組み込みモジュール, IPC, AI製品紹介

MACNICA

Agenda

本資料について

- マクニカがお勧めする CPU, AI 製品を抜粋しております
- CPU 製品詳細情報はメーカー製品ページへとリンクしております

- 本資料は一部の開発中製品も掲載しております

Each Vendor Overview 1

IPC Vendor	IEI Integration Corp.	SECO S.p.A.	ADLINK Technology, Inc.	Advantech Co., Ltd.
Main Product	 Industrial PC   MB, SBC  IoT Gateway  Panel PC	 SMARC®   Qseven®/uQseven®   COM Express®/COM-HPC®	  Industrial PC  SMARC®  Smart Panel  COM Express® /COM-HPC®	 Computer-on-Module  MB, SBC   Industrial PC   COM Express®
HQ	台湾	イタリア	台湾	台湾
Office	中国、US、オランダ	台湾、US、インド、ドイツ	中国、韓国、日本、シンガポール、US、ドイツ、UK、フランス、オランダ、イスラエル	日本、中国、US、ドイツ、韓国、シンガポール、タイ、フィリピン
Establish	1997年	1979年	1995年	1981年
Revenue	215M USD(CY24)	227M USD(CY23)	309M USD (CY24)	1,824M USD(CY24)
Employee	1,298人	250人	1,800人	8,000人

Each Vendor Overview 2

IPC Vendor	Axiomtek Co., Ltd.	HAILO Technology LTD,	CyberLink
Main Product	 Industrial MB  COM Express®  Fan-less Box型PC  Image Processing	 Chip  M.2 / mPCIe  PCIe Card(Multiple Hailo-8)	 顔認証 AI ソフトウェア
HQ	台湾	イスラエル	台湾
Office	中国、US、ドイツ、イタリア、マレーシア、タイ、UK	日本、US、ドイツ、台湾、韓国、中国	日本、US、オランダ
Establish	1990年	2017年	1996年
Revenue	210M USD(CY24)	-	63M USD(CY24)
Employee	750人	300人	420人

IEI Integration Corp. Brief Information

IPC Vendor	***IEI Integration Corp.***
Main Product	 SBC  MB  Industrial PC  IoT Gateway  Panel PC

<メーカー特徴>
MB, SBC, PPC, Box型 / Panel PC 等幅広くラインナップ。OEM/ODMにも対応。

Processor / SoC	インテル®(Mainly), AMD®, Rockchip®, NXP®, Marvell®	
Form factor & Product	Motherboard	ATX, Micro-ATX, Mini-ITX
	SBC	Pico-ITX, EPIC, 3.5"
	Panel PC	Monitor Size 6"~24", Medical Safety & EMC Compliant
	Box 型 PC	
Support	OEM, ODM	
	Configuration to order	Memory, Storage, WiFi Module, OS, Others
	Warranty	2 year from IEI shipment

SECO S.p.A Brief Information

IPC Vendor	SECO S.p.A
Main Product	 SMARC®   Qseven®/uQseven®  COM Express®  COM-HPC®  SBC

<メーカー特徴>
Qseven®, COM Express™, SMARC®等 Module や SBC 中心ランナップ。OEM/ODMにも対応。

Processor / SoC	インテル®, NXP®(i.MX6/8/9), AMD®, MediaTek	
Form factor & Product	Qseven®, μQseven ®(70 x 70mm, 40 x 70mm)	
	COM Express®	Type 6 Basic & Compact
	SMARC®	
	COM-HPC®	
	SBC	Pico-ITX, 3.5", Embedded NUC
Support	OEM, ODM	Means plus & minus customization at standard product
		Custom Carrier Board Design & Chassis
	Configuration to order	Memory, Storage, OS, Others
	Warranty	1 year from SECO shipment

ADLINK Technology, Inc. Brief Information

IPC Vendor	***ADLINK Technology, Inc.***
Main Product	 SMARC®  COM Express®  COM-HPC®   Industrial PC  Smart Panel

<メーカー特徴>
COM Express®, SMARC® 等 Module, SBC や Panel / Box 型 PC と幅広いランナップ。

Processor / SoC	インテル®, AMD®, NXP®(i.MX6/8/9), NVIDIA®, MediaTek	
Form factor & Product	COM Express®	Type 2, 6, 7, 10
	SMARC®	
	COM-HPC®	
	Open Standard Module™(OSM)	
	SBC	ATX, Micro-ATX, Mini-ITX,
	Panel PC	7”~21” Monitor Size, Medical Safety & EMC Compliant
	ROS	
Support	OEM, ODM	
	Configuration to order	Memory, Storage, OS, Others
	Warranty	2 year from ADLINK shipment

