

ACRONYMS AND ABBREVIATIONS

ACIS	Access Control Interlock System (APS)
ACNET	Accelerator Control NETwork (FNAL)
ADC	Analog to Digital Converter
ADO	Accelerator Device Object (RHIC)
AGS	Alternating Gradient Synchrotron (BNL)
AI	Artificial Intelligence
ALS	Advanced Light Source (LBL)
ANL	Argonne National Laboratory (Chicago)
API	Application Program Interface
APS	Advanced Photon Source (ANL)
ARP	Address Resolution Protocol
ATM	Asynchronous Transfer Mode
AUS	Accelerator Utility System (IHEP, Protvino)
BCD	Beam Coordination Diagram (CPS)
BEPC	Beijing Electron-Positron Collider
BESSY	Berliner Elektronenspeicherring-gesellschaft fur SYnchrotronstrahlung (Berlin electron laboratory for synchrotron radiation)
BINS	Budker Institute of Nuclear Physics (Novosibirsk)
BNL	Brookhaven National Laboratory (Long Island, NY)
BPM	Beam Position Monitor
BSD	Berkeley Software Distribution
BURT	Back Up Restore Tool
CAD/CAM	Computer Aided Design/Computer Aided Manufacturing
CAL	CAN Application Layer
CAMAC	Standard crate, module and backplane system
CAN	Controller Area Network (Automobile bus system)
CAS	Central Alarm Server (CERN)
CASE	Computer Aided Software Engineering
CDEV	Common DEvice <i>or</i> Control DEvice
CDF	Collider Detector at Fermilab
CDS	Control and Data System
CEBAF	Continuous Electron Beam Accelerator Facility (Newport News, VA)
CECIL	Common EPICS CAN Interface Layer
CERN	European Organisation for Nuclear Research (ex-Centre European pour le Research Nucleaire)
CICERO	Control Information system Concepts based on Encapsulated Real-time Objects (CERN)
CIM	Computer Integrated Manufacture
CLC	Console-Level Computers (RHIC)
CORBA	Common Object Request Broker Architecture
COSY	Cooler Synchrotron (Juelich, Germany)
CPS	CERN PS
DAC	Digital to Analog Converter
DANTE	DAPHNE New Tools Environment (Frascati)
DAQ	Data AcQuisition board (CERN)
DAQ	Data AcQuisition System (LBL)
DBMS	DataBase Management System
DCE	Distributed Computing Environment
DCM	Direct Communication Module (Allen Bradley)
DDS	Direct Digital Synthesis

DEC	Digital Equipment Corporation
DESY	Deutsches Elektronen SYNchrotron (Hamburg)
DIC	Device Interface Computer (PAL)
DIO	Digital Input/Output
DSC	Device Stub Controller
DSP	Digital Signal Processor
DTM	Distributed Table Manager (CERN)
ECA	Equipment Control Assembly (CERN)
ECR	Electron Cyclotron Resonance (Ion Source)
EIU	Equipment Interface Unit (ELETTRA)
EPA	Electron-Positron Accumulator (CERN)
EPAC	European Particle Accelerator Conference
EPCS	Experimental Physics Control Systems (Interdivisional Group of EPS)
EPICS	Experimental Physics and Industrial Control System
EPLD	Electrically Programmable Logic Devices
EPS	European Physical Society
ESO	European Space Organisation <i>or</i> European Southern Observatory
ESOC	European Space Operations Centre
ESRF	European Synchrotron Radiation Facility
EU	European Union
FDDI	Fiber Distributed Data Interface
FEC	Front End Computer
FNAL	Fermi National Accelerator Laboratory (Fermilab)
FPGA	Field Programmable Gate Arrays
FSM	Finite State Machine
GANIL	Grand Accelérateur National d'Ions Lourdes (Heavy Ion Accelerator, Caen, France)
GPIO	General Purpose Interface Bus (IEEE-488)
GSI	Gesellschaft fuer SchwerIonenforschung (Heavy Ion Research Laboratory, Darmstadt, Germany)
GUI	Graphical User Interface
HCI	Human Computer Interface (CERN)
HEP	High Energy Physics
HERA	Hadron-Elektron Ring Anlage (proton and electron colliding rings, DESY)
HIRFL	Heavy Ion Research Facility in Lanzou (China)
HMI	Hahn-Meitner-Institut (Berlin)
HVAC	High Voltage Alternating Current <i>or</i> Heating, Ventilation and Air Conditioning
ICALEPS	International Conference on Accelerator and Large Experimental Physics Control Systems
ICMP	Internet Control Message Protocol
ICRR	Institute for Cosmic Ray Research (Japan)
ID	Insertion Device
IDC	Intelligent Device Controller (BINS)
IDT	Interface Development Tool
IHEP	Institute for High Energy Physics (Protvino Russia <i>and</i> Beijing, China)
ILC	Intelligent Local Cotnroller
ILL	Institut Laue Langevin (Grenoble)
I/O or IO	Input/Output
IOC	Input/Output Controller
IP	Internet Protocol <i>or</i> Industry Pack

