



Electronics Industry Acronyms

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AA	Automatic Acknowledge
AA	Antenna Array
AGR	Annual Average Growth Rate
ABS	Acrylonitrile-Butadiene-Styrene(Plastic)
AC	Alternating Current
AC	All Call
ACA	Anisotropically Conductive Adhesive
ACC	Advanced Concept Construction Active Control Channel
ACCU	Alternating Current Connection Unit
AEC	Architecture, Engineering and Construction
Agc	Automatic Gain Control
AGV	Automated Guided Vehicle
AI	Artificial Intelligence
AIS	Adhesive Interconnect System
ANOVA	Analysis of Variance
ANSI	American National Standards Institute
AOI	Automated Optical Inspection
AOQ	Average Outgoing Quality
APT	Automatically Programmed Tools
AQL	Acceptable Quality Level
ARINC	Aeronautical Radio Incorporated
ASCII	American Standard Code for Information Interchange
ASIC	Application Specific Integrated Circuit
ASME	American Society of Mechanical Engineers
ASPaRC	Ability of Solder Paste to Retain Components
ASQ	American Society for Quality
ASTM	American Society for Testing and Materials
ATE	Automatic Test Equipment
ATG	Automatic Test Generation
ATR	Air Transport Rack
AVT	Accelerated Vesication Test
AWG	American Wire Gauge
AXI	Automated X-ray Inspection
BC	Buried Capacitance
BDMA	Benzylidimethylamine
BGA	Ball Grid Array
BITE	Built-In Test Equipment
BOD	Biochemical Oxygen Demand
BOM	Bill of Material
BTO	Build to Order
BT	Bismaleimide Triazine
BTAB	Bumped Tape-Automated Bonding
C3	Command,Control and Communicate
C4	Controlled Collapse Component Connection
CAD	Computer-Aided Design
CAE	Computer-Aided Engineering
CAF	Cathodic Anionic Filaments
CAFM	Computer-Aided Facilities Management
CAGE	Commercial and Government Entity
CALS	Computer-Aided Acquisition and Logistic Support(DOD)
CAM	Computer-Aided Manufacturing



Electronics Industry Acronyms

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CAPP	Computer-Aided Process Planning
CAR	Computer-Aided Repair
CASE	Computer-Aided Software Engineering
CAT	Computer-Aided Testing
CBGA	Ceramic Ball Grid Array
CCAPS	Circuit Card Assembly and Processing System
CDA	Copper Development Association
C&E	Cause and Effect
CET	Certified Electronic Technician
CEPM	Certified EMS Program Managers
CFM	Continuous Flow Manufacturing
CFM	Cubic Feet per Minute
CIM	Computer-Integrated Manufacturing
CISC	Complex Instruction Set Computing
CITIS	Contractor Integrated Technical Information Services
CMC	Copper Moly Copper
CMOS	Complimentary Metal-Oxide Semiconductor
CNC	Computer Numerical Control
COB	Chip-on-Board
COD	Consumed Oxygen Demand
COT	Configure to Order
Cp	Capability Performance
CPL	Capability Performance, Lower
CPLD	Complex Programmable Logic Device
CPU	Capability Performance, Upper
CPU	Central Processing Unit(Computer)
CRC	Cyclic Redundancy Check
CRT	Cathode-Ray Tube
CSA	Canadian Standards Agency
CSG	Constructive Solids Geometry
CSP	Chip Scale Package
CTE	Coefficient of Thermal Expansion
CVS	Cyclic Voltammetry Stripping
DAB	Designated Audit Body
DATC	Design Automation Technical Committee (IEEE)
DBMS	Database Management System
DC	Direct Current
DCAS	Defense Contract Administration Service
DCMA	Defense Contract Management Agency
DCMC	Defense Contract Management Command
DESC	Defense Electronics Supply Center
DFM	Design For Manufacture
DIM	Data-Information Record
DIN	Deutsches Institute for Normung
DIP	Dual-Inline Package
Dk	Dielectric Constant
DLA	Defense Logistics Agency (DOD)
DMA	Direct Memory Access
DMS	Dynamic Mechanical Spectroscopy
DMSA	Defense Manufacturers and Suppliers Association
DNC	Distributed (or Direct) Numerical Control
DOD	Department of Defense

