne | Collaborative PLM | \$135.5 | (\$18.2) | \$410.0 | 3.03x | n/m | |
| Cadence | Synopsys | Oct-05 | Abaqus | Advanced finite element analysis | \$100.0 | n/a | \$413.0 | 4.13x | n/a | |
| | | Jul-05 | Virtools | 3D application development | \$3.1 | n/a | \$14.5 | 4.63x | n/a | |
| | | Nov-00 | Spatial | Data translation and visualization technology | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-00 | SRAC | CAD analysis programs | n/a | n/a | \$22.0 | n/a | n/a | |
| | | Jul-97 | Solidworks | Mechanical design software | n/a | n/a | \$325.0 | n/a | n/a | |
| Dassault | Zuken | ESI Group | | | | | | | Total Disclosed M&A Deal Value: \$35.7 Million | |
| | | Feb-17 | Scilab Enterprises | Numerical computation platform | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-16 | Correct Checks | Background screening services | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-16 | Mineset | Technological data management | n/a | n/a | \$4.7 | n/a | n/a | |
| | | Jan-16 | ITI | Simulation tools & software | n/a | n/a | \$19.3 | n/a | n/a | |
| ESI Group | | May-15 | Amoeba Technologies | Cooling simulation & design optimization | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-15 | Ciespace | Web-based CAE modeling solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-15 | Picviz Labs | Data mining & cybersecurity services | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-15 | Civitec | Embedded perception system design | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-14 | Cam Mechanical Solutions | Technical assistance services | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-13 | CyDesign Labs | Modelling systems for engineers | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-12 | OpenCFD | Open source CFD software package | n/a | n/a | \$3.1 | n/a | n/a | |
| | | Dec-11 | Efield | Integrated modelling & simulation environments | \$0.5 | n/a | n/a | n/a | n/a | |
| | | Aug-11 | ICIDO | Virtual reality engineering solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-11 | Comet Technology | Vibro-acoustic simulation software | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-08 | Mindware Engineering | Engineering & customized software services | \$5.6 | n/a | \$5.6 | 1.00x | n/a | |
| | | Dec-08 | Vdot | Project management & execution platform | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-06 | ATE Technology International | Contract for difference (CFD) product distributor | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-02 | Vibro-Acoustic Sciences | Digital high-frequency noise simulation software | n/a | n/a | \$3.0 | n/a | n/a | |
| | | Aug-01 | Liquid Process Performance | Materials & composites simulation software | n/a | n/a | n/a | n/a | n/a | |
| Gamma Technologies | | | | | | | Total Disclosed M&A Deal Value: n/a | | | |
| | | Nov-21 | Exothermia | Exhaust systems simulation software | n/a | n/a | n/a | n/a | n/a | |
| | | Jul-21 | Power Forge | Electrical engineering software | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-18 | AutoLion | Lithium-ion battery simulation software | n/a | n/a | n/a | n/a | n/a | |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | | |
|----------|--------------------|--|---------------------------------|--|---------|------------------|------------------------|--------------------------------|--------|--|
| | | Date | Target | Description | Revenue | Estimated EBITDA | Deal Value | Deal Value / Estimated Revenue | EBITDA | |
| | | HexagonTotal Disclosed M&A Deal Value: \$8.8 Billion | | | | | | | | |
| Altair | Gamma Technologies | Jan-23 | Projectmates | Construction program management software | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-22 | Qognify | Enterprise incident management platform | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-22 | LocLab Consulting | Digital twin system for modeling & analyzing operational scenarios | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-22 | Avvir | Automated construction verification and progress monitoring | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-22 | iConstruct | Building information modeling (BIM) software | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-22 | Innovatia Accelerator | Knowledge management system | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-22 | ETQ | Manufacturing quality control data | \$75.0 | n/a | \$1,200.0 | 16.00x | n/a | |
| | | Jan-22 | Minnovare | Industrial drilling technology and software | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-21 | Infor Global Solutions | Enterprise asset management software | n/a | n/a | \$2,820.0 | n/a | n/a | |
| Altium | Hexagon | Sep-21 | Jovix | Material tracking software | n/a | n/a | n/a | n/a | n/a | |
| | | Jul-21 | Immersal | Spatial mapping and visual positioning solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-21 | CADLM | Engineering design software | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-20 | OxBlue | High resolution contruction camera systems | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-20 | PAS Global | Process safety & cybersecurity | \$39.8 | n/a | n/a | n/a | n/a | |
| | | Oct-20 | DP Technology | CAM software for CNC machine tools | \$39.2 | n/a | n/a | n/a | n/a | |
| | | Jul-20 | Tacticaware | LIDAR-based 3D surveillance software | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-20 | CAEfatigue | Mechanical fatigue simulation solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-20 | Romax Technology | Electromechanical drivetrain design and simulation services | \$30.4 | n/a | n/a | n/a | n/a | |
| Ansys | Jama Software | Jan-20 | COWI | Mapping and geospatial data services | \$15.8 | n/a | n/a | n/a | n/a | |
| | | Jan-20 | Blast Movement | Blast movement monitoring technology | \$21.4 | n/a | n/a | n/a | n/a | |
| | | Jan-20 | Geopraevent | Sensors and measuring technologies for navigating natural hazards | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-20 | Volume Graphics | Software for testing industrial computed tomograph | \$29.3 | n/a | n/a | n/a | n/a | |
| | | Jun-19 | AMendate | Generative design for additive manufacturing | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-19 | Thermopylae | Govt. & defense geospatial applications | \$48.0 | n/a | n/a | n/a | n/a | |
| | | Jan-19 | j5 International | Operational risk management software | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-19 | Etalon | Machine / equipment calibration solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-18 | Bricsys | CAD software for AEC market | \$14.7 | \$1.5 | n/a | n/a | n/a | |
| Aras | PTC | Sep-18 | External-Array Software | Metrology software for CMM manufacturers | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-18 | Geocloud (Assets) | Ski slope infrastructure measurement | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-18 | SPRING Technologies | Machine tool simulation & verification software | \$9.5 | \$0.4 | n/a | n/a | n/a | |
| | | Jun-18 | AutonomouStuff | Integrated autonomous vehicle solutions | \$45.0 | n/a | n/a | n/a | n/a | |
| | | May-18 | Nextsense | Non-contact profile measurement & inspection | \$13.5 | n/a | n/a | n/a | n/a | |
| | | Apr-18 | Licom Systems | German distributor of Alphacam CAM software | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-18 | ProCAM Group | Italian distributor of Vero Software | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-18 | AGTEK | Construction project modeling software | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-18 | Plant Design Solutions | Distributor of CADWorx & Analysis software | n/a | n/a | n/a | n/a | n/a | |
| Autodesk | Revalize | Jan-18 | Industrial Business Solutions | Digital project completion & commissioning | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-17 | Luciad | Real-time geospatial information visualization | \$21.7 | n/a | n/a | n/a | n/a | |
| | | Jun-17 | InfraMeasure | Laser-based rail measurement system | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-17 | DST Computer Services | Pipe stress analysis software | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-17 | FASys Industrie | System integration specialist for production tasks | n/a | n/a | n/a | n/a | n/a | |
| | | May-17 | VIRES | Driver-assisted & autonomous simulation | n/a | n/a | n/a | n/a | n/a | |
| | | May-17 | Catavolt | Mobile app development & edge computing | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-17 | MSC Software | Computer aided engineering software | \$230.0 | n/a | \$834.0 | 3.63x | n/a | |
| | | Jan-17 | MiPlan Consulting | Mobile mine production management software | n/a | n/a | n/a | n/a | n/a | |
| Bentley | Siemens | Sep-16 | GISquadrat | Location-based geospatial software | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-16 | Apodius | Composite component measurement solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-16 | Multivista | Construction visual documentation services | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-16 | p3d systems | Laser scanning system & 3D modeling software | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-16 | Ingegneria dei Sistemi (Assets) | Radar solutions for structural health monitoring | \$20.0 | n/a | n/a | n/a | n/a | |
| | | Jun-16 | Nestix | Prefabrication and production control software | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-16 | AICON 3D Systems | Industrial 3D optical measuring systems | \$21.1 | \$1.8 | n/a | n/a | n/a | |
| | | Mar-16 | Forming Technologies (FTI) | Manufacturing software for sheet metal forming | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-16 | M&P Survey Equipment | Surveying equipment & construction lasers | n/a | n/a | n/a | n/a | n/a | |
| Cadence | Synopsys | Feb-16 | Sigma Space | Optoelectronic aerospace instrumentation | \$25.0 | n/a | n/a | n/a | n/a | |
| | | Jan-16 | SCCS | Provider of survey equipment for Leica | \$15.0 | \$7.8 | n/a | n/a | n/a | |
| | | ESL Group | | | | | | | | |

