

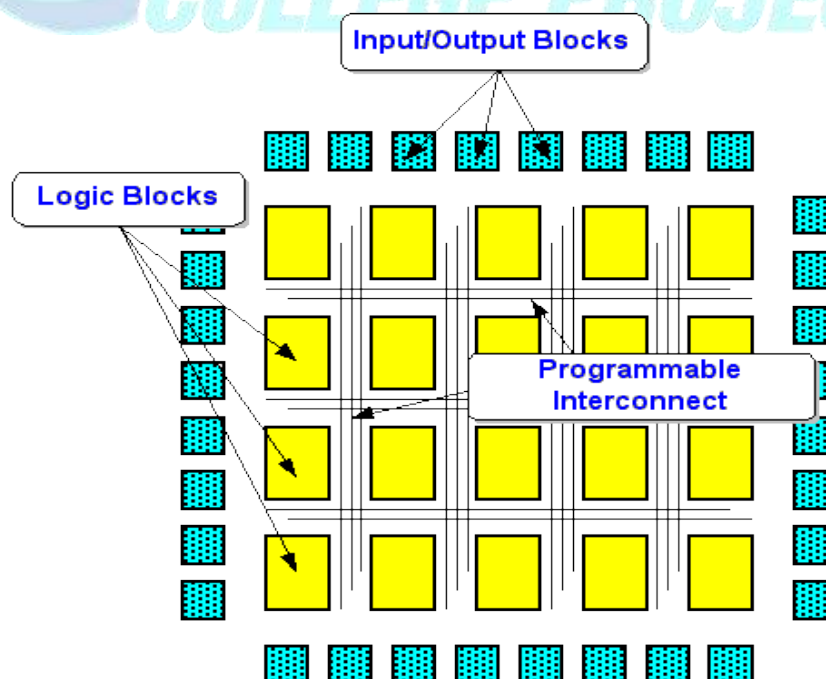
FPGA Projects supports Prototyping IC design.

FPGA device supports multiple control loops run on the single device at different rates. FPGA Device supports thousand of gates. Xilinx ISE design environment for FPGA Projects.

We assist research Scholars in implementing **FPGA Projects** with best Customer Support. For more details contact us: +91 9790238391.

Why FPGA?

- Matrix of reconfigurable gate array logic circuitry.
- Hardwired chips are produced for faster performance.
- Based around a matrix of configurable logic blocks (CLBs) connected via programmable interconnects which are surround by IOB (input/output blocks).
- Flip-flop used as memory.



FPGA TYPES.

On basis of internal arrangement

- Symmetrical arrays-logic elements arranged in rows and columns of matrix and interconnect laid out between them.
- Row based architecture- alternating rows of logic modules and programmable interconnect tracks. Input output blocks is located in the periphery of the rows.
- Hierarchical PLDs- hierarchical manner with top level containing only logic blocks and interconnects.

Based on user programmable technology,

- Anti-fuse programmed.
- SRAM programmed.
- EEPROM programmed.

Benefits of FPGA Projects.

- Reduce system complexity.
- Manufacturing cost.
- Improve performance.
- Less design and testing time.

Uses of FPGA Projects

- Automotive.
- Data Center .
- High Performance Computing.
- Security.
- Broadcast.

Domain : FPGA Projects Implementation.

- Wireless communication.
- Wired communication.
- Aerospace and Defense.
- Consumer Electronics.
- Medical electronics
- Image processing.
- Networking.

Sample IEEE FPGA Projects Topics.

SI	IEEE FPGA Projects Titles.
1	Hybrid adaptive clock management for FPGA processor acceleration.
2	A PUF-FSM Binding Scheme for FPGA IP Protection and Pay-Per-Device Licensing.
3	Software-based high-level synthesis design of FPGA beamformers for synthetic aperture imaging.
4	Real time implementation of a novel chaotic generator on FPGA.
5	170Gb/s FPGA to FPGA optical interconnects using a x12 14Gb/s onboard optics
6	A Modular Multilevel Converter Pulse Generation and Capacitor Voltage Balance Method Optimized for FPGA Implementation.
7	A 128-Channel, 710 M Samples/Second, and Less Than 10 ps RMS Resolution Time-to-Digital Converter Implemented in a Kintex-7 FPGA.
8	Linearized Torque Actuation Using FPGA-Controlled Magnetorheological Actuators.
9	750-kW interleaved buck converter dc supply control implementation in a low-cost FPGA.
10	A Novel Digital Duty-Cycle Modulation Scheme for FPGA-Based Digital-to-Analog Conversion.
11	FPGA based DSC-PLL for grid harmonics and voltage unbalance effect elimination.
12	Memory Coherency Based CPU-Cache-FPGA Acceleration Architecture for Cloud Computing.
13	An FPGA Correlation-Edge Distance approach for disparity map.
14	FPGA-Based Voltage and Current Dual Drive System for High Frame Rate Electrical Impedance Tomography.
15	Code development of a DSP-FPGA based control platform for power electronics applications.
16	Knowledge-Based Neural Network Model for FPGA Logical Architecture Development.
17	Design of a parallel-operation-oriented FPGA.
18	Implementation of FPGA Based Digital Camera System Controlled from an LCD Touch Panel.
19	Architecture of FPGA Embedded Multiprocessor Programmable Controller.
20	MRP: Mix real cores and pseudo cores for FPGA-based chip-multiprocessor simulation.
21	A fingerprint biometric cryptosystem in FPGA.
22	A FPGA implementation of JPEG baseline encoder for wearable devices.
23	Edge dedection application with FPGA based Sobel operator.
24	Intelligent and adaptive Traffic Light Controller (IA-TLC) using FPGA.

25	Memory-aware optimization of FPGA-based space systems.
26	Embedded web server for real-time remote control and monitoring of an FPGA-based on-board computer system.
27	FPGA accelerated DNA error correction.
28	Artificial Neural Network as a FPGA Trigger for a Detection of Very Inclined Air Showers.
29	Moving Object Tracking Application: FPGA and Model Based Implementation Using Image Processing Algorithms.
30	Optimization of controller gains for FPGA-based multivariable motion controller using response surface methodology.
31	Test set generation almost for free using a run-time FPGA reconfiguration technique.
32	Implementation of adaptive noise canceller using FPGA for real-time applications.
33	Development of an FPGA-based Adaptable Peak Current-Mode Control for Use in Green Energy Conversion.
34	Power efficient implementation of bit-parallel unrolled CORDIC structures for FPGA platforms.
35	A cost-effective way to expand the scope of FPGA based projects.
36	Teaching low-power design with an FPGA-based hands-on and remote lab.
37	Efficient Global Back-Projection on an FPGA.
38	Demonstration of an FPGA controller for guaranteed-rate optical packet switching.
39	Methods of wideband chirp signal generation using FPGA.
40	FPGA methodology for power analysis of embedded adaptive beamforming.
41	Multiple fault injection platform for SRAM-based FPGA based on ground-level radiation experiments.
42	Time optimization of instruction execution in FPGA using embedded systems.
43	An FPGA based power quality monitoring system.
44	High-Throughput Finite Field Multipliers Using Redundant Basis for FPGA and ASIC Implementations.
45	Direct FPGA-based power profiling for a RISC processor.
46	FPGA realization and performance evaluation of fixed-width modified Baugh-Wooley multiplier.
47	An FPGA-Based Architecture for Local Similarity Measure for Image/Video Processing Applications.
48	A proposal for source separation of ground borne vibration signals and its FPGA implementation.
49	Organic embedded architecture for sustainable FPGA soft-core processors.
50	Real-time High-quality Stereo Vision System in FPGA.