It enables low-power detection of objects, such as people or vehicles, using 4K camera

Super-high-definition video AI-Inference hardware technology

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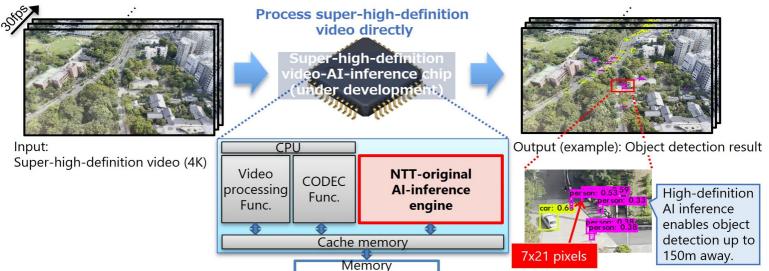


Background

In recent years, video AI application has become increasingly important to improve the efficiency of operations and production, but conventional technologies have resolution, throughput, and power challenges. NTT has been working on this solution with hardware technology specialized for video AI.

Summary

We have been developing a semiconductor chip embedded with an original hardware engine specialized for video AI inference, which enables executing inference in real time and with low power from 4K video. With an equivalent simulation model of this chip, we demonstrate object detection from 4K video.



Features

- Resolution extension technology in AI inference to high-definition video (e.g., 4K)
- Hardware engine that enables real-time and low-power execution of the above technology

| Future_benefits

Our technologies enable detecting passersby under a drone's flight route, suspicious persons in a crowd, and so on. In addition, only essential data can be sent to the cloud.

Collaboration partners

ArchiTek Corporation

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION, NTT Innovative Devices Corporation

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