

Architecture The common logic structure of a family of programmable integrated circuits. The same architecture may be realized in different manufacturing processes.

ATM (Asynchronous Transfer Mode) A method of transmitting voice, data and video in fixed-sized packets over high-speed telecommunications channels.

Chip Another term for an integrated circuit (IC).

CMOS (Complementary Metal Oxide Semiconductor) An advanced IC manufacturing process technology characterized by high integration, low cost, low power and high performance. CMOS is the preferred process for today's high density ICs.

Complexity See Density.

CPLD (Complex Programmable Logic Device) Programmable logic devices characterized by an architecture offering high speed, predictable timing and simple software.

Density A relative measure of the amount of logic, measured in gates, that may be integrated into a single IC. Higher density equates to more gates. Often used interchangeably with complexity.

DSP (Digital Signal Processing) A powerful and flexible technique of processing analog (linear) signals in digital form.

EDA (Electronic Design Automation) Generic name for all methods of entering and processing digital and analog designs for further processing, simulation and implementation.

FAE (Field Application Engineer) A field-resident engineering expert who provides on-site technical support for customer applications.

Fabless Semiconductor Companies A class of semiconductor companies that design, test, market and sell ICs, but subcontract wafer manufacturing by forming alliances with silicon wafer manufacturers.

Flash Memory A type of programmable chip that retains data even when the power is turned off.

FPGA (Field Programmable Gate Array) A class of integrated circuits pioneered by Xilinx for which the logic function is defined by the customer using development system software AFTER the IC has been manufactured and delivered to the end user. Mask programmed gate arrays are another type of IC whose logic is defined DURING the manufacturing process.

Foundry A silicon wafer fabrication facility. Also called a fab.

Gate The most basic logic element. More gates equates to higher density.

IC (Integrated Circuit) A single piece of silicon on which thousands or millions of transistors are combined. ICs are the major building blocks of modern electronic systems.

In-system programming (ISP) Methodology whereby a complex programmable logic device can be programmed, (customized), after having been soldered or plugged into the user system.

Logic One of the three major classes of ICs in most digital electronic systems: microprocessors, memory, and logic. Logic is used for data manipulation and control functions that require higher speed than a microprocessor can provide.

Mask programmed gate array A customizable device that is programmed during the IC manufacturing process.

PLD (Programmable Logic Device) A digital IC that can be programmed by the user to perform a wide variety of logical operations. FPGAs and CPLDs are classes of PLDs.

Process Technology The procedures used to convert blank silicon wafers into finished wafers containing hundreds to thousands of chips. These chips are tested and assembled into plastic or ceramic packages before final use.

Semiconductor Generic name for devices like transistors and integrated circuits that can control the flow of electrical signals. Silicon is the basic material of most semiconductors.

Silicon wafer Thin, circular disk of extremely pure, crystalline silicon, typically six or eight inches in diameter.

Submicron technology process Generic name for modern IC manufacturing methods where dimensions on the wafer can be controlled to tolerances well below one micron (one millionth of a meter).

Yield The percentage of defect-free (usable) die on the silicon wafer

[1996 Annual Report](#)[Corporate Profile](#)[Financial Highlights](#)[Shareholder's Letter](#)[Global Growth](#)[Glossary](#)[Financial Information](#)[Corporate Directory](#)[Xilinx Home Page](#)

Copyright © 1996 Xilinx, Inc. All rights reserved. Reproduction without permission is strictly prohibited.
