DATA SHEET

Intel® Neural Compute Stick 2

High Performance, Low Power for AI Inference

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

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 hard- ware 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* perfor- mance 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

INTEL® NEURAL COMPUTE STICK 2

Technical Specifications

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

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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Greece
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Hong Kong (China)
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Isle of Man (UK)
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Italy
Japan
Jersey (UK)
Kenya
Republic of Korea
Latvia
Lithuania
Luxembourg
Malaysia
Malta
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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

[1]Testing 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 (2xNCE 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_deploymenttoolkit_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.