Source: Pitchbook, Capital IQ, corporate websites, press releases

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | |
|-----------|--------------------|---|---------------------------------|--|---------|--------|------------------------|--------------------------------|--------|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Estimated Revenue | EBITDA |
| Altair | Gamma Technologies | | | | | | | | |
| | | Hexagon | | | | | | | |
| | | Total Disclosed M&A Deal Value: \$8.8 Billion | | | | | | | |
| Altium | Hexagon | Apr-15 | Q-Das | Statistical process control (SPC) services | n/a | n/a | n/a | n/a | n/a |
| | | Jul-14 | Vero Software | CAD/CAM software | \$106.2 | n/a | n/a | n/a | n/a |
| | | Jul-14 | Geodata Diffusion | Real time kinematic correction services | \$4.0 | \$1.8 | n/a | n/a | n/a |
| | | Jun-14 | North West Geomatics | Digital remote sensing/aerial photography | \$13.5 | n/a | n/a | n/a | n/a |
| | | Jun-14 | iLab Sistemas | Planning/optimization for agro-businesses | n/a | n/a | n/a | n/a | n/a |
| Ansys | Jama Software | Jun-14 | Mintec | Software services for mining industry | n/a | n/a | n/a | n/a | n/a |
| | | Apr-14 | Arvus Tecnologia | Software services for agro businesses | n/a | n/a | n/a | n/a | n/a |
| | | Mar-14 | Veripos | Satellite position software/hardware/services | \$44.0 | \$15.8 | n/a | n/a | n/a |
| | | Mar-14 | SAFEmine | Traffic safety products and services | \$17.2 | n/a | n/a | n/a | n/a |
| | | Feb-14 | Aibotix | Manufacturer of flying robots | n/a | n/a | n/a | n/a | n/a |
| | | Dec-13 | Pixis | Provider of digital engineering services | n/a | n/a | n/a | n/a | n/a |
| | | Oct-13 | Devex Tecnologia e Sistemas | Mine-management software services | n/a | n/a | n/a | n/a | n/a |
| | | Jun-13 | Geosoft | Software for cartography/photogrammetry | n/a | n/a | n/a | n/a | n/a |
| | | May-13 | Navgeokom | Surveying and mapping products | n/a | n/a | n/a | n/a | n/a |
| | | Apr-13 | Manfra & Companhia | Topography software systems | \$9.2 | n/a | n/a | n/a | n/a |
| Aras | PTC | Jan-13 | LISTECH | Developer of construction software | n/a | n/a | n/a | n/a | n/a |
| | | Jan-13 | New River Kinematics | 3D analysis software for metrology application | \$13.3 | n/a | n/a | n/a | n/a |
| | | Dec-12 | GTA Geoinformatik | Provider of 3D city mapping technologies | n/a | n/a | n/a | n/a | n/a |
| | | Jan-12 | Microsurvey Software | Developer of surveying and mapping software | \$2.6 | n/a | n/a | n/a | n/a |
| | | Aug-11 | Sisgraph | Supplier of engineering and geospatial software | \$14.3 | n/a | n/a | n/a | n/a |
| | | Jul-10 | Intergraph | Engineering and geospatial software | n/a | n/a | \$2,130.0 | n/a | n/a |
| | | Dec-09 | MYCRONA | Manufacturer of multi-sensor machines | n/a | n/a | n/a | n/a | n/a |
| | | Oct-09 | Mahr Multisensor | Industrial measuring instruments | n/a | n/a | n/a | n/a | n/a |
| | | Oct-08 | Rinex Technology | Yield mapping tools for agro businesses | \$4.5 | n/a | n/a | n/a | n/a |
| | | Jul-08 | Serein Metrology | Manufacturer of precision measuring equipment | \$4.0 | n/a | n/a | n/a | n/a |
| Autodesk | Revalize | Jun-08 | m&h Group | Manufacturer of machine tool probes | \$13.3 | n/a | n/a | n/a | n/a |
| | | Jun-08 | Messtechnik Wetzlar | Software for quality control of mechanical parts | \$3.3 | n/a | n/a | n/a | n/a |
| | | Jun-08 | Viewserve | Web based fleet management system | \$1.1 | n/a | n/a | n/a | n/a |
| | | Jun-08 | Advanced Metrology Solutions | Distributor of precision metrology products | \$4.5 | n/a | n/a | n/a | n/a |
| | | Feb-08 | Santiago & Cintra | Positioning applications for construction/agro | \$20.7 | n/a | n/a | n/a | n/a |
| Bentley | Siemens | Feb-08 | Haselbach Surveying Instruments | Distributor and seller of surveying equipment | \$750.0 | n/a | n/a | n/a | n/a |
| | | Feb-08 | Surveyors Service Company | Distributor of surveying equipment | n/a | n/a | n/a | n/a | n/a |
| | | Dec-07 | Leica Geosystems Hungary | Surveying and construction equipment | n/a | n/a | n/a | n/a | n/a |
| | | Nov-07 | NovAtel | Satellite system components | \$76.0 | \$17.8 | \$438.9 | 5.78x | 24.6x |
| | | Nov-07 | Junglas | Construction and machine control equipment | n/a | n/a | n/a | n/a | n/a |
| Cadence | Synopsys | Nov-07 | Rudolf & August Rost Vertriebs | Surveying and construction equipment | n/a | n/a | n/a | n/a | n/a |
| | | Nov-07 | Elcome Technologies | GPS and navigation surveying services | \$14.8 | n/a | n/a | n/a | n/a |
| | | Sep-07 | CogniTens | 3D non-contact measurement systems | \$8.0 | n/a | \$20.0 | 2.50x | n/a |
