CMS acronym list

AB Algorithm Board
AC Alternating Current

ADC Analog to Digital Converter

AFEB Anode Front-End Board, CSC system

AG Application Gateway

ALCT Anode Local Charged Track trigger primitive, CSC system

AOD Analysis Object Data - a compact event format for physics analysis

AOH Analog Opto-Hybrid APD Avalanche Photo-Diode

API Application Programming Interface

APV Analogue Pipeline (Voltage mode), front-end read-out chip of Tracker

ASIC Application Specific Integrated Circuit
ATLAS A Toroidal LHC ApparatuS experiment
aTTS Asynchronous Trigger Throttle System

AWG American Wire Gauge
BMU Barrel Muon system

BD Back Disk
BP Back Petal
BPix Barrel Pixel
BR Branching Ratio

BRAN Beam RAte of Neutrals
BST Beam Synchronous Timing

BTI Bunch and Track Identifier trigger primitive, DT system

BU Builder Unit
BX Bunch Crossing

BXN Bunch Crossing Number

CASTOR Centauro And Strange Object Research

CC Cosmic Challenge

CCS Clock and Control System

CCU Communication and Control Unit

CCUM Communication and Control Unit Module

CDR Central Data Recording
CFC Carbon Fiber Composite

CFEB Cathode Front-End Board of the CSC system

CLCT Cathode Local Charged Track trigger primitive, CSC system

CMM Coordinate Measuring Machine

CMN Common Mode Noise

CMOS Complementary Metal Oxide Semiconductor

CMS Compact Muon Solenoid experiment

CMSSW CMS SoftWare framework

COSINE Consistent Online Software INtegration Environment, project integrating

online with offline software

CPU Central Processing Unit

COCOA CMS Object-oriented Code for optical Alignment

CRAB CMS Remote Analysis Builder
CRack Cosmic Rack, a set of TOB rods

CRC Cyclic Redundancy Check error detection
CSC Cathode Strip Chamber muon system

CSCTF Cathode Strip Chamber Trigger Track Finder

D2S Data to Surface

DAC Digital to Analog Converter

DAQ Data Acquisition

DAQMB Data Acquisition Motherboard, CSC L1 trigger

DBMS Database Management System

DC Direct Current

DCCData Concentrator CardDCCTDC Current TransformerDCSDetector Control SystemDCUDetector Control Unit

DDD Detector Description DatabaseDDL Data Description Language

DDU Detector Dependent Unit in DAQ system
 DIP Data Interchange Protocol (CERN)
 DMB DAQ MotherBoard of CSC system
 DOFZ Diffusion Oxygenated Float Zone

DOH Digital Opto-Hybrid

DOHM Digital Opto-Hybrid ModuleDQM Data Quality Monitoring

DQMC Data Quality Monitoring Collector

DSS Detector Safety System
DT Drift Tube muon system

DTTF Drift Tube Trigger Track Finder, DT L1 trigger

EB Electromagnetic Calorimeter (Barrel)

ECAL Electromagnetic Calorimeter

EDM Event Data Model

EDMS Engineering Database Management System

EE Electromagnetic Calorimeter (Endcap)

EIC Electromagnetic Isolation Card, regional calorimeter trigger

ELMB Embedded Local Monitoring Board (ECAL)

EMDB Equipment Management DataBase

EMU Endcap Muon system
ENC Equivalent Noise Charge

EP Event Processor

ES Endcap preShower detector, also Event Server

ESP Event Server Proxy
ESS ECAL Safety System

ETTF Eta Track Finder, DT regional muon trigger

EVB EVent Builder
EVF Event Filter Farm
EVM Event Manager
FB FED builder
FD Front Disk

FDL Final Decision Logic, L1 Global Trigger

FE Front-End

FEB Front-End Board

FEC Front-End Card, Front End Controller

FED Front-End Driver
FEE Front-End Electronics
FES Front-End System

FENIX ECAL front-end read-out ASIC

FEVT Event format comprising the union of RAW and RECO data

FF Filter Farm

FMM Fast Merging Module FIFO First In First Out buffer

FP Front Petal

FPGA Field Programmable Gate Array

FPix Forward Pixel

FRL Front-End Read-out Link
FSM Finite State Machine

FTP Foil screened Twisted Pair cables

FU Filter Unit
Gb Gigabit (10⁹ bits)
GB Gigabyte (10⁹ bytes)
GBW Gain BandWidth product

