AI CORE X
Deep Neural Networks Hardware accelerators
UP AI Core X series, powered by Intel® Movidius™ Myriad™ X VPUs, drive the demanding workloads of modern computer vision and AI applications at ultra-low power.

CONVOLUTIONAL NEURAL NETWORKS
What type of Deep Neural networks can I run?

CAFFE
- GoogleNet V1
- AlexNet
- VGG
- SqueezeNet V1.1

TENSORFLOW
- Inception V1
- Inception V3
- Inception V4
- Inception ResNet V1
- MobileNet V1

TRAINING VS INFERENCE

- bird ✓
- bird ×
- bird

www.up-board.org / www.up-shop.org / www.up-community.org
## UP AI Core X Neural Accelerator Family

<table>
<thead>
<tr>
<th>Model</th>
<th>VPU</th>
<th>Amount of VPU</th>
<th>Form factor</th>
<th>Dimensions</th>
<th>Supported frameworks</th>
<th>Memory</th>
<th>Thermal</th>
<th>System requirements</th>
<th>Software tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP AI Core XM 2280</td>
<td>Myriad™ X 2485</td>
<td>2</td>
<td>M.2 2280+ 8 Gb SSD</td>
<td>60 x 80 mm</td>
<td>Caffe, TensorFlow</td>
<td>4gb LPDDR4 x2</td>
<td>Heatsink with active fan</td>
<td>OpenWino toolkit R4 or above rev.</td>
<td></td>
</tr>
<tr>
<td>UP AI Core X</td>
<td>Myriad™ X 2485</td>
<td>1</td>
<td>mPCIe 30 x 51 mm</td>
<td>90 x 56.5 mm</td>
<td>Caffe, TensorFlow</td>
<td>4gb LPDDR4 x1</td>
<td>Fanless heatsink</td>
<td>Performance high-demand tasks at 2.5 TFLOPS per chip</td>
<td></td>
</tr>
<tr>
<td>UP AI Vision F15 X</td>
<td>Myriad™ X 2485</td>
<td>3</td>
<td>PCIe x4 111 x 170 mm</td>
<td>Caffe, TensorFlow</td>
<td>48gb LPDDR4 x4</td>
<td>Heatsink with active fan</td>
<td>Neural Compute Engine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP AI Core XP4</td>
<td>Myriad™ X 2485</td>
<td>4</td>
<td>PCIe x4 111 x 170 mm</td>
<td>Caffe, TensorFlow</td>
<td>48gb LPDDR4 x4</td>
<td>Heatsink with active fan</td>
<td>Very small footprint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP AI Core XP8</td>
<td>Myriad™ X 2485</td>
<td>8</td>
<td>PCIe x4 111 x 170 mm</td>
<td>Caffe, TensorFlow</td>
<td>48gb LPDDR4 x4</td>
<td>Heatsink with active fan</td>
<td>Ultra-low power</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Works exclusively with UP Core Plus & UP Xtrme.

UP is a brand of AAEON Technology Europe, an associate company of ASUS group, focused on Embedded Computing, Artificial Intelligence on the Edge, Internet Of Things and Industry 4.0. UP’s mission is to spread the intelligence all around the world. UP bridges the gap between the world of prototypes and the world of high-grade mass-produced intelligent systems solutions. UP provides affordable and easily accessible and support of all the latest technologies to embedded industry.

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