

FPGA DESIGN FLOW WORKSHOP

PRESENTED BY

YONI – WORKSHOP DEV





AGENDA

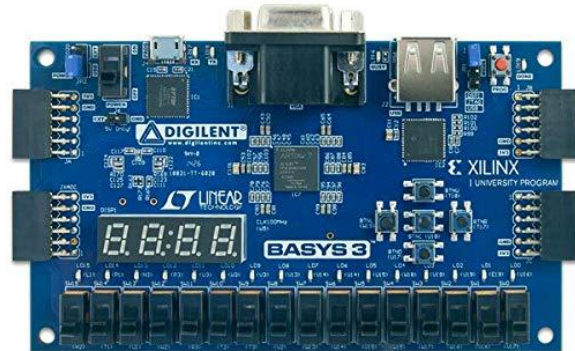
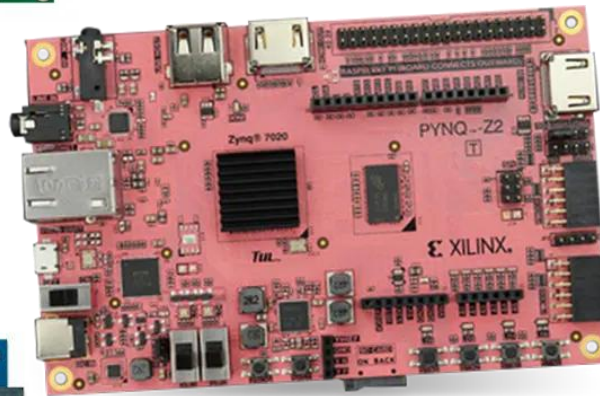
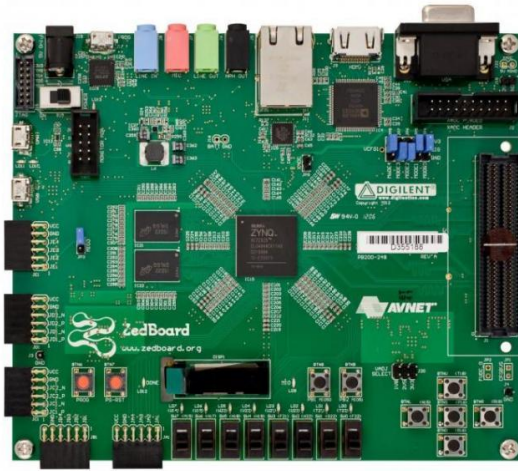
What is an FPGA?

Quartus Download

Visual Studio Code Download

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Demo on De10-Lite



WHAT IS AN FPGA

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FPGAs are chips that you can program to behave like almost any digital circuit you want.

- Field-Programmable: You can program it after it's manufactured.
- Gate Array: It's made up of thousands (or millions) of tiny logic gates and flip-flops — the basic building blocks of digital circuits.

Feature	FPGA	uP
Language	HDL (VHDL / SV)	Software (C++, Python, etc.)
Flexibility	Fully custom logic	Fixed hardware, programmable behavior
Speed / Parallelism	Super Fast! Runs many things at once	Slower, one instruction at a time

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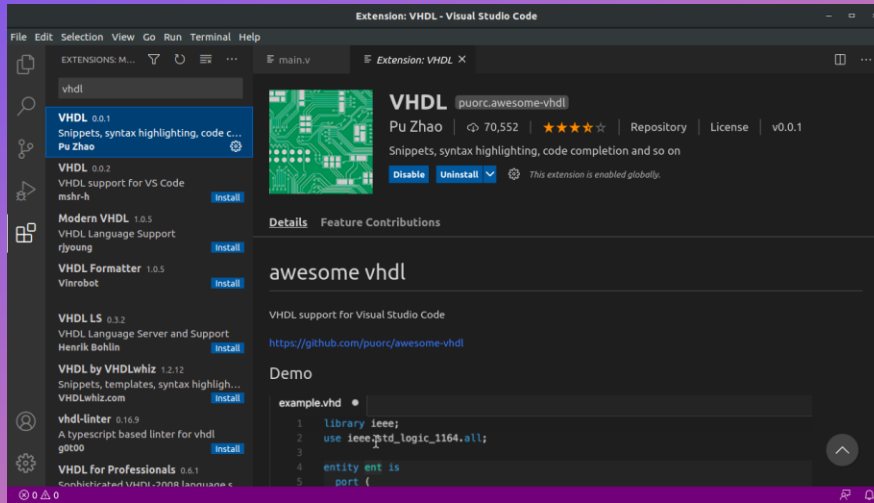
QUARTUS DESIGN SUITE

<https://www.intel.com/content/www/us/en/software-kit/825278/intel-quartus-prime-lite-edition-design-software-version-23-1-1-for-windows.html>



VISUAL STUDIO CODE DOWNLOAD

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GITHUB DOWNLOAD

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https://ftp.intel.com/Public/Pub/fpgaup/pub/Intel_Material/Boards/DE10-Lite/DE10_Lite_User_Manual.pdf

DEMO TIME



THANK YOU

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