GCALOR Computer program for hadron shower calculations

GCT Global Calorimeter Trigger (L1)
GIF Gamma Irradiation Facility
GMR Global Muon Reconstructor
GMT Global Muon Trigger (L1)

GOH Giga Optical HybridGOL Gigabit Optical Link

GPN General Purpose Network (CERN campus)

GT Global Trigger (L1)

GTFE Global Trigger Front-end board (L1)
GTL Global Trigger Logic board (L1)

GTL+ Gunning Transceiver Logic, upgraded version, developed by Fairchild

Semiconductor

GTP Global Trigger Processor

GTPe Global Trigger Processor emulator

GUI Graphical User Interface
H2 Beamline at CERN
HCAL Hadron Calorimeter

HB Hadron Calorimeter (Barrel)
 HDI High Density Interconnect
 HE Hadron Calorimeter (Endcap)
 HF Hadron Calorimeter (Forward)

HG High GainHI Heavy Ion(s)

HIJING Heavy Ion Jet INteraction Generator, Monte Carlo event generator for

heavy-ion collisions

HIP Hits and Impact Point alignment method, also Highly Ionizing Particle

HLT High-Level TriggerHM Humidity Monitoring

HO Hadron Calorimeter (Outer Barrel)

HPD Hybrid Photo-Diode

HTML HyperText Mark-up Language
HTR HCAL Trigger and Read-out

HV High Voltage

IGUANA Interactive Graphics for User ANAlysis

I²**C** Inter-Integrated Circuit

ICB InterConnect Board (TEC), InterConnect Bus (TOB)

ICC InterConnect Card
I/O Input/Output
IOV Interval Of Validity

interval of variatty

IP Interaction Point or Internet Protocol

ISO Isolation bit in muon trigger

ISR Intersecting Storage Ring collider at CERN

JCOP Joint controls Project at CERN

JSC Jet Summary Card, in Regional Calorimeter Trigger

JTAG Joint Test Action Group

kb kilobit (10³ bits)kB kilobytes (10³ bytes)

L1 Level-1 hardware-based trigger

L1A Level-1 Accept
LAN Local Area Network
LAS Laser Alignment System

LCG LHC Computing Grid (a common computing project)
LCT Local Charged Track trigger primitive of CSC system

LDAP Lightweight Directory Access Protocol

LED Light Emitting Diode

LEP Large Electron Positron collider at CERN

LG Low Gain

LHC Large Hadron Collider
LSB Least Significant Bit

LUT Lookup table

LTC Local Trigger Controller

LV Low Voltage

LVD Low Voltage Distribution

LVDS Low Voltage Differential Signaling

LVR Low Voltage Regulator
MA Module Alignment

MAB Module Alignment of Barrel

Mb Megabit (10⁶ bits)

MB Muon system (Barrel), also Mother Board or Megabyte (10⁶ bytes)

MC Monte Carlo simulation program/technique, also Mini-Crate of DT system

ME Muon system (Endcap) or Monitoring Element

MEM Monitoring Electronics Module mFEC mezzanine Front End Controller

MGPA Multiple Gain Pre-Amplifier chip, ECAL

MILLEPEDE Algorithm for tracker alignment
MIP Minimum Ionizing Particle
MOS Metal Oxide Semiconductor

MOSFET Metal Oxide Semiconductor Field Effect Transistor

MPC Muon Port Card, CSC L1 trigger

MSS Magnet Safety System

MT Mean Time

MTCC Magnet Test Cosmic Challenge

MTU Maximum Transfer Unit
NIC Network Interface Card
NIEL Non-Ionizing Energy Loss