DOD	Dissolved Oxygen Demand
DOE	Design of Experiments
DOS	Disc Operating System
DRC	Design Rule Checking
DRM	Drawing Requirements Manual
DS	Double-Sided
DSC	Differential Scanning Calorimetry
DSP	Digital Signal Processor
DTP	Diameter True Position
DTS	Dock to Stock
DVM	Digital Voltmeter
DXF	Data Exchange Format
ECAD	Electronic Computer-Aided Design
ECC	Error Correction Code
ECCB	Electronic Components Certification Board
ECL	Emitter-Coupled Logic
ECM	Electronic Countermeasures
ECN	Engineering Change Notice
ECO	Engineering Change Order
ECR	Engineering Change Request
ED	Electrodeposited
EDA	Electronic Design Automation
EDI	Electronic Data Interchange
EDIF	Electronic Design Interchange Format
EDM	Electro-Discharge Machining
EDO	Extended Data Out
EIA	Electronics Industry Association
EIS	Engineering Information System
ELD	Electro-luminescent Diode
EMC	Electromagnetic Compatibility
EMF	Electro-Motive Force
EMI	Electromagnetic Interference
EMP	Electromagnetic Pulse
EMPF	Electronics Manufacturing Productivity Facility
EPA	Environmental Protection Agency
EPR	Ethylene-Propylene (Copolymer) Resin
EPT	Ethylene-Propylene Terepolymer
ESD	Electrostatic Discharge
ESI	Early Supplier Involvement
ESR	Equivalent Series Resistance
ETPC	Electrolytic Tough-Pitch Copper
FAA	Federal Aviation Administration
FAR	Failure Analysis Report
FC-CBGA	Flip Chip Ceramic Ball Grid Array
FCC	Federal Communications Commission
FCC	Flat-Conductor Cable
FC-PBGA	Flip Chip Plastic Ball Grid Array
FEA	Finite-Element Analysis
FEM	Finite-Element Modeling
FEP	Fluorinated Ethylene-Propylene (Teflon)
FET	Field-Effect Transistor
FFT	Fast Fourier Transform

FMEA	Fault Mode and Effect Analysis
FPGA	Field Programmable Gate Array
FPT	Fine-Pitch Technology
FSCM	Federal Stock Code for Manufacturers
FTP	File Transfer Protocol
GaAs	Gallium Arsenide
GBIB	General Purpose Interface Bus
GMA	Gas Metal Arc (Welding)
GTA	Gas Tungsten Arc (Welding)
GTPBGA	Glob Top Plastic Ball Grid Array
HASL	Hot Air Solder Level
HPGL	Hewlett Packard Graphic Language
HTE	High Temperature Elongation
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
I/O	Input/Output (Terminations)
IC	Integrated Circuit
ICA	Isotropically Conductive Adhesive
ICAM	Integrated Computer-Aided Manufacturing
IDC	Insulation-Displacement Connection
IEC	International Electrotechnical Commission
IECQ	International Electronic Component Qualification System
IEDR	Initial Engineering Design Review
IEEE	Institute of Electrical and Electronic Engineers
IEPS	International Electronic Packaging Society
IGES	Integrated Graphics Exchange System
ILB	Inner-Lead Bonding (TAB)
IP	Internet Protocol
IPM	Inches per Minute
IR	Infrared
ISCET	International Society of Certified Electronics Technician
ISHM	International Society for Hybrid Microelectronics
ISO	International Organization for Standardization
ITT	Inter-Test Time
JEDEC	Solid State Technology Association (Formerly the Joint Electronic Device Engineering Council)
JIT	Just-in-Time (Manufacturing)
KGB	Known Good Board
KGD	Known Good Die
LAN	Local Area Network
LBA	Logical Block Address
LCCC	Leadless Ceramic Chip Carrier
LCD	Liquid Crystal Display
LDA	Logic Design Automation
LED	Light-Emitting Diode
LGA	Lang Grid Array
LIF	Low Insertion Force
LMC	Least Material Condition
LPISM	Liquid Photo-Imageable Solder Mask
LRU	Lowest Replaceable Unit
LSI	Large Scale Integration (Integrated Circuit)
LTCC	Low Temperature Co-fired Ceramic

MA	Mechanical Advantage
MAC	Maximum Allowable Concentration
MAC	Media Access Control
MAP	Manufacturing Automation Protocol
MATS	Material Transport Segment
MCAD	Mechanical Computer Aided Design
MCAE	Mechanical Computer-Aided Engineering
MCM	Multichip Module
MDA	Methylenedianiline
MEK	Methyl-Ethyl Ketone
MELF	Metal Electrode Face (Discrete Leadless Component)
MIBK	Methyl-Isobutyl Ketone
MIR	Moisture Insulation Resistance
MITI	Ministry of International Trade and Industry (Japan)
MLB	Multilayer Board
MLPWB	Multilayer Printed Wiring Board
MMC	Maximum Material Condition
MMIC	Monolithic Microwave Integrated Circuit
MOS	Metal-Oxide Semiconductor
MRP	Material Requirement Planning
MRP II	Manufacturing Resource Planning
MSDS	Material Safety Data Sheets
MSI	Medium Scale Integration (Integrated Circuit)
MTBF	Mean Time Between Failures
MTTR	Mean Time To Repair
NADCAP	National Aerospace and Defense Contractors Accreditation Procedures
NASA	National Aeronautics and Space Administration
NBR	Nitrile Butadiene-Acrylonitrile Rubber
NBS	National Bureau of Standards
NC	Numerical Control
NDT	Non-Destructive Testing
NECQ	National Electronics Component Qualification System
NEMA	National Electrical Manufacturers Association
NIST	National Institute for Science and Technology
NMR	Normal-Mode Rejection
NSA	National Security Agency
OA	Organic Acid (flux)
ODR	Oscillating Disk Rheometer
OEM	Original Equipment Manufacturer
OFHC	Oxygen-Free High-Conductivity Copper
OLB	Outer-Lead Bonding (TAB)
OSHA	Occupational Safety Hazards Act
OSI	Open Systems Interconnection
OSP	Organic Solder Preservative
P&IA	Packaging and Interconnecting Assembly
P&IS	Packaging and Interconnecting Structure
PBGA	Plastic Ball Grid Array
PBX	Private Branch Exchange
PC	Personal Computer
PCA	Printed Circuit Assembly
PCB	Printed Circuit Board



