AXELL CORPORATION

RZ Ecosystem Partner Solution

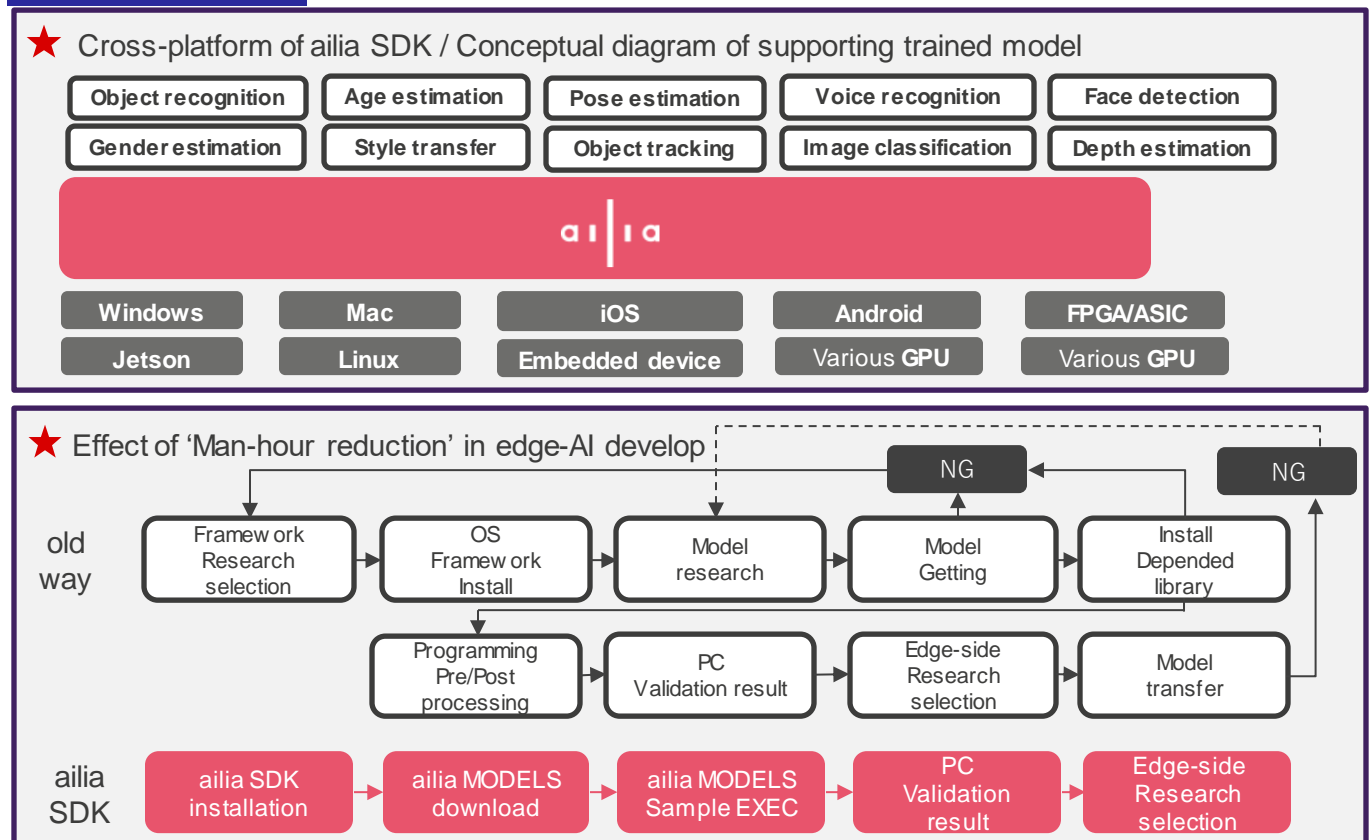# AXELL Multi-platform AI Framework ailia SDK

RENESAS RZ READY

Solution Summary

ailia SDK is a Multi-platform AI Framework for edge inference, which is developed from scratch totally as in-house product. Various AI models 「ailia MODELS」 support the RZ family of AI edge solutions.

Features/Benefits

- Support high-speed inference with effective use of H/W property on cross-platform
- Support long-term supply of API including low layer
- Develop application by using Unity in addition to C++, Python
- Compatible with over one hundred types of trained models
- Compatible with Vulkan, Metal and no dedicated driver software installation needed

Diagrams/Graphics

★ Cross-platform of ailia SDK / Conceptual diagram of supporting trained model

Object recognition	Age estimation	Pose estimation	Voice recognition	Face detection
Gender estimation	Style transfer	Object tracking	Image classification	Depth estimation

ai|ia

Windows	Mac	iOS	Android	FPGA/ASIC
Jetson	Linux	Embedded device	Various **GPU**	Various **GPU**

★ Effect of 'Man-hour reduction' in edge-AI develop

old way

Framework Research selection → OS Framework Install → Model research → Model Getting → NG → Install Depended library → NG

Programming Pre/Post processing → PC Validation result → Edge-side Research selection → Model transfer

ailia SDK

ailia SDK installation → ailia MODELS download → ailia MODELS Sample EXEC → PC Validation result → Edge-side Research selection

Target Markets and Applications

- Surveillance Camera
- Retail Facility
- Manufacturing Equipment
- Business Equipment
- Amusement
- Consumer Product
- Automotive

https://ailia.jp/en/

2021.06

AXELL CORPORATION

AXELL established 'ax' as AI expert subsidiary company,
Whose scope is from learning to application development.

URL	https://www.axel.co.jp/
Corporate name	AXELL CORPORATION The 1st section of TSE (Security code : 6730)
HQ location	10F, Akihabara UDX South Wing, 4-14-1 Sotokanda, Chiyoda-ku, Tokyo 101-8973, Japan
Established	February 1996
Directors	President : Kazunori Matsuura Vice President : Akihiro Saito
Capital	1,018 Million Yen
Revenue	8,999 Million Yen (FY ending in Mar. 2021)
Business activities	1 LSI and PCB with embedded LSI 2 Element technology about graphics/sound/machine learning 3 Element technology about information security 4 Element technology about blockchain Research, development, and sales for above 2~4

URL	https://axinc.jp
Corporate name	ax Inc.
HQ location	4F, Tosokaikan, 19-22 Uguisudanicho, Shibuya-ku, Tokyo, Japan
Established	May 2019
Representative	President and CEO : Takehiko Terada
Capital	300 Million Yen (including capital reserve)
Business activities	1 Consulting related to AI (development of AI application ,etc) 2 Development and sales of framework related to AI, sales of Middleware (AXIP)