

Digital Dynamics Unveils Next-Gen Fusion Control Modules at SEMICON West

New Solutions Reduce System Complexity, Lower Total Cost of Ownership and Improve Reliability for Semiconductor Equipment OEMs

SCOTTS VALLEY, Calif. — Oct. 7, 2025 — Digital Dynamics Inc. (DDI), a technology leader delivering high-performance safety rated I/O interlock control solutions to the world's leading OEMs, today introduced a suite of powerful new products and capabilities at **SEMICON West** in Phoenix, Arizona at booth #1283.

DDI's Fusion.IO platform delivers seamless integration into process equipment requiring high-density mixed signal I/O with fast, precise interlock control enabling OEMs to achieve system-level **SIL3-rated functional safety**, ultimate modularity and design flexibility in a cost-effective, compact form factor.

Highlights of DDI's latest innovations include:

- **Fusion.TMP** – An enhancement of Fusion.IO's advanced PID process control capability, delivering critical temperature control features including **PID autotuning, digital filtering, setpoint ramp control** and **ratio control**, configurable through EtherCAT, DDI's **Interlock Builder™** software or as an optional factory pre-set.
- **Fusion XL and RIM XL** – Delivering Fusion.IO in an extended chassis for OEMs requiring connectivity of mixed signal I/O tailored to even larger connector counts with **SIL-rated functional safety**.
- **Fusion XT** – Delivering Fusion features and performance with **even more** modularity for OEMs requiring ultimate form factor flexibility.
- **Safe temperature monitoring I/O slot card** – Compatible with all thermocouple types, and 3- or 4-wire RTDs, designed for systems requiring temperature measurement and over/under temperature interlocking to **enable system-level SIL3-rated functional safety**.
- **Force-Guided Relay I/O slot card** – For OEMs requiring dry contact outputs to **enable system-level SIL3-rated functional safety**.
- **Interlock Builder v9.0** – A comprehensive upgrade of DDI's powerful interlock development solution, adding interlock previsualization/simulation, expanded configurable features, and advanced design and editing features to enable even **faster time to market**.

Nir Merry, CEO, Digital Dynamics Inc., said: "Semiconductor wafer process OEMs are under constant pressure to deliver higher performance with uncompromising safety. DDI's latest innovations in integrated temperature control and a new level of modularity underscore our commitment to delivering intelligent, scalable and safety-certified control solutions for the evolving needs of critical industries, including semiconductor wafer fabrication and display fabrication. DDI's newly released Interlock Builder software empowers equipment engineers to rapidly develop and validate complex interlock logic."

Michael Summers, manager, application engineering, Digital Dynamics Inc., said: “The Fusion.TMP controller and Fusion XL modular solution for large-scale deployments represent a breakthrough in OEM productivity and system safety. By combining certified hardware with easy-to-use software, we’re enabling customers to design safer, smarter, bigger systems faster than ever before.”

About Digital Dynamics Inc.:

Digital Dynamics Inc. (DDI) is a leader in delivering innovative, high-performance solutions for the semiconductor and advanced manufacturing industries. Based in Scotts Valley, California, DDI is dedicated to creating products that enhance machine safety, efficiency, and performance, including IEC61508 SIL-compliant systems. For more information, or to contact a DDI Solution Engineer, visit www.digitaldynamics.com.

Media Contact

Max Holden

Force4 Technology Communications

Max.holden@force4.co