

AI Google Coral TPU Overview & Products

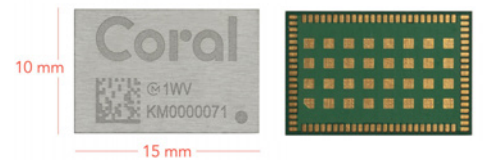


As an industrial PC AI accelerator manufacturer, IEI keep provide excellent performance AI accelerator's option to fulfill different AI task. Google Coral edge TPU provide up to 4TOPS and power consumption is only 2 watt per TPU module.

Google edge TPU leverage well-developed Tensorflow Lite community, can fast implement the existing model zoo to your edge inference project, from image classification, object detection to image segmentation.

Edge TPU Coral

- Google Edge TPU ML accelerator: 4 TOPS peak performance (int8) / 2 TOPS per watt
- Integrated power management
- PCIe Gen2 x1 or USB 2.0 interface
- Surface-mounted (LGA) module
- Size: 15.0 x 10.0 x 1.5 mm
- Weight: 0.67 g
- Operating temp: -40°C~85°C
- RoHS compliant



Source: <https://coral.ai/docs/module/datasheet/>

» Mustang-T100-T5

IEI Mustang-T100-T5 leverage the power of Google Coral edge TPU, it integrates five Coral TPU module into one half-height, half-length, single slot PCIe card, and can provide up to 20 TOPS, is an idea compact PCIe accelerator for multiple AI tasks application.



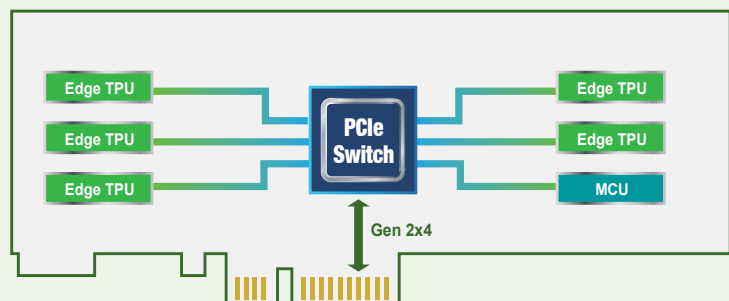
Feature

- 5 x Google Edge TPU ML accelerator
- 20 TOPS peak performance (int8)
- Host interface PCIe Gen2 x 4
- Low-profile PCIe form factor
- Approximate 15W
- RoHS compliants

