

# All about FPGAs

Field programmable gate arrays (FPGAs) are programmable digital logic chips that can be used to create our own digital circuit. This month we highlight a few websites that will introduce and help you learn more about these programmable semiconductor devices

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## embeddedmicro.com

The website covers all that is needed to understand and get started with FPGAs. This is the right place for you if you have no idea what an FPGA is. Tutorials are based on Mojo, an FPGA development board. The board is designed to teach how to use FPGAs. The site also sells Mojo development boards, along with other shields compatible with Mojo.



<https://embeddedmicro.com/tutorials/mojo/what-is-an-fpga>



## altera.com

Altera Corp. is the pioneer in programmable logic solutions. It offers FPGAs, systems on chips (SoCs) with embedded processor systems, CPLDs in combination with software tools, intellectual property (IP), embedded processors and customer support. Apart from several tutorials and online courses, the site has a free online course on How to Begin a Simple FPGA Design. This training is for engineers who have never designed an FPGA before. You will learn about the basic benefits of designing with FPGAs and how to create a simple FPGA design using Quartus II.

<http://www.altera.com/education/training/courses/ODSW1010>

## fpgacentral.com

The website provides a central place for FPGA and CPLD vendors and users to share experiences and information about FPGA design, development, verification, validation, process, tools and products. It has FPGA tutorials and videos that can be a good resource for getting started with FPGAs.



<http://www.fpgacentral.com>



## xilinx.com

Xilinx is the world's leading provider of all programmable FPGAs, SoCs and 3D ICs. These industry-leading devices are coupled with a next-generation design environment and IP to serve a broad range of customer needs, from programmable logic to programmable systems integration. The website has a dedicated section on FPGA tutorials. It has tutorials on ISE Design Suite, ChipScope Pro and embedded development kits.

<http://www.xilinx.com/training/fpga-tutorials.htm>

## fpga4fun.com

FPGA is a wonderful technology but can be intimidating. This is what Jean P. Nicolle, the creator of this website, believes. As many FPGA vendors are providing affordable parts and free tools, this is the right time to learn, claims Nicolle. FPGA4fun provides you information on FPGAs and FPGA projects to build with an FPGA board. It provides great examples and a great learning experience for beginners as well as professionals. The website reflects the author's experience and opinions on FPGA technology.



<http://www.fpga4fun.com/FPGAinfo1.html>