intel innovation
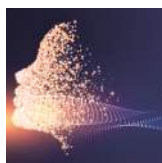

terasIC
www.terasic.com

FLIK
World's First Portable Accelerator for Your Laptop!

Introduction

With the rapidly-rising demand in today's AI and compute-intensive applications, Terasic's FLIK (FPGA Client Innovation Kit) is a compact, all-in-one, adaptable accelerator purpose-design to accelerate critical workloads such as data analysis, deep learning, and machine learning algorithms directly on laptops or everything portable! With a form factor slightly larger than a 2.5" external hard drive, it can be placed vertically or horizontally to blend into various size-demanding environment.

FLIK takes advantage of the powerful Intel® Arria® 10 FPGA to enable higher speed data processing. The kit is armed with 8GB DDR4-2133 on-board memory, providing around 4GB data transfer via PCIe Gen 3 interface between FPGA and laptops or host PC via Thunderbolt™ 3 port. Also, closely packed in an aluminum body with advanced thermal solution, FLIK takes care of the heat dissipation dynamically and is adapt-able to various size-demanding environment.

FLIK fully supports Intel® Open VINO™ toolkit, Intel® Acceleration Stack, and OpenCL in both Linux and Windows versions. Our clients can achieve highest computing performance, adaptability and lowest cost across broadest range of AI and Deep Learning workloads.

What You Can Do

- Artificial Intelligence
- Data Center Acceleration
- Automotive
- Security Gateway

Software Services

- Support Intel® OpenVINO™ toolkit
- Terasic-optimized OpenCL™ board support package (BSP)
- Support Intel® Acceleration Stack, including OPAE

  As Intel® certified service provider for OpenCL services and development, Terasic also provides customized service to meet the exact needs of our clients
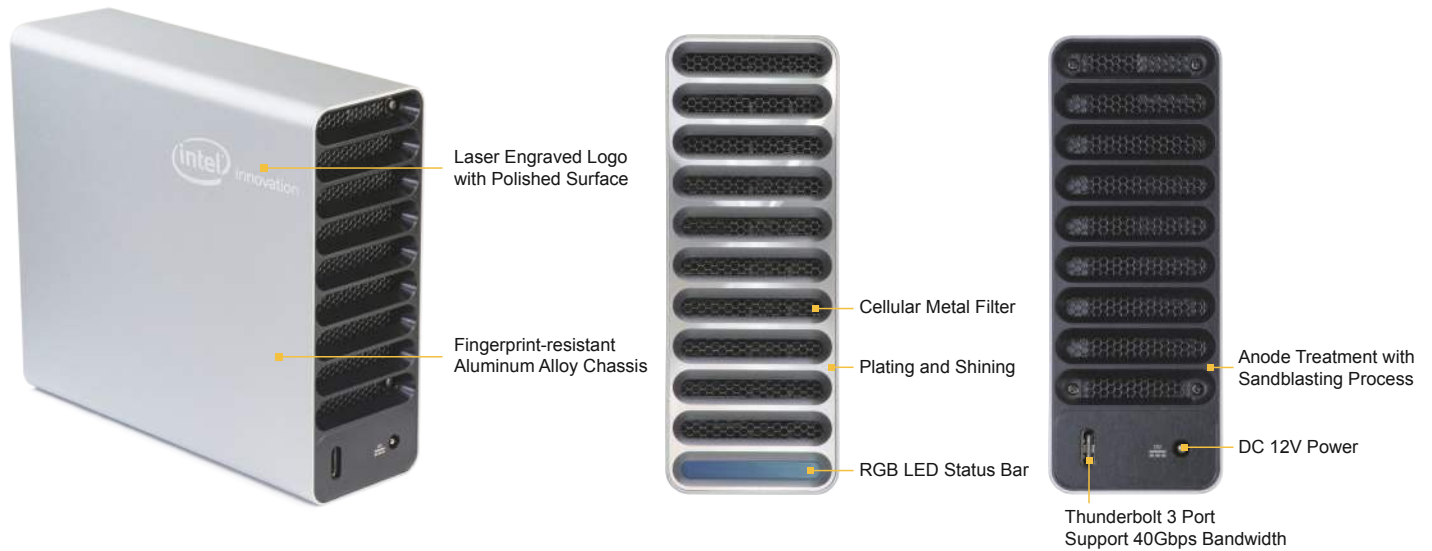
Customized Services

Hardware and Software Solution
- Terasic has a strong design expertise in FPGA hardware and software.

- Terasic creates FPGA-based products to meet our clients' specific requirements. We excel at delivering ready-to-use and highly optimized systems. Terasic rugged FPGA systems have been deployed in various extreme environments, such as Wall Street's zero-down time data center and 5G base station in desert.
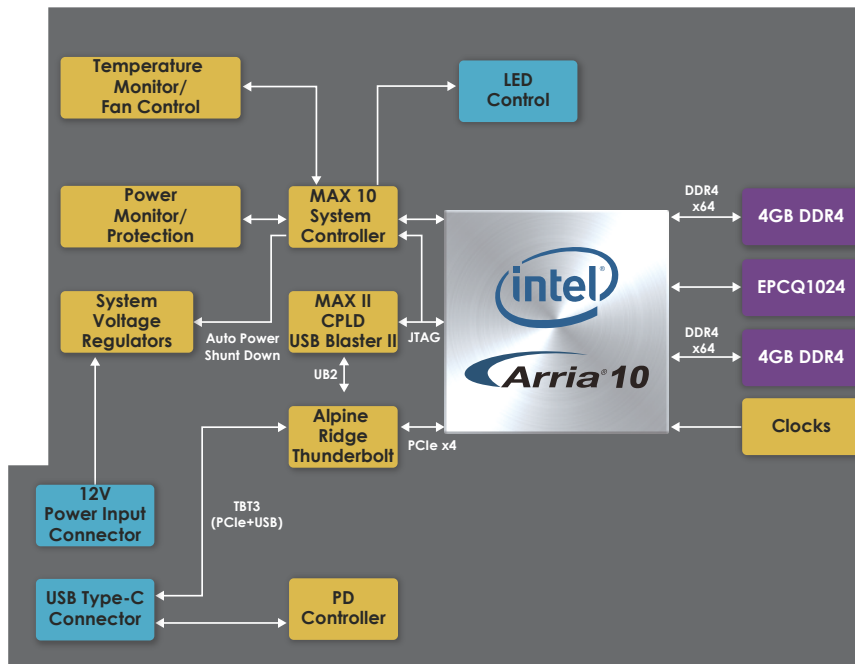
Consultancy Services
- At Terasic, we offer assistance to our clients in aspects such as porting, optimization and benchmarking of applications executed on Terasic FPGA Boards. Our support includes software upgrade and OpenCL design services.

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Kit Highlights

Laser Engraved Logo with Polished Surface

Fingerprint-resistant Aluminum Alloy Chassis

Cellular Metal Filter

Plating and Shining

RGB LED Status Bar

Anode Treatment with Sandblasting Process

DC 12V Power

Thunderbolt 3 Port Support 40Gbps Bandwidth

Block Diagram

Major Specs and Interfaces

- Intel® Arria® 10 GX FPGA (10AX115N2F45E1SG) with 1150K logic elements

- Total 8 GB DDR4-2133 memory

- 1024Mb QSPI Flash

- One Thunderbolt™ 3 port for host communication and on-board USB-Blaster II function

- Power/temperature monitor and auto fan speed control

Power and Thermals

- 55W TDP and 65W peak power

- 55 °C TLA

Dimensions and Weight

- 40.1x106.6x120mm and 742g