

## Hardware Accelerated Face Recognition

## NeoFace® Accelerator Platform

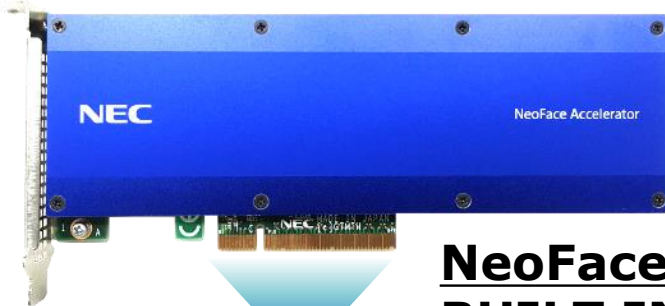
Building on its extensive experience as an industry leader in facial recognition artificial intelligence (AI) that powers the world's highest (\*1) authentication accuracy and belonging to NEC's cutting-edge portfolio of AI technologies, NEC the WISE (\*2), NEC has applied its strengths in R&D as a IT platform solutions provider to develop hardware acceleration technology that will bring new levels of performance to NEC's face recognition portfolio.

**Higher Performance – Higher Resolution – Higher Camera Density**



Up to **x20 faster** detection  
with hardware accelerated software

- By combining the NEC NeoFace® Accelerator Platform with NeoFace® Watch v4.x the face detection process, which is a CPU intensive task, the detection function load shifts to the accelerator which is programmed and optimized to process the detection as quickly as possible. It's a much more efficient way of optimizing all system resources.
- At the same time the camera appliance can process much more faces per camera.



**NeoFace® Accelerator  
BUILT IN**



(\*1) NEC's video facial recognition technology has been top ranked for four consecutive times in the benchmark testing of the U.S. National Institute of Standards and Technology (NIST).

[http://www.nec.com/en/press/201703/global\\_20170316\\_01.html](http://www.nec.com/en/press/201703/global_20170316_01.html)

(\*2) "NEC the WISE" is a term for the Company's cutting-edge portfolio of AI technologies. The WISE, which refers to wise people, reflects a desire to solve social challenges through high-level intelligence in collaborative efforts between humans and AI in societies that are becoming more complex and sophisticated.

# High Performance High Resolution

## 4K Ultra HD in Real Time

- With the NEC NeoFace® Accelerator Platform, it is now possible to use 4K Ultra HD high resolution camera's with high speed FPS that can capture a significantly larger area.
- Detecting and tracking a face in large crowds now becomes a reality

4K Ultra HD (8MP Camera): 3840 x 2160 pixels  
 2K Full HD (2MP Camera): 1920 x 1080 pixels



## Higher Camera Density Better TCO

- By adopting the NeoFace® Accelerator Platform for face detection, it allows for significant larger amount of camera's to be supported on an camera appliance, therefore substantially reducing the TCO for processing power.

## Basic Specifications

### ■ NeoFace® Accelerator Platform

- NEC Express5800 Series PC Server (Rack or Slim tower)
- CPU: Intel Xeon Series
- OS: Windows Server 2016



(Planning)

### NeoFace® Accelerator (built in)

- Dimensions: PCI Express Low Profile (69 x 168 mm)
- Interface: PCI Express Gen3 (8Gbps ) x4 lanes (x8 sockets)
- Memory: DDR4-2133 2GB
- Power: Max 25W
- System status LED
- Field Upgradable

