

GLOSSARY OF TERMS

Abbreviations and Acronyms

| | |
|--------|--|
| ADC | analogue to digital converter |
| ASIC | application specific integrated circuit |
| BCI | bulk current injection |
| BEM | boundary element method |
| BiCMOS | bipolar and CMOS |
| BGA | ball grid array |
| BJT | bipolar junction transistor |
| BNC | Bayonet Neill-Concelman |
| CAD | computer-aided design |
| CD | compact disk |
| CMOS | complementary metal oxide semiconductor |
| CMRR | common mode rejection ratio |
| DAC | digital-to-analogue converter |
| DIL | dual-in-line |
| DRAM | dynamic random access memory |
| DRC | design rule checker |
| DSO | digital storage oscilloscope |
| EC | European Community |
| ECAD | electronic computer-aided design |
| ECL | emitter coupled logic |
| EDA | electronic design automation |
| EFT | electrical fast transient |
| EM | electromagnetic |
| EMC | electromagnetic compatibility |
| EMF | electromotive force |
| EMI | electromagnetic interference |
| EN | European Norme |
| ESD | electrostatic discharge |
| ESL | equivalent series inductance |
| ESR | equivalent series resistance |
| FATID | frequency, amplitude, time, impedance and dimensions |
| FDTD | finite difference time domain |
| FEM | finite element method |
| FET | field effect transistor |
| FEXT | far end cross-talk |
| FPGA | field programmable gate array |

| | |
|--------|--|
| GDT | gas discharge tube |
| GTEM | GHz transverse electromagnetic |
| GTL | gunning transistor logic |
| HD | high density |
| HM | hard metric |
| IBIS | input/output buffer information specification |
| IDC | internal data channel |
| IC | integrated circuit |
| IGBT | insulated gate bipolar transistor |
| IRQ | interrupt request |
| ISM | industrial, scientific and medical equipment |
| ITE | information technology equipment |
| JFET | junction field effect transistor |
| LDO | low drop out (regulator) |
| LED | light-emitting diode |
| LVD | low voltage directive |
| LVDS | low voltage differential signalling |
| MLCC | multilayer ceramic chip capacitor |
| MLV | multilayer varistor |
| MOM | method of moments |
| MOSFET | metal oxide semiconductor field effect transistor |
| MOV | metal oxide varistor |
| NEXT | near end cross-talk |
| NRZ | non-return to zero |
| NRZI | non-return to zero inverted |
| OEM | original equipment manufacturer |
| OTP | one time programmable |
| PC | personal computer |
| PCB | printed circuit board (also printed wiring board) |
| PCMCIA | Personal Computer Memory Card Industry Association |
| PECL | pseudo emitter coupled logic |
| PGA | pin grid array |
| PLCC | plastic leadless chip carrier |
| PLA | programmable logic array |
| PLL | phase locked loop |
| PSDC | power supply damping circuit |
| PSU | power supply unit |
| PTH | plated through hole |
| PWB | printed wiring board (PCB used here) |
| PWM | pulse width modulation |
| QFP | quad flat pack |
| RAM | random access memory |
| RF | radio-frequency |
| RFI | radio-frequency interference |
| ROM | read only memory |
| RTOS | real-time operating systems |

| | |
|-------|---|
| SCI | scalable coherent interface |
| SCR | silicon controlled rectifier |
| SI | signal integrity |
| SM | surface mount |
| SMD | surface mount device |
| SMPS | switched mode power supply |
| SMT | surface mount technology |
| SPICE | simulation program with integrated circuit emphasis |
| SRAM | static random access memory |
| SRF | self-resonant frequency |
| SSC | spread spectrum clock |
| SSR | solid state relay |
| STP | shielded twisted pair |
| TAB | tape automated bonding |
| TBU | transient blocking unit |
| TCF | technical construction file |
| TEM | transverse electromagnetic |
| TLM | transmission line matrix |
| TTL | transistor transistor logic |
| TVS | transient voltage suppressor |
| UART | universal asynchronous receive and transmit |
| UHF | ultra high frequency |
| UTP | unshielded twisted pair |
| VHF | very high frequency |
| VCO | voltage-controlled oscillator |
| VDR | voltage-dependent resistors |
| VME | virtual memory extended |
| ZIF | zero insertion force |
| ZCS | zero current switching |
| ZVS | zero voltage switching |

International Standards Bodies and Institutions

| | |
|----------------|--|
| ANSI | American National Standards Institute |
| BAPT | Bundesamt für Post und Telekommunikation (Germany) |
| BSI | British Standards Institute |
| CCITT | International Telephone and Telegraph Consultative Committee |
| CEI | Italian Electrotechnical Committee |
| CENELEC | Comite European de Normalisation Electrotechnique |
| CISPR | Comite International Special des Perturbations Radioelectriques |
| CSA | Canadian Standards Authority |
| DEMKO | Dansk Standards (Denmark) |
| DIN | Deutsches Institut für Normung (Germany) |
| DKE | Deutsches Elektrotechnische Kommission in DIN und VDE (Germany) |
| DTI | Department of Trade and Industry (UK) |
| EIA | Electronic Industries Association |
| ETCI | Electrotechnical Council of Ireland |
| ETSI | European Telecommunications Standards Institute |
| FCC | Federal Communications Commission (US) |
| HDT | Hoofdirectie Telecommunicatie en Post (Netherlands) |
| IEC | International Electrotechnical Commission |
| ISO | International Organisation for Standardization |
| ITU | International Telecommunication Union |
| JISC | Japanese Industrial Standards Committee |
| NAMAS | National Measurement Accreditation Service (UK) |
| NEMKO | Norsk Elektroteknisk Komite (Norway) |
| NSF | Norges Standardiseringsforbund (Norway) |
| OVE | Osterreichischer Verband für Electrotechnik (Austria) |
| SAA | Standards Australia |
| SCC | Standards Council of Canada |
| SFS | Suomen Standardoimislitto (Finland) |
| SEMKO | Svenska Elektriska Kommissionen (Sweden) |
| SESKO | Finnish Electrotechnical Standards Organisation |
| SEV | Schweiz Elektrotechnisher Verein (Switzerland) |
| SIRIM | Standards and Industrial Research of Malaysia |
| UL | Underwriters Laboratory (USA) |
| UNI | Ente azionale Italiano di Unificazione (Italy) |
| VCCI | Voluntary Council for Interference by Data Processing Equipment and Electronic Office Machines (Japan) |
| VDE | Verband Deutsche Electrotechniker (Germany) |