| | | Jul-07 | Jingjiang Measuring Tools | Manufacturer of linear measuring tools | \$10.9 | n/a | n/a | n/a | n/a |
| | | Jun-07 | IONIC Software | Software for geospatial information systems | \$12.6 | n/a | n/a | n/a | n/a |
| | | May-07 | Transmetal | Distributor of metrology products | \$5.4 | n/a | n/a | n/a | n/a |
| | | May-07 | Jigsaw Technologies | GPS-based machine automation software | \$9.0 | n/a | n/a | n/a | n/a |
| | | May-07 | GAMFI International | Construction laser tools and instruments | \$1.5 | n/a | n/a | n/a | n/a |
| | | May-07 | D&P Systems | Developer of multidimensional systems | n/a | n/a | n/a | n/a | n/a |
| | | May-07 | Allen Precision Equipment | Surveying and construction products | \$24.0 | n/a | n/a | n/a | n/a |
| Dassault | Zuken | Apr-07 | Topolaser System | Distributor of survey equipment | n/a | n/a | n/a | n/a | n/a |
| | | Apr-07 | Acquis | Data editing and management software | \$3.0 | n/a | n/a | n/a | n/a |
| | | Jan-07 | Svensk ByggnadsGeodesi | Software systems for measuring and planning | \$6.8 | \$0.8 | n/a | n/a | n/a |
| | | Jan-07 | Willi Geßwein | Manufacturer of surveying instruments | \$1.3 | n/a | n/a | n/a | n/a |
| | | Oct-05 | Leica Geosystems | Surveying and mapping equipment | n/a | n/a | \$1,140.0 | n/a | n/a |
| ESI Group | | May-02 | Newport | Metrological tools and technology | n/a | n/a | n/a | n/a | n/a |
| | | May-01 | Brown & Sharpe | Manufacturer of metrological tools | n/a | n/a | \$170.0 | n/a | n/a |
| | | Jama Software | | | | | | | |
| | | Total Disclosed M&A Deal Value: n/a | | | | | | | |
| | | Jan-18 | Notion Data | Product development intelligence | n/a | n/a | n/a | n/a | n/a |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | | |
|-----------|--------------------|------------------|------------------------|--|---------|--------|------------------------|----------------------|---|--|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Revenue | Estimated EBITDA | |
| Altair | Gamma Technologies | PTC | | | | | | | Total Disclosed M&A Deal Value: \$5.0 Billion | |
| Altium | Hexagon | Jan-23 | ServiceMax | Asset-centric field service management software | \$171.0 | n/a | \$1,460.0 | 8.54x | n/a | |
| | | Sep-22 | CloudMilling | CAM software | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-22 | Inland Software | Application lifecycle management platform | n/a | n/a | \$278.1 | n/a | n/a | |
| | | Jan-22 | RE'FLEKT | Interactive VR technology | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-20 | Arena Solutions | Cloud-based PLM platform | \$50.0 | n/a | \$715.0 | 14.30x | n/a | |
| Ansys | Jama Software | Sep-20 | ioxp | Augmented reality content creation software | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-19 | Onshape | Cloud-based 3D CAD platform | n/a | n/a | \$470.0 | n/a | n/a | |
| | | Jun-19 | TWNKLS | Augmented reality solutions & services | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-19 | Factora Solutions | Manufacturing execution & operations mgmt. | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-18 | Frustum | Topology optimization & generative design | n/a | n/a | \$69.6 | n/a | n/a | |
| Aras | PTC | Feb-18 | Waypoint Labs | Augmented reality for frontline workers | \$20.0 | n/a | n/a | n/a | n/a | |
| | | Jan-16 | Kepware | Manufacturing device connectivity | \$20.0 | n/a | \$118.0 | 5.90x | n/a | |
| | | Nov-15 | Vuforia | Vision-based AR platform | n/a | n/a | \$64.8 | n/a | n/a | |
| | | May-15 | ColdLight Solutions | Machine learning predictive analytics | \$7.1 | n/a | \$103.8 | 14.56x | n/a | |
| | | Jan-15 | Caugmate | Augmented reality technologies services | n/a | n/a | n/a | n/a | n/a | |
| Autodesk | Revalize | Jul-14 | ITA Holdings | Sensor connectivity | n/a | n/a | \$170.0 | n/a | n/a | |
| | | Jul-14 | Atego | Model-based systems applications | \$20.0 | n/a | \$49.3 | 2.47x | n/a | |
| | | Dec-13 | ThingWorx | IoT platform for machines | \$6.0 | n/a | \$130.0 | 21.67x | n/a | |
| | | Sep-13 | NetIDEAS | Product development and PLM | \$1.0 | n/a | \$20.0 | 20.00x | n/a | |
| | | Jul-13 | Enigma | Manufacturing content management | n/a | n/a | \$10.0 | n/a | n/a | |
| Bentley | Siemens | Oct-12 | Servigistics | Strategic service management | \$80.0 | n/a | \$220.0 | 2.75x | n/a | |
| | | Sep-11 | 4CS | Warranty lifecycle management | n/a | n/a | \$14.9 | n/a | n/a | |
| | | Jan-11 | Mortice Kern Systems | Configuration management software | \$67.9 | \$10.1 | \$304.0 | 4.48x | n/m | |
