Introduction

Bringing computer vision and artificial intelligence to your IoT and edge device prototypes is now easier than ever with the enhanced capabilities of the Intel® Neural Compute Stick 2 (Intel® NCS 2).

Whether you’re developing a smart camera, a drone with gesture-recognition capabilities, an industrial robot, or the next, must-have smart home device, the Intel® NCS 2 offers what you need to prototype smarter.

What looks like a standard USB thumb drive hides much more inside. It’s built on the latest Intel® Movidius™ Myriad™ X VPU which features the neural compute engine—a dedicated hardware accelerator for deep neural network inferences. With more compute cores than the original version and access to the Intel® Distribution of OpenVINO™ toolkit, the Intel® NCS 2 delivers 8X* performance boost over the previous generation.¹

Product Features

- Powered by Intel® Movidius™ Myriad™ X Vision Processing Unit
- Up to 8X* the performance of Intel® Movidius™ Neural Compute Stick
- Supported by the Intel® Distribution of OpenVINO™ toolkit
- Real-time, on device inference - cloud connectivity not required
- Run multiple devices on the same platform to scale performance

Learn more about Intel® Neural Compute Stick 2 at http://intel.com/ncs
## Technical Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Intel® Neural Compute Stick 2</th>
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<tbody>
<tr>
<td>Vision Processing Unit (VPU)</td>
<td>The Intel® Movidius™ Myriad™ X VPU</td>
</tr>
<tr>
<td>Software development kit</td>
<td>The Intel® Distribution of OpenVINO™ toolkit</td>
</tr>
<tr>
<td>Operating Systems support</td>
<td>Ubuntu* 16.04.3 LTS (64 bit), Windows® 10 (64 bit), or CentOS* 7.4 (64 bit)</td>
</tr>
<tr>
<td>Supported framework</td>
<td>TensorFlow* and Caffe*</td>
</tr>
<tr>
<td>Connectivity</td>
<td>USB 3.1 Type-A, USB 2.0 Type-A</td>
</tr>
<tr>
<td>USB stick dimensions</td>
<td>72.5mm X 27mm X 14mm</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0° - 40° C</td>
</tr>
<tr>
<td>Material Master Number</td>
<td>964486</td>
</tr>
<tr>
<td>MSRP</td>
<td>$69 USD July 14, 2019</td>
</tr>
</tbody>
</table>

**WHERE TO BUY**

Purchase your Intel® Neural Compute Stick 2 from one of our trusted partners at: Where to Buy

**WHERE WE SELL**

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Anguilla (UK)  
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Australia  
Austria  
Bahrain  
Belarus  
Belgium  
Bermuda (UK)  
Bonaire  
Sint Eustatius and Saba (Caribbean Neth)  
Brazil  
British Indian Ocean Territory  
British Virgin Islands (UK)  
Bulgaria  
Canada  
Cayman Islands (UK)  
China  
Colombia  
Croatia  
Curacao (Netherlands)  
Cyprus  
Czech Republic  
Denmark  
Falkland Islands (UK)  
Faroe Islands (Denmark)  
Finland  
France  
French Guiana (France)  
French Polynesia (France)  
French Southern Lands  
Germany  
Gibraltar (UK)  
Greece  
Greenland (Denmark)  
Guadeloupe (France)  
Guam (USA)  
Guernsey (UK)  
Hong Kong (China)  
Hungary  
India  
Indonesia  
Ireland  
Isle of Man (UK)  
Israel  
Italy  
Japan  
Jersey (UK)  
Kenya  
Republic of Korea  
Latvia  
Lithuania  
Luxembourg  
Malaysia  
Malta  
Martinique (France)  
Mayotte (France)  
Mexico  
Montserrat (UK)  
Netherlands  
New Caledonia (France)  
New Zealand  
Nigeria  
Northern Mariana Islands (USA)  
Norway  
Pakistan  
Pitcairn Islands (UK)  
Poland  
Portugal  
Reunion (France)  
Romania  
Russian Federation  
Saint Barthélemy  
Saint Helena  
Ascension and Tristan da Cunha (UK)  
Saint Maarten (Netherlands)  
Saint Martin (France)  
Saint Pierre and Miquelon (France)  
Saudi Arabia  
Serbia  
Singapore  
Slovakia  
Slovenia  
South Africa  
South Georgia and South Sandwich Islands  
Spain  
Sweden  
Switzerland  
Taiwan  
Thailand  
Turkey  
Turks and Caicos Islands (UK)  
Ukraine  
United Arab Emirates  
United Kingdom  
United States of America  
United States Virgin Islands (USA)  
Wallis and Futuna (France)
REGULATORY CERTIFICATIONS

- Australian Communications and Media Authority (ACMA) Supplier's Declaration of Conformity
- Intel Corporation Declaration of Conformity
- IECEE Mutual Recognition of Test Certificate
- VCCI Council Acceptance of Report of Compliance
- Registration of Broadcasting and Communication Equipment
- Intel® Neural Compute Stick 2 BSMI Certification
- Declaration of the Presence Condition of the Restricted Substances Marking
- Intel® Neural Compute Stick 2 Warranty

ADDITIONAL RESOURCES

- Getting Started
- Forum
- Tutorials

1Testing by Intel as of October 12th, 2018
Deep Learning Workload Configuration. Comparing Intel® Movidius™ Neural Compute Stick based on Intel® Movidius™ Myriad™ 2 VPU vs. Intel® Neural Compute Stick 2 Intel® Movidius™ Myriad™ X VPU with Asynchronous Plug-in enabled for (2X)CE engines. As measured by images per second across GoogleNetV1. Base System Configuration: Intel® Core™ i7-8700K 95W TDP (6C12T at 3.7GHz base freq and 4.7GHz max turbo freq), Graphics: Intel® UHD Graphics 630 Total Memory 65830088 kB Storage: INTEL SSDSC2BB24 (240GB), Ubuntu 16.04.5 Linux-4.15.0-36-generic-x86_64-with-Ubuntu-16.04-xenial, deeplearning deployment toolkit_2018.0.14348.0, API version 1.2, Build 14348, myriadPlugin, FP16, Batch Size = 1. Software and workloads used in performance tests may have been optimized for performance only on Intel® microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit www.intel.com/benchmarks. Performance results are based on testing as of October 12th, 2018 and may not reflect all publicly available security updates. See configuration disclosure for details. No product can be absolutely secure.

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