Advantech Co., Ltd. Brief Information

IPC Vendor	Advantech Co., Ltd.
Main Product	 SMARC®  COM Express®  OSM  SBC  Industrial PC  Panel PC

<メーカー特徴>
業界最大手の Computing / Solution メーカー。幅広いランナップで OEM/ODMにも対応。

Processor / SoC	インテル®, AMD®, NXP®(i.MX6/8/9), NVIDIA®, Rockchip, MediaTek, Qualcomm	
Form factor & Product	COM Express®	Type 6, 7, 10
	SMARC®	
	Open Standard Module™(OSM)	
	SBC	ATX, Micro-ATX, Mini-ITX, 2.5", 3.5"
	Panel PC	RISC-based PPC, industrial all-in-one, and high computing configurable PPC for various industrial applications.
	BOX 型 PC	
Support	OEM, ODM	
	Configuration to order	Memory, Storage, OS, Others
	Warranty	2 year from Advantech shipment

ODM(Custom) Solution

IPC Vendor	IEI Integration Corp.	SECO S.p.A.
Custom Solution		 
	過去の提案・対応事例 ・Driver, BSP カスタム ・SBC 医療用規格対応 ・マイナスカスタム ・ケース防水防塵対応 ・温度範囲拡張 ・インターフェース、コネクタカスタム ・OS 対応拡張 ・外箱のラベル変更	過去の提案・対応事例 ・Driver, BSP カスタム ・Dual OS 対応 ・Touch Panelカスタム ・HDMI プチェック ・EMC プレチェック ・Board 形状カスタム ・Carrier Board 設計、チェック

お客様

項目
モジュール、IPC 製品ご提案
契約条件すり合わせ
開発要件定義
納品物定義
開発スケジュール調整
見積もり/開発費用受発注
契約書締結

- Customizable Condition
  - 開発費は要求仕様に依存
  - 1Kpcs+/year（応相談）
- ご要望ありましたら、ご相談ください

製品ページリンク インテル® Core-i（コア種類 vs 形状）

	Maker	COM-HPC®	COM Express®	SMARC®	Qseven®	SBC/MB	Box型PC	Panel PC
インテル® Meteor Lake Raptor Lake-Refresh (第14世代)	SECO	Client	Type-6	-	-	-	-	
	ADLINK	Mini	Compact Type-6	-	-	ATX	BOX	
	iEi	-	-	-	-	ATX, micro-ATX, Mini-ITX	BOX	
	ADVANTECH	Client	Type-6	-	-	3.5“, EPIC, Mini-ITX, micro-ATX	-	
インテル® Raptor Lake (第13世代)	SECO	Client	Type-6	-	-	-	-	
	ADLINK	Client	Type-6	-	-	3.5”, Mini-ITX, ATX	BOX w/Hailo	
	iEi	Client	-	-	-	Mini-ITX, micro-ATX, ATX	BOX	○
	ADVANTECH	-	Compact Type-6	-	-	3.5”, EPIC, Mini-ITX, micro-ATX	○	
インテル® Alder Lake-P (第12世代)	SECO	Client	-	-	-	-	-	
	ADLINK	Server (Xeon, Ice Lake-D)	Type-6	-	-	ATX, Mini-ITX	○	○(11世代)
	iEi	Client	-	-	-	3.5”, EPIC, micro-ATX, ATX	DIN , BOX	
	ADVANTECH	Server (Xeon, Ice Lake-D)	-	-	-	3.5”, EPIC, Mini-ITX, micro-ATX	○	

製品ページリンク インテル® Atom（コア種類 vs 形状）

	Maker	COM-HPC®	COM Express®	SMARC®	Qseven®	SBC/MB	Box型PC	Panel PC
インテル® Amston Lake	SECO	-	Type-6	○	-	-	-	-
	ADLINK	-	Type-6	○	-	-	-	-
	iEi	-	-	-	-	3.5”	-	-
	ADVANTECH	-	Type-6	○	-	3.5”	-	-
インテル® Alder Lake-N	SECO	-	Type-6	○	-	-	-	-
	ADLINK	-	Type-6	○	-	3.5” , Mini-ITX	○	-
	iEi	-	-	-	-	3.5”	-	-
	ADVANTECH	-	Type-10 Compact Type-6	○	-	3.5”, EPIC, Mini-ITX	○	○
インテル® Elkhart Lake	SECO	-	Compact Type-6	○	○	-	-	-
	ADLINK	-	Type-6, 10 Compact Type-6	○	-	-	Media Player	○
	iEi	-	-	-	○	3.5”, EPIC, Pico-ITX	○, ○	○
	ADVANTECH	-	Type-10 Compact Type-6	○		3.5”, EPIC, Mini-ITX	○	○

