

Products & Services



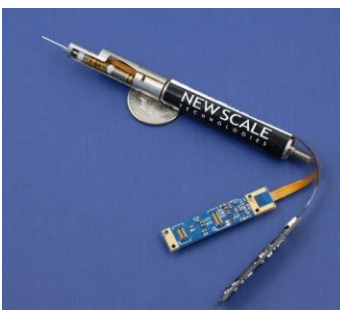
M3-LS Linear Smart Stages



M3-FS Focus Module



M3-RS Rotary Micro Stage



Custom Motion Modules

Embedded M3 Smart Modules Make Great Products Smaller

ALL drive and control electronics are inside. The result is precise motion and easy installation for hand-held and portable instruments.

About Us

New Scale Technologies is a world leader in embedded smart motion systems with the smallest size and highest precision. We design and manufacture intelligent mechatronic solutions that enable our customers to launch sooner, discover faster, automate quicker and minimize total cost.

Technology and Product Platforms

Since 2002, New Scale has secured 17 US patents and corresponding international patents in the development of piezoelectric motors and motion systems. These patents, combined with our proprietary know-how, enable us to create products with unmatched miniaturization, micrometer-scale resolution, fully-integrated microelectronics and intelligent firmware.

Our M3 Micro Mechatronic Modules are smart closed-loop micro-stages and actuators with built-in controllers. M3 modules fit on your fingertips and are easy to integrate into handheld and portable instruments. Embedded M3 modules make great product smaller. Some examples are imaging systems, scientific instruments, micromanipulators, robotic grippers, medical devices, aerospace and defense sensors and more.

Each M3 Smart Module is a fully-engineered solution that integrates our patented and propriety piezoelectric motor, drive, sensing, guide and control technologies. Standard M3 Smart Modules include **M3-LS Linear Stages**, **M3-RS Rotary Stages**, **M3-FS Focus Modules**, and **M3-L Linear Actuators**. These compact positioning modules deliver ten times better precision, force and range when compared similar-sized electromagnetic solutions. We sell developer's kits for our standard modules directly or through Digi-Key or Mouser.

We applied our M3 modules and system development expertise to create the **MPM Multi-Probe Micromanipulator** in 2016. The MPM System is used for precise positioning of silicon probes in neuroscience research. It combines automated and manual probe positioning in an integrated instrument, with more than 15 M3-LS linear stages controlled from a single PC application or joystick.

In 2018 we launched **New Scale Robotics** to serve the fast-growing collaborative robots market. Our **NSR-PG Precision Parallel Grippers** are the smallest grippers for the smallest collaborative robots, delivering high precision and unsurpassed ease of use to industrial automation customers.

Manufacturing

We design and manufacture all modules and systems in our Victor, New York facility. We are committed to fully understand, meet and exceed our customers' requirements through continuous improvement processes.

Our manufacturing processes follow ISO 9001 guidelines and we have passed quality audits by major medical device manufacturers. For very high-volume markets, we work with manufacturing partners and technology licensees worldwide.

Development and Manufacturing Partners

ams (www.ams.com) (SWX:AMS) is a strategic investor, development partner for high-performance analog ASICs, and worldwide sales partner.



Milestones

- 2002** Founded by David Henderson
- 2003** First products ship
- 2004** First SQUIGGLE[®] motors ship
- 2005** First US patent: SQUIGGLE motor Series A equity investment
- 2006** Tamron licenses SQUIGGLE motor
- 2007** Two additional US patents and three industry innovation awards
- 2008** Series B equity investment from austriamicrosystems (SWX:AMS) Additional license agreements with Tamron, ALPS and TDK-EPCOS UTAF motor demonstrated Single-chip driver ASIC introduced
- 2009** Named to “Best Companies to Work for in New York” list Rotary piezo motors demonstrated
- 2010** Reduced-voltage SQUIGGLE motor First M3 Modules delivered
- 2011** UTAF focus module demonstrated by tier-one phone camera supplier *Design News* innovation award
- 2012** Two additional companies signed as intellectual property licensees 10th anniversary, 10th US patent
- 2013** First custom micro beam steering solutions delivered
- 2014** First M3-FS and M3-LS smart motion modules delivered 15th US patent awarded
- 2015** Additional micro beam steering solutions introduced
- 2016** 16th and 17th US patents awarded Multi-Probe Micromanipulator (MPM) introduced COBRA fiber positioner in production
- 2017** Longer-travel, higher-load M3-LS micro stage introduced 2,550 Cobra positioners shipped
- 2018** New Scale Robotics Division launched

Financial

New Scale is privately held entity. Our investors include our strategic partners, venture capital company Trillium Group, and several individuals including members of the Rochester Angel Network.

Management

David Henderson – CEO and Founder

David has more than 30 years of experience in engineering, technology innovation, new product introduction, worldwide market development and business operations.

Before founding New Scale in 2002, he was director of positioning products at Burleigh Instruments (now EXFO) where he achieved 300% revenue growth with 20% EBITA over six years. He has prior experience as program manager and mechanical engineer with Contraves USA.

David has published or presented numerous papers and holds several patents including patents for SQUIGGLE motors and systems. He has a BS in mechanical engineering and an MBA from Carnegie Mellon University.

Allison Leet - VP Finance and Planning

Allison joined New Scale in 2012 with more than 30 years of experience in finance and operations management. She was general manager, CFO and executive VP with full P&L responsibility for Corsair Display, growing the company from \$1.2M to \$8M over eight years.

She has additional experience as CFO and executive VP for a medical real estate and construction company; controller for a machining company; a finance, quality and manufacturing supervisor at Delphi Automotive; and a finance and business process consultant.

Allison has a BS in management science from Nazareth College and an MBA in business administration and finance from Rochester Institute of Technology.

