




# Acronyms

# Acronyms

Following the overwhelming response to our Acronyms Guide in the last issue, Imprint Automation India returns with Part II—an even more comprehensive compilation of essential terms that define the language of automation. From APQP to ZSC, this ready-reference list expands your vocabulary across domains like robotics, control systems, industrial communication, and process safety. Whether you're a seasoned engineer or a new entrant into the automation world, this continued glossary will keep you fluent in the fast-evolving industrial lexicon.

- A**  
**APQP** – Advanced Product Quality Planning  
**ASi** – Actuator Sensor Interface  
**AOI** – Automated Optical Inspection  
**AIDC** – Automatic Identification and Data Capture  
**ATP** – Acceptance Test Procedure  
**AIT** – Automation Interface Terminal
- B**  
**BOP** – Balance of Plant  
**BLE** – Bluetooth Low Energy  
**BPCS** – Basic Process Control System  
**BOM** – Bill of Materials
- C**  
**CMMS** – Computerized Maintenance Management System  
**CNC** – Computer Numerical Control  
**CRP** – Capacity Requirements Planning  
**CSM** – Control System Module
- D**  
**DNP3** – Distributed Network Protocol  
**DLR** – Device Level Ring  
**DTM** – Device Type Manager  
**DAQ** – Data Acquisition System  
**DCM** – Digital Control Module
- E**  
**ESD** – Emergency Shutdown System  
**EPCM** – Engineering, Procurement, Construction Management
- EEPROM** – Electrically Erasable Programmable ROM  
**EDA** – Electronic Design Automation  
**EPICS** – Experimental Physics and Industrial Control System
- F**  
**FAT** – Factory Acceptance Test  
**FDT** – Field Device Tool  
**FPGA** – Field-Programmable Gate Array  
**FCS** – Field Control Station  
**FMEA** – Failure Mode and Effects Analysis
- G**  
**GSD** – General Station Description  
**GOT** – Graphical Operator Terminal  
**GA** – General Arrangement  
**GAMP** – Good Automated Manufacturing Practice  
**GNSS** – Global Navigation Satellite System
- H**  
**HART** – Highway Addressable Remote Transducer  
**HILS** – Hardware-in-the-Loop Simulation  
**HTD** – High Torque Drive  
**HPS** – High Performance System
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- I**  
**ICS** – Industrial Control System  
**ICCP** – Inter-Control Center Protocol  
**IACS** – Industrial Automation and Control Systems  
**IO-Link** – Intelligent Sensor/Actuator Communication Protocol
- J**  
**JTAG** – Joint Test Action Group  
**JSON** – JavaScript Object Notation  
**JSP** – Job Safety Plan
- K**  
**KPI** – Key Performance Indicator  
**KUKA** – Robotics brand used as programming reference
- L**  
**LVDT** – Linear Variable Differential Transformer  
**LOTO** – Lockout-Tagout  
**LCP** – Local Control Panel
- M**  
**MTBF** – Mean Time Between Failures  
**MTTR** – Mean Time to Repair  
**MCC** – Motor Control Center  
**MODBUS** – Modular Bus Protocol
- N**  
**NOC** – Network Operations Center  
**NAMUR** – Process Automation Standards Group
- O**  
**OPC UA** – Open Platform Communications Unified Architecture  
**OEE** – Overall Equipment Effectiveness  
**ORP** – Oxidation Reduction Potential Sensor
- P**  
**PAC** – Programmable Automation Controller  
**PDM** – Plant Data Management  
**PSSR** – Pre-Startup Safety Review  
**PFD** – Process Flow Diagram  
**PLCopen** – PLC Standardization Initiative
- Q**  
**QOS** – Quality of Service  
**QRM** – Quick Response Manufacturing  
**QRQC** – Quick Response Quality Control
- R**  
**RTU** – Remote Terminal Unit  
**RPA** – Robotic Process Automation  
**RFID** – Radio Frequency Identification  
**RTO** – Real-Time Optimization  
**REST** – Representational State Transfer
- S**  
**SIL** – Safety Integrity Level  
**SOP** – Standard Operating Procedure  
**SCM** – Supply Chain Management  
**SMED** – Single-Minute Exchange of Die  
**SPC** – Statistical Process Control
- T**  
**TPM** – Total Productive Maintenance  
**TDC** – Total Distributed Control  
**TSN** – Time Sensitive Networking  
**TQM** – Total Quality Management  
**TIA** – Totally Integrated Automation
- U**  
**UPS** – Uninterruptible Power Supply  
**UART** – Universal Asynchronous Receiver-Transmitter  
**UDT** – User Defined Type
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# Acronyms

### V

**VSA** – Value Stream Analysis

### W

**WMS** – Warehouse Management System

**WES** – Warehouse Execution System

**WCS** – Warehouse Control System

### X

**XIoT** – Extended Internet of Things

**XSLT** – Extensible Stylesheet Language Transformation

### Y

**YTD** – Year to Date (used in industrial dashboards)

### Z

**ZTP** – Zero Touch Provisioning

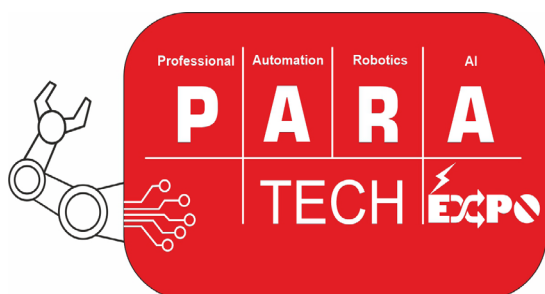
**ZSC** – Zero Speed Control

**ZPA** – Zone Presence Automation



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