



**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

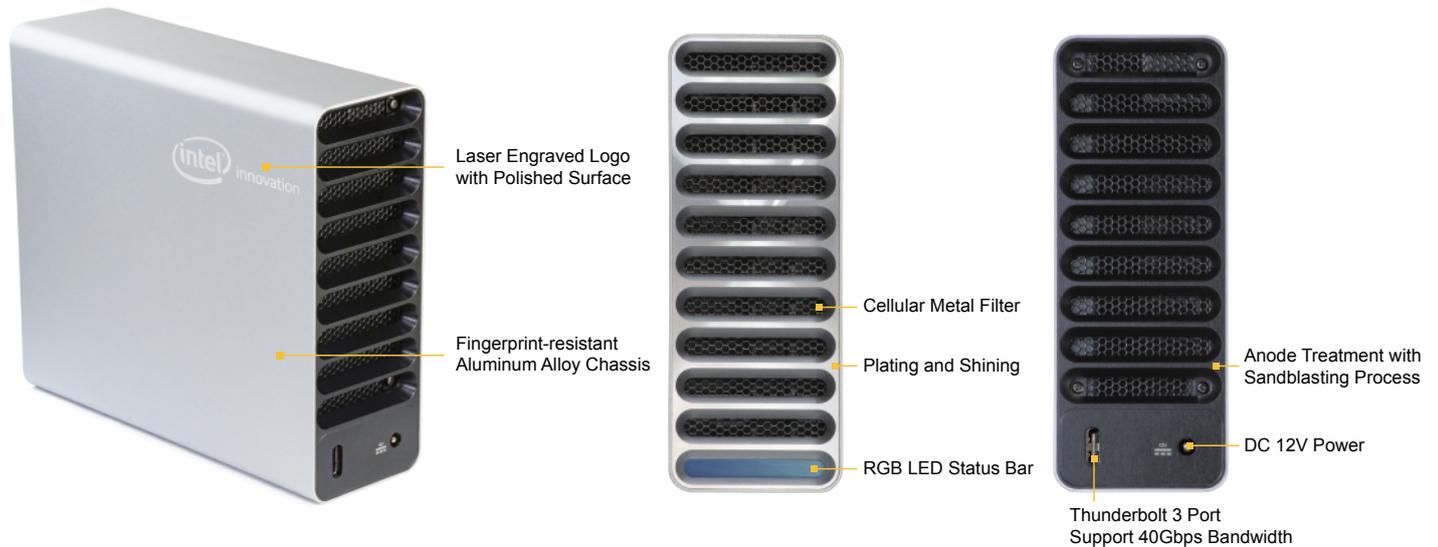
### Hardware and Software Solution

- 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.

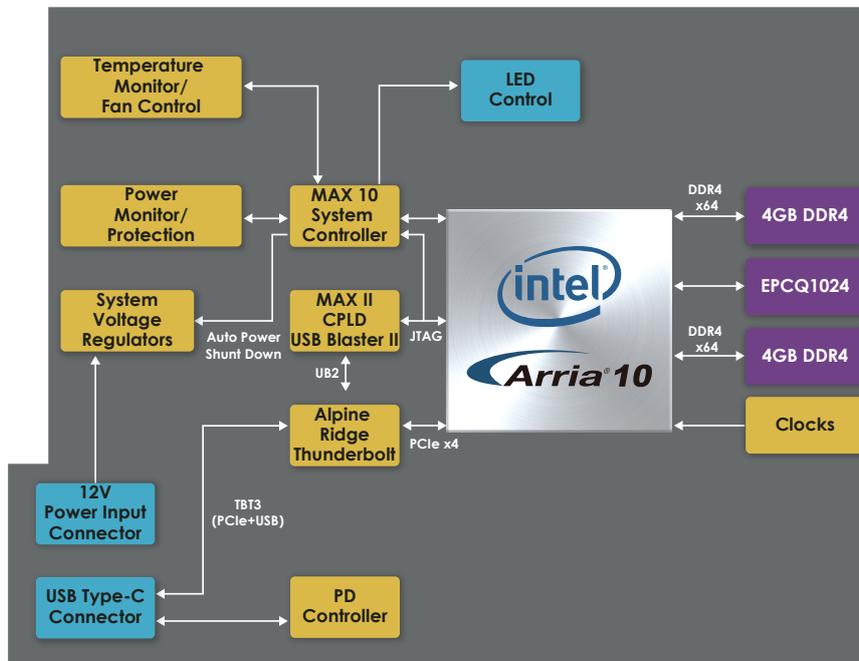
### Consultancy Services

- 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.

## Kit Highlights



## 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