

# Appendix B

## Acronyms and Abbreviations

The following acronyms and abbreviations are used in the Technical Design Report:

<b>ADC</b>	Analogue to Digital Converter
<b>AISC</b>	American Institute of Structural and Civil Engineering
<b>AMS</b>	Alpha Magnetic Spectrometer
<b>ANSI</b>	American National Standards Institute
<b>APV</b>	Front-end Readout Chip: Analogue Pipeline (Voltage mode)
<b>APV6</b>	Silicon APV in Harris CMOS
<b>APVD</b>	Silicon APV in DMILL CMOS
<b>APVMUX</b>	APV Multiplexer
<b>ASIC</b>	Application Specific Integrated Circuit
<b>ASME</b>	American Association of Mechanical Engineering
<b>BER</b>	Bit Error Rate
<b>CCD</b>	Charge Coupled Device
<b>CCU</b>	Communication and Control Unit
<b>CCUM</b>	CCU Module
<b>CF</b>	Carbon Fiber
<b>CFRP</b>	Carbon Fiber Re-enforced Plastic
<b>CME</b>	Coefficient of Moisture Expansion
<b>CNC</b>	Computer Numerically Controlled milling machine
<b>COG</b>	Centre of Gravity
<b>CST</b>	Central Support Tube
<b>CTE</b>	Coefficient of Thermal Expansion
<b>DAQ</b>	Data Acquisition System
<b>DCS</b>	Detector Control System
<b>DCU</b>	Detector Control Unit
<b>DIL</b>	Dual In-Line (package)
<b>DLC</b>	Diamond-Like Coating
<b>DME</b>	Dimethyl Ether
<b>DPM</b>	Dual Port Memory
<b>EB</b>	Electromagnetic Calorimeter Barrel
<b>ECAL</b>	Electromagnetic Calorimeter
<b>EDMS</b>	Engineering Data Management System

<b>ESD</b>	Electro-Static Discharge
<b>FEA</b>	Finite Element Analysis
<b>FEC</b>	Front-End Controller
<b>FED</b>	Front-End Driver
<b>FIFO</b>	First In First Out Buffer
<b>FPGA</b>	Field Programmable Gate Array (=PLD)
<b>GLIMOS</b>	Group Leader in Matters of Safety
<b>HB</b>	Hadron Calorimeter Barrel
<b>HCAL</b>	Hadron Calorimeter
<b>HE</b>	Hadron Calorimeter Endcap
<b>HIP</b>	Highly Ionizing Particle
<b>HM</b>	High Modulus
<b>HV</b>	High Voltage
<b>I2C</b>	Philips two wire serial command protocol
<b>IC</b>	Integrated Circuit
<b>IEEE</b>	Institute of Electrical and Electronics Engineering
<b>IOC</b>	Input-Output Controller
<b>LAN</b>	Local Area Network
<b>LED</b>	Light Emitting Diode
<b>LUT</b>	Look Up Table
<b>LV</b>	Low Voltage
<b>LVDS</b>	Low Voltage Differential Swing
<b>MAB</b>	Muon Alignment Barrel station
<b>MB</b>	Minimum Bias
<b>MCM</b>	Multi-Chip Module
<b>MIP</b>	Minimum Ionizing Particle
<b>MPC</b>	Multi-Project Chip
<b>MSGC</b>	Micro-strip Gas-Counter
<b>PBS</b>	Product Breakdown Structure
<b>PCI</b>	Peripheral Component Interface
<b>PCM</b>	Process Control Monitor
<b>PEEK</b>	Poly Ether Ether Keton
<b>PID</b>	Process Internal Detection
<b>PLC</b>	Programmable Logical Controller
<b>PLD</b>	Programmable Logic Device
<b>PLL</b>	Phase Locked Loop (chip)
<b>PMC</b>	PCI Mezzanine
<b>PPP</b>	Pre Production Prototype
<b>QIL</b>	Quasi Isotropic Laminate
<b>RDPM</b>	Readout Dual Port Memory

---

<b>SE</b>	Pre-shower Endcap
<b>SST</b>	Silicon Strip Tracker
<b>TDR</b>	Technical Design Report
<b>TIS</b>	Technical Inspections and Safety
<b>TPG</b>	Thermal Pyrolytic Graphite
<b>TSC</b>	Tracker Sub-system Controller
<b>TSS</b>	Temporary Supporting Structure
<b>TTC</b>	Timing Trigger and Command
<b>TTCrx</b>	TTC receiver
<b>UHM</b>	Ultra High Modulus
<b>WBS</b>	Work Breakdown Structure

---

