



2021  
embedded  
**VISION**  
summit®  
VIRTUAL | MAY 25-28

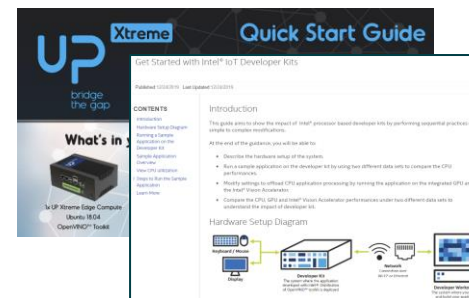
# IoT Foundational Developer Kits

Daniel Tsui  
Intel Corporation



# What Makes up a Foundation Dev Kit?

Everything you need packaged and pre-installed to begin your development out of the box



Regulatory certified for  
Deployable/Scalable  
design options

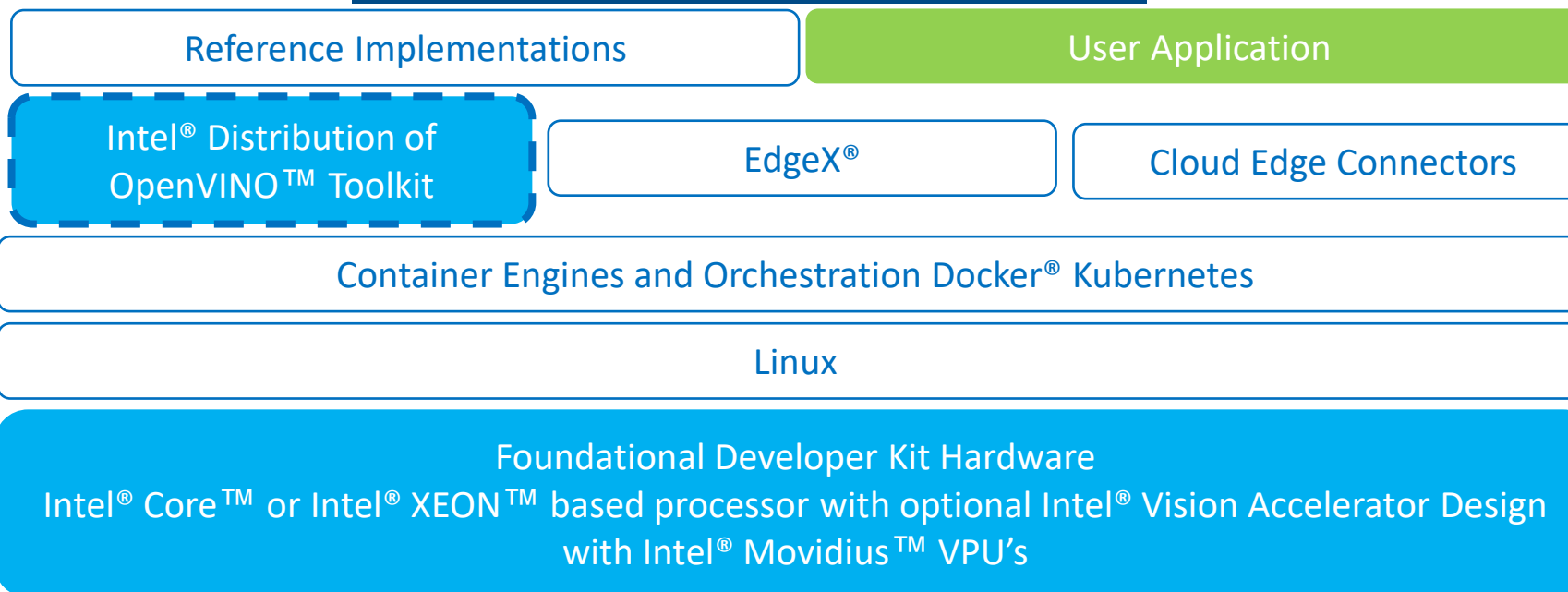
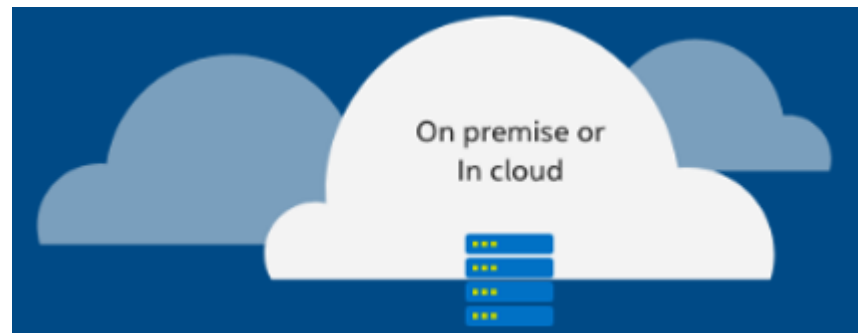
Software includes all modules you  
need to develop, connect, and  
optimize solutions