製品ページリンク AMD®（コア種類 vs 形状）

	Maker	COM-HPC®	COM Express®	SMARC®	Qseven®	SBC/MB	Box型PC	Panel PC
AMD® EPYC™	SECO	-	-	-	-	-	-	-
	ADLINK	-	-	-	-	-	-	-
	iEi	-	-	-	-	-	-	-
	ADVANTECH	○	-	-	-	Micro-ATX	○	-
AMD® Ryzen™ Embedded	SECO	-	Type-6					
	ADLINK	-	Type-6	-	-	-	-	-
	iEi	-	-	-	-	Micro-ATX, ATX	-	-
	ADVANTECH	-	Type-6	-	-	3.5”, Mini-ITX, Micro-ATX	-	-
	SECO	-	-	-	-	-	-	-
	ADLINK	-	-	-	-	-	-	-
	iEi	-	-	-	-	-	-	-
	ADVANTECH	-	-	-	-	-	-	-

製品ページリンク Arm®（コア種類 vs 形状）

	Maker	OSM (Open Standard Module™)	COM Express®	SMARC®	Qseven®	SBC	オリジナル	Panel PC
NXP® i.MX9	SECO	-	-	○	-	-	-	-
	ADLINK	○	-	○	-	-	-	-
	ADVANTECH	○	-	○	-	-	-	-
NXP® i.MX8, 8M, 8X, 8UL	SECO	-	-	○	○	3.5”	-	-
	ADLINK	○	-	○	-	-	BOX Gateway	○
	ADVANTECH	○	-	○	-	-	-	○
MediatTek® Genio	SECO	-	-	○	-	-	-	-
	ADLINK	○	-	○	-	-	-	-
	ADVANTECH	-	-	-	-	-	-	-
Qualcomm® X Elite RB5, QCS	SECO	-	-	○	-	-	-	-
	ADLINK	-	-	○	-	-	-	-
	ADVANTECH	-	-	○	-	3.5”, mini-ITX	○	-

製品ページリンク Arm®（Module 形状 vs サポートOS）①

Module Type	Maker	CPU Series	Model	Linux	Android	VxWorks	Windows®
SMARC®	ADLINK	i.MX 95	LEC-IMX95	Yocto	○	-	-
	ADLINK	i.MX 8M Mini	LEC-IMX8MM	Yocto	○	○	-
	ADLINK	i.MX 8M Plus	LEC-IMX8MP	Yocto	○	○	○
	ADLINK	i.MX 8M	LEC-iMX8M	Yocto	○	-	○
	ADLINK	Genio 1200	LEC-MTK-I1200	Canonical Ubuntu, Yocto Linux	-	-	-
	ADLINK	QRB5165	LEC-RB5N	Canonical Ubuntu, Yocto Linux	-	-	-
	SECO	i.MX 93	SOM-SMARC-MX93	Yocto	-	-	-
	SECO	i.MX 8M Plus	SOM-SMARC-MX8M-Plus	Yocto	○	-	-
	SECO	iMX 8X	SOM-SMARC-MX8X	Yocto	○	-	-
	SECO	iMX 8M	SOM-SMARC-MX8M	Yocto	○	-	-
	SECO	Genio 500	SOM-SMARC-Genio510	Yocto	○	-	-
	SECO	Genio 700	SOM-SMARC-Genio700	Yocto	○	-	-
	ADVANTECH	i.MX8M Plus	ROM-5722	Yocto	-	-	-
	ADVANTECH	i.MX8M Mini	ROM-5721	Yocto	○	-	-
	ADVANTECH	i.MX8M	ROM-5720	Yocto	○	-	-

