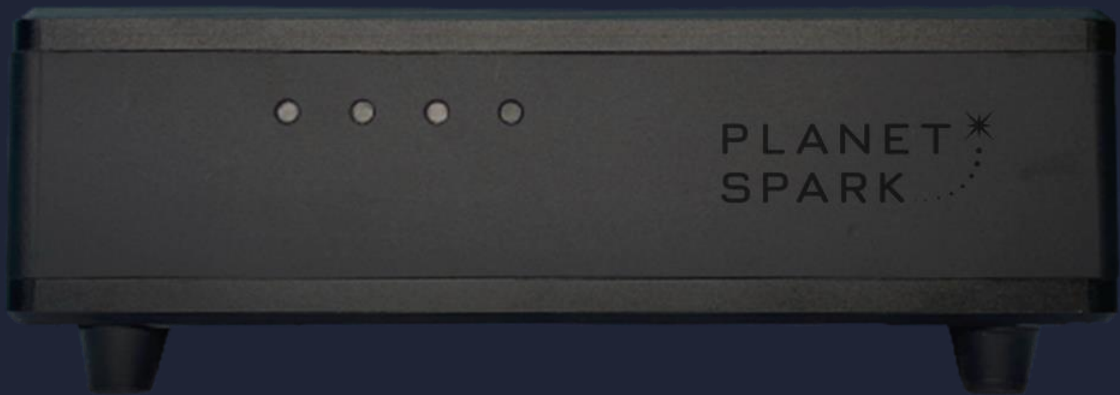


# PLANETSPARK BLACK TITAN EDGE AI SERIES



## PlanetSpark Edge AI Box X7

**NEW**

DESIGNED FOR EDGE AI AND MACHINE VISION

The PlanetSpark Edge AI Box X7 is an arm-based, Xilinx Zynq Ultrascale+ MPSOC computing device for easy deployment on-site or mobile deployments.

With its included middleware and support for many common peripherals and interfaces, this PlanetSpark Edge AI Box can help developers jumpstart designs for Industrial internet-of-Things applications, machine vision and embedded vision applications.

It can also be paired with our partner's applications for real-time analytics.



# HIGHLIGHTS

## High Performance, Low System Power Edge AI Box

With support for many high speed interfaces like USB3.0, Tri-mode Gigabit Ethernet and SATA 3.1, developers can use this to jumpstart their embedded vision designs.

## Partner AI Applications for Deployment

We have partnered AI Application solution providers like Aupera to provide commercial grade AI Applications like ANPR and Crowd Statistics for real-time analytics.

## Pre-trained Models for Development (by Xilinx)

A comprehensive set of pre-optimized models are provided. Developers can leverage this to find the closest model and start re-training for your targeted applications.

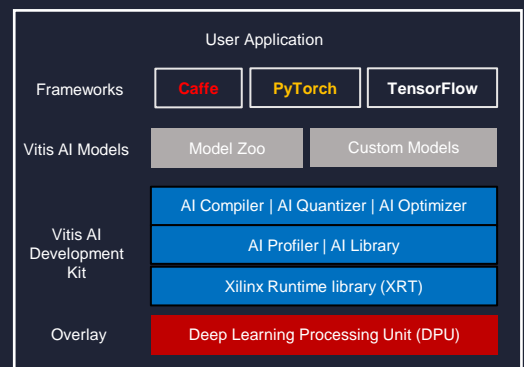
## Multiple interfaces & Peripheral Options

With it's efficient, scalable and programmable IP cores, customization can be done for many different applications to achieve a balance of performance at the lowest system power.

# Development Environment

The Vitis™ AI development environment is Xilinx's development platform for AI inference on Xilinx hardware platforms, including both edge devices and Alveo™ cards. It consists of optimized IP, tools, libraries, models, and example designs. It is designed with high efficiency and ease-of-use in mind, unleashing the full potential of AI acceleration on Xilinx FPGA and ACAP.

Open to all users rich and off-the-shelf deep learning models from the most popular frameworks, Pytorch, Tensorflow, Tensorflow 2 and Caffe. AI model zoo provides optimized and retrainable AI models, with which you will be able achieve faster deployment, performance acceleration and productization on all Xilinx platforms.