Electronics Industry Acronyms

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PCMCIA	Personal Computer Memory Card International Assoc.
PDES	Product Data Exchange Specification
PDL	Page Description Language
PEM	Plastic Electronic Module
PGA	Pin Grid Array (Leaded Component Package)
PHIGS	Programmer's Hierarchical Interface Graphics Standard
PID	Photo-Imageable Dielectric
PLCC	Plastic Leaded Chip Carrier
PLD	Programmable Logic Device
PPM	Parts Per Million
PPO	Polyphenylene Oxide
PPS	Polyphenylene Sulfide (Plastic)
PRT	Planar Resistor Technology
PSI	Pounds Per Square Inch
PT	Positional Tolerance
PTFE	Polytetrafluoroethylene (Teflon)
PTH	Plated-Through Hole
PVC	Polyvinyl Chloride
PWA	Printed Wiring Assembly
PWB	Printed Wiring Board
QFP	Quad FlatPack
QML	Qualified Manufacturers List
QPL	Qualified Products List
OTA	Quick Turn Around
R	Rosin (flux)
RA	Rosin Activated (flux)
RAM	Random Access Memory
RETMA	Radio Electronics & Television Manufacturers Association
RFI	Radio-Frequency Interference
RFP	Request for Proposal
RFQ	Request for Quote
RFS	Regardless of Feature Size
RISC	Reduced Instruction Set Computing
RMA	Rosin Mildly Activated (flux)
RMS	Root Mean Square
ROM	Read Only Memory
ROM	Rough Order of Magnitude
RPM	Revolutions Per Minute
RSS	Ramp Soak Spike
RwoH	Reliability without Hermeticity
RTS	Ramp To Spike
RTV	Room Temperature Vulcanizing
SAE	Society of Automotive Engineers
SBU	Sequential Buildup
SEC	Solvent Extract Conductivity
SEM	Scanning Electron Microscope
SEM	Standard Electronic Module (Navy)
SERA	Sequential Electrochemical Reduction Analysis
SFM	Surface feet per minute
SIP	Single Inline Package
SIR	Surface Insulation Resistance
SMD	Surface Mount Device

SMEMA	Surface Mount Equipment Manufacturers Association
SMOBC	Solder Mask Over Bare Copper
SMT	Surface Mounting Technology
SMTA	Surface Mount Technology Association
SNA	Systems Network Architecture
SOIC	Small-Outline Integrated Circuit
SOS	Silicon-on-Sapphire
SPC	Statistical Process Control
SPICE	Simulation Program, Integrated Circuit Emphasis
SQC	Statistical Quality Control
SQL	Structured Query Language
SSI	Small-Scale Integration (Integrated Circuit)
STEP	Standard for Exchange of Product Model Data
TAB	Tape-Automated Bonding
T's & C's	Terms and Conditions
TCE	Thermal Coefficient of Expansion
TCP/IP	Transmission Control Protocol / Internet Protocol
TCR	Temperature Coefficient of Resistance
TDR	Time-Domain Reflectometry
TEM	Transverse Electromagnetic Mode
TFA	Tree-based Floorplanning Algorithm
TFE	Tetrafluoroethylene (Teflon)
Tg	Glass Transition Temperature
TGA	Thermo Gravimetric Analysis
THT	Through-Hole Technology
TIFF	Tagged Image File Format
TMA	Thermo Mechanical Analysis
TO	Transistor Outline
TOP	Technical and Office Protocol
TP	True Position
TQM	Total Quality Management
TTL	Transistor-Transistor Logic
UBM	Under Bump Metallization
UHF	Ultra-High Frequency
UL	Underwriter's Laboratories
ULSI	Ultra-Large Scale Integration (Integrated Circuit)
URL	Uniform Resource Locator
VAR	Value-Added Reseller
VHDL	VHSIC Hardware Description Language
VHF	Very-High Frequency
VHSIC	Very-High Speed Integrated Circuits
VLSI	Very-Large Scale Integration (Integrated Circuit)
VME	Versa-Module Electronic
VOC	Volatile Organic Compound
VSAG	VHDL Standardization and Analysis Group (IEEE)
WIP	Work In Process
WSI	Wafer-Scale Integration
WWW	World Wide Web
WYSIWYG	What You See Is What You Get
XIP	Execute in Place
ZAF	Z-Axis Adhesive Film
ZIF	Zero-Insertion Force



Electronics Industry Acronyms

ZIP Zigzag Inline Package