| | | Feb-10 | Planet Metrics | Carbon information management | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-09 | Relx | Reliability analysis software | n/a | n/a | \$24.3 | n/a | n/a | |
| Cadence | Synopsys | Feb-09 | Synapsis | Manufacturing supply chain optimization | n/a | n/a | \$7.5 | n/a | n/a | |
| | | Dec-08 | Synapsis Technology | Software applications and consulting services | n/a | n/a | \$7.5 | n/a | n/a | |
| | | Feb-08 | Digital Human | Human simulation model | n/a | n/a | \$1.1 | n/a | n/a | |
| | | Dec-07 | CoCreate Software | Flexible CAD & PLM for electronics | \$78.0 | n/a | \$247.5 | 3.17x | n/a | |
| | | Nov-07 | LBS | Integrated logistics support software | n/a | n/a | n/a | n/a | n/a | |
| Dassault | Zuken | Sep-07 | NetRegulus | Enterprise regulatory management | n/a | n/a | \$2.3 | n/a | n/a | |
| | | May-07 | NC Graphics | High-speed machining and engineering tools | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-06 | Mathsoft | Calculation management | \$24.0 | \$0.9 | \$63.0 | 2.62x | n/m | |
| | | Nov-05 | Cadtrain | E-learning courses for engineers | n/a | n/a | n/a | n/a | n/a | |
| | | Jul-05 | Arbortext | Code authoring & publishing | \$40.0 | n/a | \$190.0 | 4.75x | n/a | |
| ESI Group | | Jun-05 | Aptavis Technologies | Life cycle management software | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-04 | OPIO Design Automation | Electronics design collaboration software | n/a | n/a | \$12.0 | n/a | n/a | |
| | | Mar-99 | Auxilium | Manufacturing collaboration | n/a | n/a | \$79.0 | n/a | n/a | |
| | | Oct-98 | InPart | Industrial 3D CAD | n/a | n/a | \$26.4 | n/a | n/a | |
| | | Aug-95 | Rasna | Design optimization & simulation | \$22.7 | n/a | \$163.4 | 7.19x | n/a | |
| | | Revalize | | | | | | | Total Disclosed M&A Deal Value: n/a | |
| | | Nov-21 | Procad | Product and document lifecycle management (PDM and PLM) platform | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-21 | Tenado | Computer-aided design (CAD) software for 2D and 3D technical drawings | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-21 | Sofon | Uided Selling and configure price quote software | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-21 | Specpage | Product lifecycle management and product data management software | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-21 | Attainia | Capital equipment planning software | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-21 | BCA Technologies | Cloud pricing and quoting software | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-21 | LeadMethod | Channel sales management software | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-21 | MicroD | Website development and digital marketing services | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-21 | Configure One | Configure, price, and quote (CPQ) software | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-21 | FPX | Cloud-based configure-price-quote (CPQ) platform intended for manufacturer | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-18 | Axonon | Cloud-based quoting, ordering and configuration solutions | n/a | n/a | n/a | n/a | n/a | |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | Transaction Statistics | | |
|-----------|--------------------|------------------|----------------------------|--|---|------------------------|------------|--------------------------------|
| | | Date | Target | Description | Revenue | Estimated EBITDA | Deal Value | Deal Value / Estimated Revenue |
| Altair | Gamma Technologies | | | | | | | |
| | | | Siemens | | Total Disclosed M&A Deal Value: \$17.0 Billion | | | |
| | | Dec-22 | Vendigital | Supply chain consulting services | n/a | n/a | n/a | n/a |
| | | Aug-22 | Brightly Software | Operations management software | \$180.0 | n/a | \$1,880.0 | 10.44x |
| | | Jul-22 | Zona Technology | Engineering services for aerospace industry | n/a | n/a | n/a | n/a |
| | | Jul-22 | Innovation Strategies | IT strategy & application development | n/a | n/a | n/a | n/a |
| | | Jul-22 | Radica Software | Electrical CAD software | n/a | n/a | n/a | n/a |
| | | Jun-22 | Senseye | Machine monitoring & diagnostics platform | n/a | n/a | n/a | n/a |
| | | Oct-21 | Wattsense | IoT management software | n/a | n/a | n/a | n/a |
| | | Aug-21 | SupplyFrame | Design-to-source intelligence | n/a | n/a | \$700.0 | n/a |
| | | Aug-21 | Sqills | Freight railway management and maintenance workflow software | n/a | n/a | \$650.4 | n/a |
| | | Jun-21 | Nextflow Software | Computational fluid dynamics simulation software | n/a | n/a | n/a | n/a |