## Vitis AI Model Zoo



- ❖ Rich Models
- ❖ Open and Free
- ❖ Advanced Optimization
- ❖ Retraining

# Technical Specifications

## COMPUTE

Application Processor	64-bit Quad-Core Arm® Cortex®-A53
Real-Time Processor	32-bit Dual-Core Arm Cortex-R5
Graphics Processor	Arm Mali™-400MP2
Programmable Logic	504K System Logic Cells (192k for PlanetSpark Edge AI Box X4)
Deep Learning Processor	4K INT8 (upgradable to INT4)
Video Codec (H.264/H.265)	Up to 32 Streams (total resolution ≤ 4Kp60)
Memory	4GB DDR4
Security	IEC62443 Security w/ HW Root-of-Trust



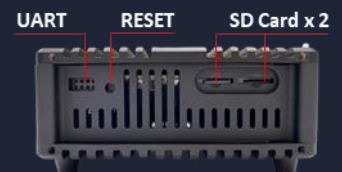
## INTERFACES

USB	4x USB 3.0
Multi-Media	DisplayPort, HDMI
Network	1Gb (w/GigE Vision)
SD Card	2x microSD Card Slot



## GENERAL

Mechanical	151 x 111 x 53mm
Operating Temperature	-30°C to +70°C



## What's Inside the Box

- PlanetSpark Edge AI Box X7 (or PlanetSpark Edge AI Box X4)
- ADAPTER
- GETTING STARTED GUIDE

**PRELIMINARY INFORMATION.**  
**THIS MATERIAL IS SUBJECT TO CHANGE WITHOUT NOTICE.**

## STACKABLE



Stacking Kit sold separately

Also available:

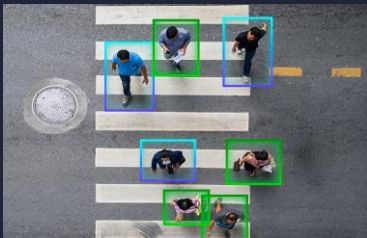
**PlanetSpark  
 Edge AI Box X4**  
 (Based on Xilinx ZU4EV)



# Partner Applications



Smart parking utilises various different forms of technology, including sensors and edge computing, to create real-time heat maps of available parking lots within a certain area. This information can be used in a variety of ways, including but not limited to: helping drivers find parking lots near them easily using an application, redirecting traffic to prevent congestion in an area in the case of a lack of parking spaces, as well as relaying information to the traffic authorities in the case of parking violations.



Crowd Statistics involve using sensors and cameras to capture data of the flow of human traffic in certain areas. Certain relevant data is collected, such as movement of the crowd, number of people, among other forms of data.

# Distributor /Enquiries

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or

[enquire@planetspark.io](mailto:enquire@planetspark.io)

**50 cities in more than 10 countries**

SOUTHEAST ASIA, AUSTRALIA & NEW ZEALAND			NORTH ASIA	SOUTH ASIA
<b>SINGAPORE</b> - Headquarters - 1 R&D Centre (1 R&D team) - 1 Warehouse	<b>MALAYSIA</b> - Offices • Penang - 1 SOHO	<b>THAILAND</b> - Office • Bangkok	<b>CHINA</b> - Offices • Beijing • Changsha • Chengdu • Fuzhou • Guangzhou • Hangzhou • Hong Kong • Jinan • Nanjing - 13 SOHOs - 1 R&D Centre - 2 R&D teams - 1 Warehouse	<b>INDIA</b> - Offices • Bangalore • Hyderabad • Mumbai • New Delhi • Pune - 2 SOHOs
<b>AUSTRALIA</b> - Office • Sydney - 2 SOHO	<b>NEW ZEALAND</b> - 1 SOHO	<b>VIETNAM</b> - Offices • Hanoi • Ho Chi Minh City - 1 R&D Centre (1 R&D team)		
<b>INDONESIA</b> - Office • Jakarta	<b>PAKISTAN</b> - 1 SOHO	<b>PHILIPPINES</b> - Office • Manila		<b>N. AMERICA</b> <b>USA</b> - Office • San Diego, California
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