A system is not smart if it is not safe. Functional safety is ubiquitous in automation systems with strict standardization and certification requirements.

Industry 4.0 Delivers on Increased Productivity

See where ADI is accelerating the transition to the secure connected enterprise

Flexibility

The shift to more flexible architectures allows for greater capacity and faster reconfiguration. Using universal analog I/O (input/output) brings integration, robustness, flexibility, and efficiency with significant time and cost savings. All of which create opportunities for virtualization utilizing AI and digital twin technologies.

Efficiency

Even a 1% reduction in energy use can bring tremendous savings to a factory operator. These savings can be realized through the adoption of inherently lower power solutions that are then augmented by condition-based machine monitoring analytics.

Communications

Central to the execution of Industry 4.0 is robust and secure wired and wireless communication that must support legacy standards and provide a clear path to Ethernet to the Edge and Time Sensitive Networks (TSN).

Safety

A system is not smart if it is not safe. Functional safety is ubiquitous in automation systems with strict standardization and certification requirements.

Security

Greater connectivity of smart machines with Industry 4.0 brings with it risks from cyber attacks. Factory operators and solution providers need to develop stronger cybersecurity strategies that are more vigilant and resilient to attack.