| | | May-21 | Padam Mobility | TAD software to facilitate public transport system | n/a | n/a | n/a | n/a |
| | | Feb-21 | Fourkind | Management consulting and advisory services | n/a | n/a | n/a | n/a |
| | | Nov-20 | Culgi | Computational chemistry software for material simulation | n/a | n/a | n/a | n/a |
| | | Jul-20 | Avatar Integrated Systems | IC place and route software | n/a | n/a | n/a | n/a |
| | | Jun-20 | UltraSoC Technologies | System-on-chip analytics software | n/a | n/a | n/a | n/a |
| | | Jun-20 | Vizendo | Virtual operator training for CAD & PLM systems | n/a | n/a | n/a | n/a |
| | | Jan-20 | C&S Electric | Manufacturer of low voltage products | n/a | n/a | n/a | n/a |
| | | Jan-20 | AIT Goehner | IT consultancy and development service | n/a | n/a | n/a | n/a |
| | | Nov-19 | MultiMechanics | Materials modeling and simulation software | n/a | n/a | n/a | n/a |
| | | Nov-19 | Atlas 3D | 3D printing parts design software | n/a | n/a | n/a | n/a |
| | | Jul-19 | Process Systems Enterprise | Advanced modeling software | n/a | n/a | n/a | n/a |
| | | Jul-19 | Innovation Systems (IST) | Industrial transport planning software | n/a | n/a | n/a | n/a |
| | | Jun-19 | ESTEQ (South Africa) | Developer and distributor of PLM and MOM | n/a | n/a | n/a | n/a |
| | | Jun-19 | Saab Medav (Assets) | NVR testing products and services | n/a | n/a | n/a | n/a |
| | | Dec-18 | Comsa | Wire-harness engineering software | n/a | n/a | n/a | n/a |
| | | Oct-18 | Mendix | Low code application development platform | n/a | n/a | \$579.7 | n/a |
| | | Sep-18 | Lightwork Design | 3D rendering designs and visualization systems | n/a | n/a | n/a | n/a |
| | | Jul-18 | Omativ | Factory optimization system | n/a | n/a | n/a | n/a |
| | | Jun-18 | Comfy | Smart building management software | n/a | n/a | n/a | n/a |
| | | Jun-18 | Austemper Design | Electronic design tools for circuit components | n/a | n/a | n/a | n/a |
| | | Mar-18 | Agilion | Real-time location systems (RTLS) | n/a | n/a | n/a | n/a |
| | | Feb-18 | Sarokal Test Systems | Testing equipment platform for ASIC & FPGA | n/a | n/a | n/a | n/a |
| | | Jan-18 | Milanovic Engineering | Engineering and manufacturing services | n/a | n/a | n/a | n/a |
| | | Dec-17 | Solido Design Automation | Variation-aware design and characterization | n/a | n/a | n/a | n/a |
| | | Oct-17 | Mentor Infolytica | Electromagnetic and thermal analysis | n/a | n/a | n/a | n/a |
| | | Oct-17 | Wi-Tronix | Predictive maintenance for rail services | n/a | n/a | n/a | n/a |
| | | Aug-17 | Tass International | Design and testing software for automotive | n/a | n/a | n/a | n/a |
| | | Mar-17 | Mentor Graphics | Electronic design automation | \$1,282.5 | \$267.2 | \$4,500.0 | 3.51x |
| | | Nov-16 | Conworx Technology | Lab device interfaces | n/a | n/a | n/a | n/a |
| | | Mar-16 | CD-adapco | Specialized simulation based on CFD | \$190.0 | n/a | \$970.0 | 5.11x |
| | | Mar-16 | Neo New Oncology | Medical diagnostic technology | n/a | n/a | n/a | n/a |
| | | Nov-15 | Polarion Software | Application lifecycle management | n/a | n/a | n/a | n/a |
| | | Jul-15 | Zenco Systems | Traffic enforcement technology | n/a | n/a | n/a | n/a |
| | | Mar-15 | AxIT | Order management & logistics | n/a | n/a | n/a | n/a |
| | | Oct-14 | Camstar | Manufacturing execution systems | n/a | n/a | \$160.0 | n/a |
| | | Jan-14 | IBS | Industrial productivity software | n/a | n/a | n/a | n/a |
| | | Dec-13 | TESIS PLMware | Product lifecycle management | n/a | n/a | n/a | n/a |
| | | Jun-13 | Sky Eye | Transport fleet management | n/a | n/a | n/a | n/a |
| | | Jun-13 | Preactor | Manufacturing planning & scheduling | n/a | n/a | n/a | n/a |
| | | May-13 | Invensys Rail | Railway design & system automation | \$1,179.5 | n/a | \$2,660.0 | 2.26x |
| | | Nov-12 | LMS | PLM simulation & testing | \$241.7 | n/a | \$870.0 | 3.60x |
| | | Sep-12 | VRcontext | Visualization technology | n/a | n/a | n/a | n/a |
| | | Jan-12 | eMeter | Energy information management | n/a | n/a | n/a | n/a |
| | | Dec-11 | Vistagy | Specialized engineering environments | \$18.0 | n/a | n/a | n/a |
| | | Aug-11 | Advanced Telemetry | Energy management | n/a | n/a | n/a | n/a |
| | | Oct-09 | Energy4u | Energy IT services | n/a | n/a | n/a | n/a |
| Altium | Hexagon | | | | | | | |
| Ansys | Jama Software | | | | | | | |
| Aras | PTC | | | | | | | |
| Autodesk | Revalize | | | | | | | |
| Bentley | Siemens | | | | | | | |
| Cadence | Synopsys | | | | | | | |
| Dassault | Zuken | | | | | | | |
| ESI Group | | | | | | | | |

