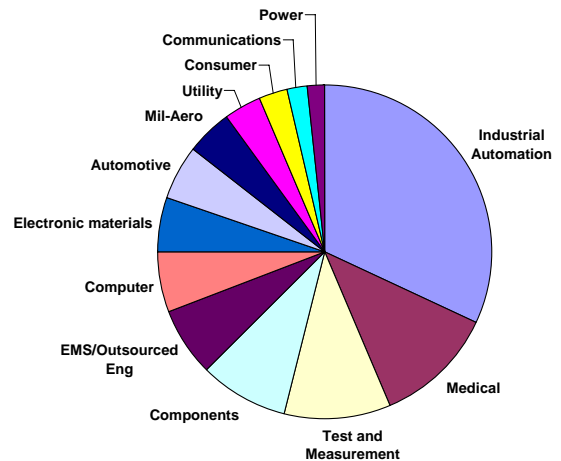


## **Electronics- a sizeable and unique contributor to Northeast Ohio's economy**

Northeast Ohio has a sizeable and thriving electronics industry. Recent estimates indicate the industry employs nearly 30,000 in Northeast Ohio over 70,000 statewide. Over 250 electronics companies and locations are in Northeast Ohio. These include divisions and headquarters of very large companies like Rockwell Automation, Parker Hannifin, Phillips Medical and Keithley Instruments, a very large number of mid-sized companies, and a growing number of start ups in various technologies like MEMS, LCDs, Industrial Automation and others.

The makeup up our electronics industry is unique. Although all sectors of the electronics industry are represented in Northeast Ohio, our mix is very focused on instruments and controls, hence the term ICE (Instruments, Controls and Electronics). Over 50% of electronics employment in Northeast Ohio is in sectors that would be considered to be Instruments and Controls- Industrial Automation, Medical, Test and Measurement.



**Northeast Ohio Electronics Employment Distribution**  
Note- Utility sector includes only technical personnel

## **Growing Northeast Ohio's Electronics Industry**

The electronics industry is a major driver of the Northeast Ohio economy, both directly and as a key enabling and intersecting technology for nanotechnology, fuel cells, biosciences and polymers. NorTech, the region's technology-based economic development organization recognizes this, and has made the development of electronics one of our key focus areas. Our efforts, done under the banner of the **Northeast Ohio Electronics Cluster**, will be focused on driving electronics industry cohesiveness and collaboration, increasing the number and quality of EECS graduates from Northeast Ohio universities, and growing the industry both embryonically and through attraction.

To learn more about the Northeast Ohio Electronics Cluster's efforts in the electronics industry, please contact Chris Mather at NorTech [cmather@nortech.org](mailto:cmather@nortech.org), or call (216) 363-6883.

To receive email alerts on activities and events for Northeast Ohio's electronics industry, please contact Melissa Shrewsberry at NorTech [melissa@nortech.org](mailto:melissa@nortech.org), or call (216) 274-6186.



**OhioICE**, is a university/industry collaborative formed to drive pre-competitive, yet highly commercializable, research performed at Northeast Ohio's research universities and institutions. Ohio ICE is a key ingredient to the regions plans in the electronics industry going forward. [www.ohio-ice.org](http://www.ohio-ice.org)



**Rockwell Automation**, one of Northeast Ohio's largest electronics employers, recently won "Best Product of 2006" by Design News Magazine for Rockwell's DriveExplorer Software. [www.rockwellautomation.com](http://www.rockwellautomation.com)



CASE  
CASE WESTERN RESERVE UNIVERSITY

The school of engineering at **Case Western Reserve University** received a \$6 million gift from university alumni Larry Sears founder of Cleveland-based Hexagram Inc., which develops wireless meter-reading systems for utilities. The financial gift is the largest donation by individuals to the Case School of Engineering. The money will be spent on construction of a new laboratory, the Sears Undergraduate Design Laboratory, which will provide students with hands-on engineering and design experience. [www.case.edu](http://www.case.edu)



KEITHLEY  
A GREATER MEASURE OF CONFIDENCE

**Keithley Instruments**, a world leader in the creation of electrical measurement solutions for nanotechnology recently announced it will play a key role in New IEEE Test Standards for Carbon Nanotubes. [www.keithley.com](http://www.keithley.com)



Cleveland State University

**Parker Hannifin** recently donated \$4 Million to **Cleveland State University**, with \$3 Million going to establish scholarships at the Fenn College of Engineering. The gift is the largest corporate endowment the University has ever received, as well as the largest gift ever made by **the Parker Hannifin Foundation**. [www.csuohio.edu](http://www.csuohio.edu)



CleveMed  
Cleveland Medical Devices Inc.

**Cleveland Medical Devices** has received just over \$3 Million in NIH funding in the past year to help the company develop, manufacture, and distribute rehabilitation and physiological monitoring equipment for the medical and research communities. [www.clevemed.com](http://www.clevemed.com)



the  
new faces  
of engineering

**The New Faces of Engineering High School Roadshow** is a program sponsored by the Cleveland Engineering Society and organized in collaboration with NorTech. It encourages Northeast Ohio high school students to choose engineering careers. [www.cesnet.org](http://www.cesnet.org)



**Parker Hannifin**, the world's leading diversified manufacturer of motion and control technologies and systems, was one of only 16 winners of Start Magazine's eighth annual Technology & Business Awards, receiving recognition in the Industrial Equipment category. [www.parker.com](http://www.parker.com)



CASE  
CASE WESTERN RESERVE UNIVERSITY



The  
University  
of Akron



Cleveland State University



KENT STATE  
UNIVERSITY

In mid 2005, **Case Western, Cleveland State, University of Akron and Kent State** signed a memorandum of understanding with NorTech to work together and individually to significantly increase research funding and faculty levels in Electrical Engineering and Computer Science (EECS). The four schools signed a memorandum of understanding agreeing to the goals of quadrupling EECS research funding levels and increasing EECS faculty levels by 80% by 2009.