O2O Online to Offline

ODBMS Object Database Management System

OMDS Online Master Data Storage
OPC OLE for Process Automation

ORCOF Offline ReConstruction Offline subset, conditions database

ORCON Offline ReConstruction ONline subset, conditions database

OS Operating System

P5 Point 5 collision area of LHC
PACE Preshower front end ASIC

PACT PAttern Comparator Trigger, RPC system

PB Petabyte (10¹⁵ bytes)
PC Personal Computer
PCB Printed Circuit Board

PCI Peripheral Component Interconnect

PD Pixel Detector

PDF Parton Density Function, also Probability Distribution Function

PHTF Phi Track Finder, DT regional muon trigger

PLC Programmable Logic Controller
PLD Programmable Logic Device

PLL Phase-Locked Loop

PP Patch Panel

PLT Pixel Luminosity Telescope

PS Proton Synchrotron

PSB Pipeline Synchronizing Buffer, L1 Global Trigger and Global Muon Trigger

PSX PVSS SOAP Interface

PTM Precision Temperature Monitoring, ECAL

PV Primary Vertex

PVSS Prozessvisualisierungs- und Steuerungs-System

QIE Charge Integrator and Decoder, ECAL frontend electronics

QPLL Quartz Phase-Locked Loop

RAW Event format from the online containing full detector and trigger data

RB Read-out Unit Builder, also Resource Broker

RCT Regional Calorimeter Trigger (L1)

RCS Run Control System

RECO Event format for reconstructed objects such as tracks, vertices, jets, etc.

RH Relative Humidity

RISC Reduced Instruction Set Computer

RMS Root Mean Square

ROB ReadOut Board, DT system

ROC ReadOut Chip, pixels

ROS ReadOut Server board, DT system
RPC Resistive Plate Chamber muon system

RS Resource Service RU Read-out Unit

SAN Storage Area Network

SC Sector Collector, DT muon L1 trigger or Super Crystal, ECAL

SCA Switched Capacitor Array buffer, CSC system
SCADA Supervisory Control And Data Acquisition

SCX Surface Control eXperimental building at P5

SDA Slow Dump Accelerated
SEL Single Event Lathcup
SEU Single Event Upset
SFM SubFarm Manager

Skim Subset of events selected from a larger set

SLB Sychronization and Link Board

SM SuperModule (ECAL) or Storage Manager (DAQ)

SMB System Mother Board SMD Surface Mounted Device

SMS Short Message Service (mobile phones)

S/N Signal to Noise ratio

SNMP Simple Network Management Protocol

SOAPSimple Object Access ProtocolSPSSuper Proton SynchrotronSRPSelective Read-out Processor

SST Silicon Strip Tracker
STL Standard Template Library

sTTS Synchronous Trigger Throttle System

SV Secondary Vertex

SX5 Surface hall at Point 5 for CMS T1, T2 Tracking telescopes of TOTEM

TAG Event index information such as run/event number, trigger bits, etc.

TbTerabit (1012 bits)**TB**Terabyte (1012 bytes)**TBM**Token Bit Manager

TCA Telecom Computing Architecture

TCC Trigger Concentrator Card
TCP Transmission Control Protocol

TCS Trigger Control System
TDC Time to Digital Converter
TDR Technical Design Report

TDSS Tracker Detector Safety System

TEC Tracker EndCap

TF Track-Finder, muon L1 trigger

TIB Tracker Inner Barrel
TID Tracker Inner Disks

TIM Timing Module, Global Trigger and Drift Tube Trigger Track Finder

TMB Trigger MotherBoard, CSC L1 trigger

TN Technical Network
TOB Tracker Outer Barrel

TOTEM TOTal Elastic and diffractive cross section Measurement

TPD Tracker Pixel Detector

TPG Trigger Primitive Generator
 TRACO Track Correlator, DT L1 trigger
 TriDAS Trigger and Data Acquisition project

TRLB Token Ring Link Board

TS Trigger Server, DT L1 trigger
TSM Track Sorter Master, DT L1 trigger
TSS Track Sorter Slave, DT L1 trigger

TTC Trigger Timing and Control
TTCex TTC Encoder and Transmitter

TTCmi TTC Machine Interface

TTCrx TTC Receiver

TTS Trigger Throttling System
UDP User Datagram Protocol

USC55 Underground Service Cavern at Point 5 for CMS
UXC55 Underground eXperimental Cavern at Point 5 for CMS

VFE Very Front End

VHDI Very High Density Interconnect

VME Versa Module Eurocard VPT Vacuum PhotoTriode WAN Wide Area Network

WLCG Worldwide LHC Computing Grid

WLS WaveLength Shifting

XDAQ Software framework for CMS Data Acquisition

XML eXtensible Markup Language

YB Yoke (Barrel)
YE Yoke (Endcap)

ZDC Zero Degree Calorimeter