UNIVERSITÀ DEGLI STUDI DI BOLOGNA

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Design and development of high speed VLSI architectures for high energy physics

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Acronyms

ADC	Analog to Digital Converter
AFM	Adaptive Fuzzy Modeler
ALICE	A Large Ion Collider Experiment
AMBRA	multi-event buffer integrated-circuit pair
ASIC	Application Specific Integrated Circuits
CARLOS	Compression And Run Length encOding Subsystem
CLB	Configurable Logic Block
CMOS	Complementary Metal Oxide Semiconductor
CPLD	Complex Programmable Logic Device
CRC	Cyclic Redundancy Check
DAQ	Data AcQuisition system
DIU	Destination Interface Unit
DSI	Drift SIlicon
ES2	European Silicon Structure
FIFO	First In First Out
FPGA	Field Programmable Gate Array
HEPE	High Energy Physics Experiments
HV	High Voltage
IC	Integrated Circuit
ID	IDentifier
IEEE	Institute of Electrical and Electronics Engineering
INFN	Istituto Nazionale Fisica Nucleare
ITS	Inner Tracking System
JTAG	Joint Test Action Group
LHC	Large Hadron Collider
LSB	Least Significant Bit
MIP	Minimum Ionizing Particle
MOS	Metal Oxide Semiconductor
MSB	Most Significant Bit
MS/s	Million Sample per Second
NEMO	NEutrino subMarine Observatory
PASCAL	analog storage and ADC architecture
PASIC	Programmable Application Specific Integrated Circuits
RAM	Random Access Memory
R&D	Research and Development
SDD	Silicon Drift Detector
SEE	Single Event Effects
SIU	Source Interface Unit
S/H	Sample and Hold
S/N	Signal to Noise
SW	Software
TDM	Time Domain Multiplexing
TM	Trade Mark
VLSI	Very Large Scale Integration