IPC	InterProcess Communication
ISAS	Institute of Space and Astronautical Science (Japan)
ISN	Institut des Sciences Nucleaires (Grenoble)
ISO	International Standards Organization
ISR	Interrupt Service Routine
ISS	Instrumentation SubSystem (PSR)
KEK	National Laboratory for High Energy Physics (Japan)
KFA	KernForschungsAnlage (Nuclear Research Laboratory, Juelich, Germany)
KEKB	KEK B-Factory
KFTI	Kharkiv Institute of Physics and Technology (Ukraine)
LAN	Local Area Network
LAMPF	Los Alamos Meson Physics Facility
LANL	Los Alamos National Laboratory
LANSCE	Los Alamos Neutron Science CEntre
LBL	Lawrence Berkeley Laboratory (Berkeley, CA)
LCR	Local Control Room
LEAR	Low Energy Antiproton Ring (CERN)
LEP	Large Electron-Positron collider (CERN)
LHC	Large Hadron Collider (proposed, CERN)
LIL	LEP Injector Linac (CERN)
LINAC	LINEar ACcelerator
LPC	Local Process Controller (ELETTRA)
MAD	Methodical Accelerator Design program
MAP	Manufacturing Automation Program
MBS	Message Broadcasting System
MCR	Main Control Room,
MEDM	Motif Editor/Display Manager
MEPHI	Moscow state Engineering PHysics Institute
Mil-1553	MIL/STD-1553B serial field bus
MMI	Man-Machine Interface
MPX	MultiPleX system (CERN)
MRTI	Moscow RadioTechnical Institute
MTG	Master Timing Generator
NAO	National Astronomical Observatory (Japan)
NC	Network Compiler (CERN) <i>or</i> Numerically Controlled
NFS	Network File System
NIKHEF	National Institute for Nuclear and High-Energy Physics (Amsterdam, Netherlands)
NIRS	National Institute of Radiological Sciences (Chiba, Japan)
NODAL	NORsk Data Accelerator Language (CERN)
NSLS	National Synchrotron Light Source (BNL)
OAT	Osservatorio Astronomico di Trieste (Italy)
ODBC	Open DataBase Connectivity (KEK)
ODBMS	Object DataBase Management System
ODS	Open Database Services (KEK)
OLE	Object Linking & Embedding
OO	Object Oriented
OOD	Object Oriented Design
OODB	Object Oriented DataBase
OOP	Object Oriented Paradigm
OOT	Object Oriented Technology
OPI	OPERator Interface
OS	Operating System

OSD	Open Database Services
OSF	Open Systems Foundation
OSI	Open Interconnection Standard
PAC	Particle Accelerator Conference
PAL	Pohang Accelerator Laboratory (Korea) <i>or</i> Programmable Array Logic
PC	Personal Computer (usually IBM or clone)
PCA	Process Control Assembly (CERN)
PHIGS	Programmer's Hierarchical Interactive Graphics System
PID	Proportional, Integral and Differential Controller
PLC	Programmable Logic Controller
PS	Proton Synchrotron
PSB	PS Booster (CERN)
PSI	Paul Scherrer Institut (Villigen, CH)
PSR	Proton Storage Ring (LAMPF)
PSS	Personnel Safety System (APS)
PV	Process Variable
RDBMS	Relational DataBase Management System
REMOT	Remote Experiment MONitoring and conTrol (EU Project)
RHIC	Relativistic Heavy Ion Accelerator (BNL)
RISC	Reduced Instruction Set Computing
RMON	Remote MONitoring protocol
RPC	Remote Process Call
RTP	Real-Time Protocol (Internet)
SA/SD	Structured Analysis/Structured Design
SCC	Spring-8 Control Command
SCI	Simple CAN Interface
SCMP	Software Configuration Management Plan
SDDS	Self Describing Data Sets (ANL)
SDFD	Self Describing File Protocol (ANL)
SFC	Sector-Focussing Cyclotron
SLAC	Stanford Linear ACcelerator (Stanford, CA)
SLC	SLAC Linear Collider
SNL	State Notation Language
SNMP	Simple Network Management Protocol
SOSH	Software SHaring
SPring-8	Super Photon ring 8GeV
SPS	Super Proton Synchrotron (CERN)
SQA	Software Quality Assurance
SQL	Structured Query Language
SR	Synchrotron Rariation
SRRC	Synchrotron Radiation Research Center (Taiwan)
SSC	Separate-Sector Cyclotron
SSRL	Stanford Synchrotron Radiation Laboratory
STAR	Solenoidal Tracks at RHIC
SVVP	Software Verification and Validation Plan
TCP/IP	Transport Control Protocol/Internet Protocol
TCR	Technical Control Room (CERN)
TDM	Time Division Multiplex
TESLA	TeV Superconducting Linear Accelerator (DESY and others)
TNG	Telescopio Nazionale Galileo (La Palma)
TOD	Time of Day
TPC	Time Projection Chamber (RHIC)
TRINITI	TRoitsk INstitute for Innovation and Thermonuclear

	Investigations (Russia)
TRISTAN	Transposable Ring Intersecting SStorage Accelerator in Nippon (KEK electron-positron collider)
TRIUMF	TRI-University Meson facility (Vancouver, British Columbia, Canada)
TSS	Telescope Software System (TNG)
UCS	Utility Control System (IHEP, Protvino)
UDP	User Datagram Protocol
UIDS	User Interface Development System
UIMS	User Interface Management System
UMMI	Uniform Man Machine Interface
VEPP	Electron-Positron Collider (Novosibirsk, Russia)
VLAN	Virtual Local Area Network
VLT	Very Large Telescope (ESO)
VME	Versa Module European (Crate, module & backplane)
VMEbus	Often used for VME. Not just the VME backplanes.
VMS	Virtual Memory System (DEC)
VUV	Vacuum Ultra-Violet
VXI	VME EXtension for Instrumentation
WAN	Wide Area Network
WIMP	Windows, Icons, Menus and Pointer Interface
WYSIWYG	What You See Is What You Get
WSS	Workstation Software System (TNG)
WWW	World-Wide Web
XUIMS	X-Windows User Interface Management System (CERN)