Documentation that gets you  
started quickly to evaluate  
system capabilities

Inventory availability and  
no quote-purchase order  
process

Developer Experience Assessments:  
Incorporate real world developer feedback

# Pre-installed Edge Insights for Vision Software Package



Open Source or third-party Components



User-defined components



Docker® Container

# Busnet Defence Line Kit

## Use Case: Human Wellness Monitoring

Business compliance to health and safety requirements for COVID-19

- Configurable access control
- Continuous monitoring
- Real Time Alerts

Foundational Developer Kit:  
UP Squared AI Vision X Developer Kit



## Benefits

Pre-validated software

- Rapid deployment of software solutions

Flexible Container Structure

- Expand Services and Sensor capabilities

Heterogenous architecture

- Intel Atom®
- Intel® Movidius™ VPU



# Converged Edge Devkit

2021  
embedded  
**VISION**  
summit



Edge Inferencing



5G On-premise Edge Platforms

## Benefits

- Edge inferencing for on-premise edge 5G
- Consolidation of workloads
- Reduced time to deploy with pre-validate use cases



# IoT Developer Kits and Accelerators



2021  
embedded  
**VISION**  
summit

Available now

[Order here >](#)

Or evaluate in Intel® DevCloud for the Edge

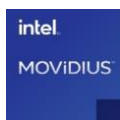
[Signup here >](#)

Purpose-built  
Computer vision



**Intel® Neural  
Compute Stick 2**

Plug-and-play computer  
vision at the edge



Prototyping/Computer  
vision/  
Deep Learning



**Intel Atom®-based developer kit  
with optional accelerator**

Computer vision and deep learning from  
prototype to production



Low Power,  
multi-stream  
Compute



**Intel® Core™ based developer kits  
with optional accelerator**

Low power production-ready development with  
deep learning/computer vision/AI



High-performance,  
multi-stream Compute at the  
network edge



**Intel® XEON D™ based developer  
kits**

Based on Converged Edge Reference  
Architecture utilizing OpenNESS and  
OpenVINO Toolkit



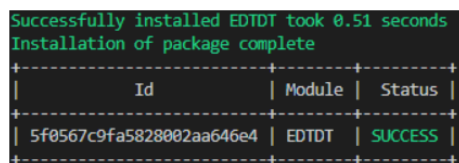
**Faster prototyping and path to productization, designed for scalability and extensibility**

All kits include the start-up essentials for a bootable development environment

<https://software.intel.com/content/www/us/en/develop/topics/iot/hardware.html>



- Hardware systems that have been self-qualified with the Edge Device Test and Diagnostic Tool (EDTDT) – Systems work with ESH Software Packages
- Provides additional hardware and vendor options for various industries, use cases, and use conditions

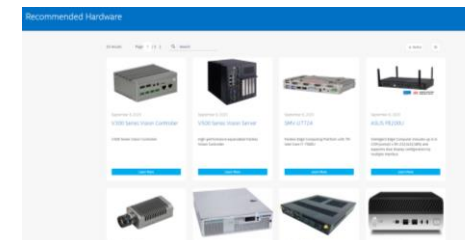


## Summary

Property	Value
OS	Linux
Executable (Timestamp UTC)	2020-08-24 00:50:10
Duration	0:20:29
Number of test categories	1
Test Categories	System/Value, Test Module/Value, Test Module/Value

## SystemInfo

System Category	Property	Value
OS	OS name	Linux 4.18.0-17
SOFTWARE	NAME	EL-5-23-glibc
HARDWARE	NAME	IBM
HARDWARE	Manufacturer	IBM
HARDWARE	Model	IBM
HARDWARE	Processor	Intel(R) Core(TM) i7-7820 CPU @ 2.90GHz
HARDWARE	Memory	32GB
HARDWARE	Device	ATA HDD: WESTERN DIGITAL
HDD Configuration	OSK device	108GB
HDD Configuration	Factor size	200GB
HDD Configuration	Partition	108GB
HDD Configuration	OSK Page Header	Number 200 GB File system Name Page
HDD Configuration	OSK Page	1. 108GB 108GB File system Name Page
HDD Configuration	OSK Page	2. 108GB 108GB File system Name Page
HARDWARE ACCELERATION	GPU	1. Intel(R) Core(TM) i7-7820 CPU @ 2.90GHz



# Wrap Up

- Enabling developers with development tools, samples, and documentation on scalable/deployable developer kits
- Software packages and reference implementations pre-validated on developer kits for developers to sample platform capabilities
- Provide developers other hardware vendors certified to work with Intel Software Packages

- [Foundational Developer Kits](#)
- [Edge Software Hub](#)
- [Edge Software Hub Recommended Hardware](#)