Source: Pitchbook, Capital IQ, corporate websites, press releases

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | | |
|-----------|--------------------|--|------------------------------|--|-----------|--------|------------------------|--------------------------------|--------|--|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Estimated Revenue | EBITDA | |
| Altair | Gamma Technologies | Siemens | | | | | | | | |
| | | Total Disclosed M&A Deal Value: \$17.0 Billion | | | | | | | | |
| Altium | Hexagon | Sep-09 | YSNC | Machine engineering | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-09 | Elan Software | Process control software | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-08 | Syncos | Digital manufacturing engineering | n/a | n/a | n/a | n/a | n/a | |
| | | May-07 | UGS | 2D & 3D PLM and industry automation | \$1,150.0 | n/a | \$3,500.0 | 3.04x | n/a | |
| | | Feb-07 | ETM | Supervisory & data acquisition systems | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-06 | VistaScape | Surveillance video analysis | n/a | n/a | n/a | n/a | n/a | |
| Ansys | Jama Software | Sep-05 | Garderos | Local area network management | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-05 | Transmitton | Railway infrastructure management | n/a | n/a | n/a | n/a | n/a | |
| | | Apr-05 | Myrio | IP video networking | n/a | n/a | \$50.0 | n/a | n/a | |
| | | Dec-04 | Chantry Networks | Mobility-enabled wireless networking | n/a | n/a | \$85.0 | n/a | n/a | |
| | | Apr-03 | Cycos | Unified messaging systems | n/a | n/a | \$45.6 | n/a | n/a | |
| | | Apr-02 | Symbian | Mobile operating system | n/a | n/a | \$309.0 | n/a | n/a | |
| | | Synopsys | | | | | | | | |
| | | Total Disclosed M&A Deal Value: \$4.3 Billion | | | | | | | | |
| Aras | PTC | Jun-22 | NTT Application Security | Risk management platform | n/a | n/a | \$330.1 | n/a | n/a | |
| | | Jan-22 | FishTail Design Automation | Management of design constraints for chip-implementation progresses | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-21 | Concertio | System performance optimization tools | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-21 | BISTel | Manufacturer of semiconductor and flat panel display systems | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-21 | Code Dx | Application security platform | n/a | n/a | n/a | n/a | n/a | |
| | | May-21 | MorethanIP | Intellectual properties for multi-gigabit high-speed telecom and datacom | n/a | n/a | n/a | n/a | n/a | |
| Autodesk | Revalize | Nov-20 | Light Tec | Optical scattering measurements and measurement equipment | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-20 | Moortec Semiconductor | Embedded sensor and monitoring technologies | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-20 | Qualtera | Industrial big-data analytics platform | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-20 | Terrain EDA | Electronic design automation technologies | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-20 | Invecas | Certain IP assets; Logic Library, Embedded Memory, Interface and Analog IP | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-20 | eSilicon | Embedded Memory IP And Interface IP assets | n/a | n/a | \$24.0 | n/a | n/a | |
| Bentley | Siemens | Jan-20 | Tinfoil Security | Website and application programming interface (API) security | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-19 | The Dini Group | Digital circuit based hardware and applications | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-19 | Qtronic | Automotive virtual prototyping solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-18 | Source III | Developer of specialist simulation and test data management tools | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-18 | Silicon and Beyond | Developer of SerDes technology used in data-intensive applications. | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-18 | Phoenix Software | Provider of manufacturing automation software | n/a | n/a | n/a | n/a | n/a | |
| Cadence | Synopsys | Jan-18 | Kilopass | SoC system developer | n/a | n/a | \$49.0 | n/a | n/a | |
| | | Dec-17 | Black Duck | Provider of open source security and license management software | \$75.0 | n/a | \$565.1 | 7.53x | n/a | |
| | | Oct-17 | Sidense | Silicon-proven embedded non-volatile memory intellectual property (IP) | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-17 | QuantumWise | Provider of simulation tools for materials modeling designing. | n/a | \$35.0 | n/a | n/a | n/a | |
| | | Jan-17 | Forcheck | Developer of security software | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-16 | Cigital | Provider of software security consulting services. | n/a | n/a | n/a | n/a | n/a | |
| Dassault | Zuken | Nov-16 | Codiscope | Developer of complementary security tools | n/a | n/a | n/a | n/a | n/a | |
| | | May-16 | Gold Standard Simulations | Provider of simulation tools for design technology | n/a | n/a | n/a | n/a | n/a | |
| | | May-16 | Simpleware | Provider of 3D image processing software | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-16 | WinterLogic | Provider of electronic design automation software products. | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-15 | Red Lizard Software | Developer of source code analysis tools | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-15 | Protecode | Provider of license management tools for managing open source software | n/a | n/a | n/a | n/a | n/a | |
| ESI Group | | Aug-15 | Atrenta | Provider of realization services for the semiconductor and electronic systems in | n/a | n/a | n/a | n/a | n/a | |
| | | Jul-15 | Seeker Security | Provider of computer security services | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-15 | Codenomicon | Automated tools for testing the interfaces of mission critical software | \$11.1 | n/a | n/a | n/a | n/a | |
| | | Jun-15 | Elliptic Technologies | Provider of security software and semiconductor Internet Protocol engines | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-14 | Coverity | Provider of source code analysis tools | \$70.0 | n/a | \$375.0 | 5.36x | n/a | |
| | | Feb-14 | Brandenburg | Developer of automotive design software | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-14 | Target Compiler Technologies | Software tools for the design, programming, and verification of processors | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-12 | EVE-USA | Provider of emulation platforms for SoC verification | n/a | n/a | n/a | n/a | n/a | |
| | | Aug-12 | Ciranova | Provider of electronic design automation software | n/a | n/a | n/a | n/a | n/a | |
| | | May-12 | RSoft Design Group | Developer of designing software | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-12 | Magma Design Automation | Provider of chip-design software | \$146.4 | \$16.3 | \$523.0 | 3.57x | n/m | |
| | | Feb-12 | Luminescent Technologies | Provider of lithography enhancement services | n/a | n/a | n/a | n/a | n/a | |