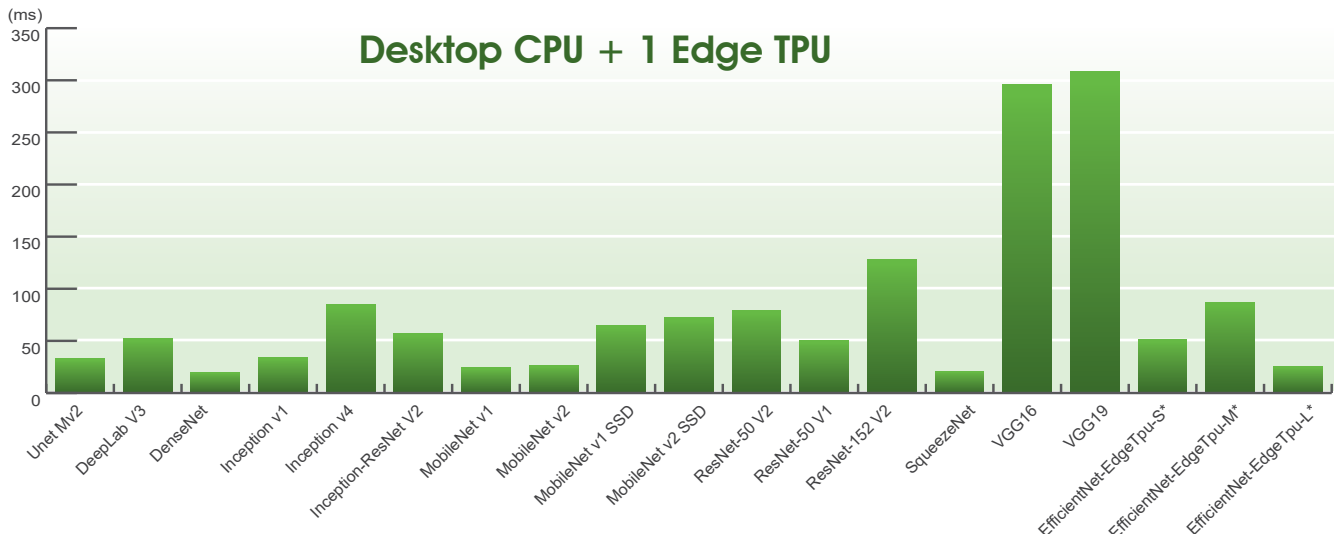
System Requirements

- Linux:
64-bit version of Debian 10 or Ubuntu 16.04 (or newer)
x86-64 or ARMv8 system architecture
- Windows:
64-bit version of Windows 10
x86-64 system architecture

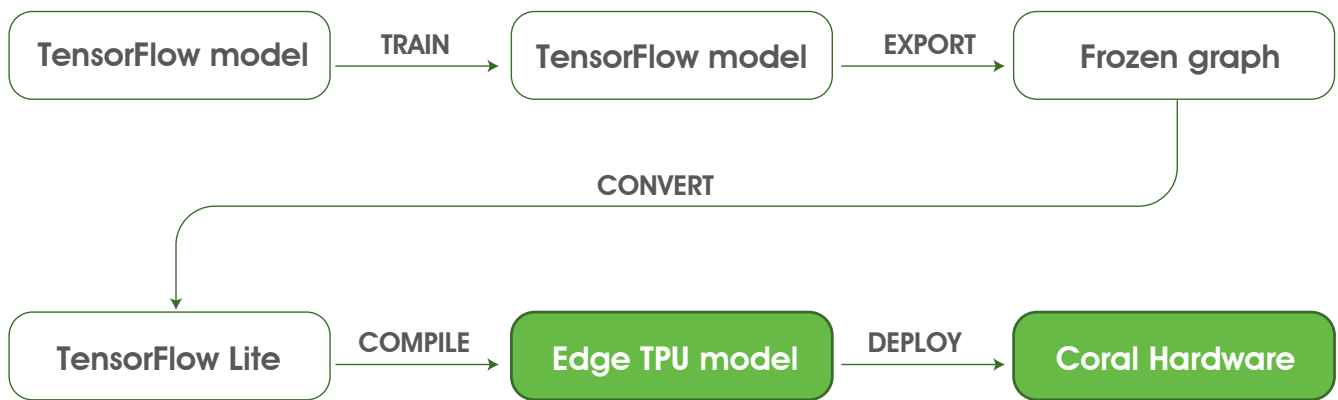
Mustang-T100-T5 Block Diagram



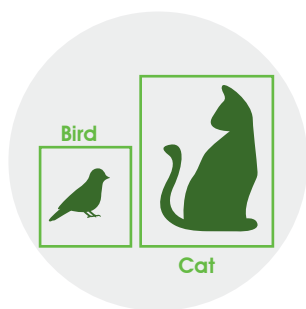
IEI provide series of system to support Mustang-T100-T5 accelerator such as TANK-870AI & FLEX-BX200AI.



TensorFlow models on the Edge TPU - Coral



Solutions for on-device intelligence



Object detection

Draw a square around the location of various recognized objects in an image



Pose estimation

Estimate the poses of people in an image by identifying various body joints.

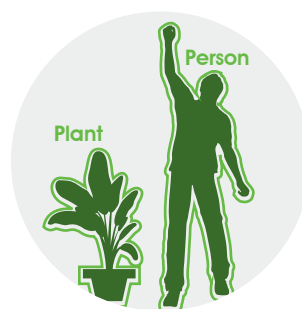


Image segmentation

Identify various objects in an image and their location on a pixel-by-pixel basis.



Key phrase detection

Listen to audio samples and quickly recognize known words and phrases.