

# Technology Issues to Realize Vision Perceptual Intelligence on Chip

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## Abstract

Neuromorphic and Brain-inspired technology has been advanced since 1990's and one of major objective of these technology is realizing human like perception capability on machine. Human being are taking most information through the optic nerve system. Therefore, it is crucial for human-like perceptual machine to implement the human's optic nerve functionality. This presentation will explain about the technology issues to realize human-like visual intelligence on a chip. The amount of synaptic operations and memory requirement for synapse and feature map are estimated from some deep learning models which are from ILSVRC (<http://image-net.org/challenges/LSVRC/>) competition. We also describe an architecture proposal for visual intelligence SoC.