Precedent Engineering & Design M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

| | | (\$ in Millions) | | Target Overview | | | Transaction Statistics | | | |
|---------------|--------------------|------------------|---|---|---------|----------|------------------------|----------------------|---|--|
| | | Date | Target | Description | Revenue | EBITDA | Deal Value | Deal Value / Revenue | Estimated EBITDA | |
| Altair | Gamma Technologies | Synopsys | | | | | | | Total Disclosed M&A Deal Value: \$4.3 Billion | |
| Altium | Hexagon | Jan-12 | ExpertIO | Provider of internet protocol verification services | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-12 | Mojave Design | Physical verification technology for 90 and 65 nanometer designs | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-11 | Extreme DA | Operator of an electronic design automation company | n/a | n/a | n/a | n/a | n/a | |
| | | Sep-11 | nSys Design Systems | Provider of business verification services | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-10 | Optical Research Associates | Developer of software used for optical application | n/a | n/a | n/a | n/a | n/a | |
| Ansys | Jama Software | Jun-10 | Virage Logic | Provider of semiconductor intellectual property (IP) and services | \$72.0 | (\$5.6) | \$315.0 | 4.38x | n/m | |
| | | Jun-10 | Synfora | Provider of algorithmic synthesis tools | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-10 | Nusym Technology | Provider of verification closure solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-10 | CoWare | Supplier of platform-driven electronic system-level design software | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-10 | VaST Systems Technology | Provider of tools and models for embedded system design automation | n/a | n/a | n/a | n/a | n/a | |
| Aras | PTC | Nov-09 | Gemini Design Technology | Developer of electronic design automation (EDA) software | n/a | n/a | n/a | n/a | n/a | |
| | | May-09 | Chipidea Mikroelektronika | Analog and mixed-signal semiconductor circuit designs software | n/a | n/a | \$22.0 | n/a | n/a | |
| | | May-09 | MIPS Technologies (Analog Business) | Software based designing services for the semiconductor industry in USA | n/a | n/a | \$22.0 | n/a | n/a | |
| | | Dec-08 | Pro Design Electronic (CHIPit Business) | Provider of hardware verification services | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-07 | Sandwork Design | Developer of transistor-level debugging and waveform analysis tools | n/a | n/a | \$24.0 | n/a | n/a | |
| Autodesk | Revalize | Jun-07 | ArchPro Design Automation | Developer of advanced electronic design automation (EDA) products | n/a | n/a | \$13.0 | n/a | n/a | |
| | | Jan-07 | TeraRoute | Developer of routing software | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-05 | Hpl Technologies | Developer of yield optimization software | \$9.3 | (\$27.2) | \$13.0 | 1.39x | n/m | |
| | | May-05 | Nassda | Developer of full-chip circuit verification software | \$45.6 | (\$70.8) | \$200.2 | 4.39x | n/m | |
| | | Jan-05 | TriCN Associates | Accounting, tax, and finance service | n/a | n/a | n/a | n/a | n/a | |
| Bentley | Siemens | Nov-04 | Integrated Systems Engineering | Provider of Technology CAD (TCAD) software products | n/a | n/a | \$107.5 | n/a | n/a | |
| | | Nov-04 | Leda Design | Digital library platform developer | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-04 | Cascade IP | Provider of digital intellectual property (IP) services | n/a | n/a | n/a | n/a | n/a | |
| | | Oct-04 | Monterey Design Systems | Provider of SoCs software | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-04 | IRoC (Memory BIST Division) | Electronic design automation (EDA) tool | n/a | n/a | n/a | n/a | n/a | |
| Cadence | Synopsys | Feb-04 | Analog Design Automation | Developer of automated circuit optimization software | n/a | n/a | \$13.0 | n/a | n/a | |
| | | Feb-04 | Accelerant Networks | Manufacturer of computer transceivers | n/a | n/a | \$22.5 | n/a | n/a | |
| | | Jan-04 | Progressant Technologies | Manufacturer of negative differential resistance transistor | n/a | n/a | n/a | n/a | n/a | |
| | | Jun-03 | InnoLogic Systems | Equivalence checking technology for memory and custom blocks | n/a | n/a | n/a | n/a | n/a | |
| | | Mar-03 | Numerical Technologies | Developer and marketer of proprietary technologies and software | n/a | n/a | \$250.0 | n/a | n/a | |
| Dassault | Zuken | Jul-02 | InSilicon | Manufacturer of communications products | n/a | n/a | \$74.6 | n/a | n/a | |
| | | Jun-02 | Avanti | Provider of engineering and environmental regulatory support services | n/a | n/a | \$735.0 | n/a | n/a | |
| | | Mar-02 | Co-Design | Developer of design language and tools | n/a | n/a | \$36.0 | n/a | n/a | |
| | | Nov-01 | C Level Design | Graphic design and web marketing service | n/a | n/a | n/a | n/a | n/a | |
| | | Nov-98 | Everest Design Automation | Software solutions that solves complex problems of chip assembly | n/a | n/a | n/a | n/a | n/a | |
| ESI Group | | Mar-97 | EPIC Design | Developer of simulation and analysis tools for chip management | n/a | n/a | \$427.1 | n/a | n/a | |
| | | May-95 | Silicon Architect | Designer of Structured ASIC Methodology | n/a | n/a | n/a | n/a | n/a | |
| | | Feb-94 | Logic Modeling | Provider of high-level design automation software | n/a | n/a | \$118.0 | n/a | n/a | |
| Zuken | | | | Total Disclosed M&A Deal Value: n/a | | | | | | |
| | | Jan-19 | Vitech | Systems engineering solutions | n/a | n/a | n/a | n/a | n/a | |
| | | Jan-18 | Alphatech | CAD Provider in Japan | n/a | n/a | n/a | n/a | n/a | |
| | | Dec-15 | CAETEK | Schematic red liner design and implementation software | n/a | n/a | n/a | n/a | n/a | |
| Total Average | | | | 6.44x 16.3x | | | | | | |
| Total Median | | | | 4.72x 16.8x | | | | | | |

IV.



About MPG

Growth Stage

FOCUSED ON TRANSACTIONS WITH \$100-500 MILLION ENTERPRISE VALUE

200+

COMPLETED TRANSACTIONS

\$30+

BILLION IN DEAL VALUE

~30%

CROSS-BORDER DEALS ⁽¹⁾

40%+

SPONSOR-BACKED CLIENTS

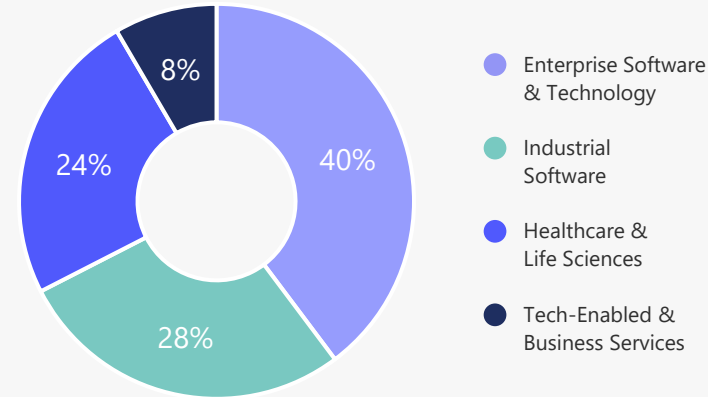
30%+

REPEAT CLIENTS ⁽²⁾

20+

DEDICATED ADVISORS

Our Deep Sector Expertise Drives Better Outcomes ⁽¹⁾



(1) Select deals completed in the last ten years
(2) Calculated as total clients divided by clients completing more than one transaction with MPG over client relationship, inclusive of investor relationships



FOCUS

We partner with global technology clients across North America and Europe



EXPERTISE

We specialize in impacting growth strategies to optimize shareholder value creation



STRATEGY

We marry thoughtful corporate strategy planning with stalwart transactional execution



RESOURCES

Domain experts with active relationships across +1,500 global investors

MPG's Industrial Technology Leadership Team

20+ Years Average Investment Banking & Technology Advisory Experience

MADISON PARK GROUP



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Highlight Areas of Expertise

- ✓ Engineering Software
- ✓ Manufacturing Software
- ✓ IIoT



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- ✓ IIoT



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Highlight Areas of Expertise

- ✓ Blockchain
- ✓ Industrial Tech

Select Recent Transactions

Right People, Right Narrative, Right Time

MADISON PARK GROUP

| | | | | | |
|--|---|---|---|---|--|
| <p>Founder-owned</p>  <p>Strategic Sale</p>  | <p>PE-Backed</p>  <p>Strategic Sale</p>  | <p>VC-Backed</p>  <p>Debt Placement</p>  | <p>Founder-owned</p>  <p>Growth Investment</p>  | <p>PE-Backed</p>  <p>Acquisitions Of</p>  | <p>Founder-owned</p>  <p>Financial Sale</p>  |
| <p>Founder-owned</p>  <p>Financial Sale</p>  | <p>PE-Backed</p>  <p>Financial Sale</p>  | <p>Founder-owned</p>  <p>Strategic Sale</p>  | <p>VC-Backed</p>  <p>Strategic Sale</p>  | <p>PE-Backed</p>  <p>Strategic Sale</p>  | <p>Founder-owned</p>  <p>Financial Sale</p>  |
| <p>Founder-owned</p>  <p>Minority Investment</p>  | <p>PE-Backed</p>  <p>Strategic Sale</p>  | <p>Founder-owned</p>  <p>Financial Sale</p>  | <p>PE-Backed</p>  <p>Financial Sale</p>  | <p>VC-Backed</p>  <p>Strategic Sale</p>  | <p>PE-Backed</p>  <p>Financial Sale</p>  |

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Sources & Notes

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