製品ページリンク Arm®（Module 形状 vs サポートOS）②

Module Type	Maker	CPU Series	Model	Linux	Android	VxWorks	Microsoft®
μQseven®	SECO	i.MX 8M Mini, i.MX 8M Nano	SOM-uQ7-MX8M-Mini-Nano	Yocto	-	-	-
Qseven®	SECO	iMX 8X	SOM-Q7-MX8X	Yocto	○	-	-
	SECO	i.MX 8M	SOM-Q7-MX8M	Yocto	○	-	-
	SECO	i.MX 8	SOM-Q7-MX8	Yocto	○	-	-
Myon Micro Module SOM	SECO	i.MX 8M Mini, i.MX 8M Nano	SOM-Myon-II-MX8M-Mini	Yocto, debian	○	-	Windows® 10 IoT
Trizeps SODIMM SOM	SECO	i.MX 8M	SOM-Trizeps-VIII-MX8M	Yocto, debian	○	-	Windows® 10 IoT
	SECO	i.MX 8M Plus	SOM-Trizeps-VIII-MX8M-Plus	Yocto, debian	○	-	Windows® 10 IoT
	SECO	i.MX 8M Mini	SOM-Trizeps-VIII-MX8M-Mini	Yocto, debian	○	-	Windows® 10 IoT
Open Standard Module (OSM)	ADLINK	i.MX93	OSM-IMX93	Yocto	-	-	-
	ADLINK	i.MX8MP	OSM-IMX8MP	Yocto	○	-	-
	ADLINK	Genio 510	OSM-MTK510	Yocto	○	-	-
	ADVANTECH	i.MX 8ULP	ROM-2620	Yocto	-	-	Azure Sphere
	ADVANTECH	i.MX 93	ROM-2820	Yocto	-	-	Azure Sphere
	ADVANTECH	i.MX 91	ROM-2821	Yocto	-	-	Azure Sphere
	ADVANTECH	QCS6490	AOM-2721	Yocto, Ubuntu	-	-	Windows® 11

ADLINK MXM / PEG GPU 製品 サポート PC ページリンク

DLAP-5200 Series

Preliminary

- High-Performance, Fanless AI IPC Based on 12th/13th Generation Intel® Processor
- Up to 128GB DDR5 4800MHz Memory.
- Supports MXM 3.1 Type A/B form factor GPU module.

GPU Maker	Maker	GPU Series	Model	Card Type	Linux	Microsoft®
NVIDIA®	ADLINK	Quadro® Embedded A500	EGX-MXM-AD2000	MXM 3.1 Type A	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® Embedded T1000	EGX-MXM-A4500	MXM 3.1 Type A	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® Embedded A2000	EGX-MXM-A2000	MXM 3.1 Type A	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® 2000A	MXM-AXe	MXM 3.1 Type A	○	Windows® 10/11

DLAP-8100 Series

Preliminary

- AI IPC with 14th/13th/12th Intel® Core™ Processor
- Up to 128GB DDR5 4800MHz (4x SODIMM slots)
- Supports NVIDIA® RTX A6000E 350W GPU with full speed Gen4 x16 signal

GPU Maker	Maker	GPU Series	Model	Card Type	Linux	Microsoft®
NVIDIA®	ADLINK	Quadro® RTX 2000 Ada	NVIDIA RTX 2000 Ada	Dual slot, Half height	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® RTX 4000 Ada	NVIDIA RTX 4000 SFF Ada	Dual slot, Half height	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® RTX 4000 Ada	NVIDIA RTX 4000 Ada	Single slot, Full height	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® RTX 4500 Ada	NVIDIA RTX 4500 Ada	Dual slot, Full height	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® RTX 5000 Ada	NVIDIA RTX 5000 Ada	Dual slot, Full height	○	Windows® 10/11
NVIDIA®	ADLINK	Quadro® RTX 6000 Ada	NVIDIA RTX 6000 Ada	Dual slot, Full height	○	Windows® 10/11

Advantech MXM GPU 製品 サポート PC ページリンク

AIR-310

- MXM GPU Edge AI System with Intel ® Core™ 14th gen processors i3/i5/i7/i9 LGA1700

AIMB-288E

- THIN AI Motherboard 12/13/14th Gen Intel® Core™ Processor, MXM GPU module Integration

GPU Maker	Maker	GPU Series	Model	Card Type	Linux	Microsoft®
NVIDIA®	ADVANTECH	Quadro® Embedded A500	SKY-MXM-A500	MXM 3.1 Type A	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® Embedded T1000	SKY-MXM-T1000	MXM 3.1 Type A	○	Windows® 10
NVIDIA®	ADVANTECH	Quadro® Embedded A2000	SKY-MXM-A2000	MXM 3.1 Type A	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® 2000A	SKY-MXM-2000A	MXM 3.1 Type A	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® 5000	SKY-MXM-5000A	MXM 3.1 TYPE B+	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® 3500	SKY-MXM-3500A	MXM 3.1 TYPE B+	○	Windows® 10/11
Intel®	ADVANTECH	Intel Arc A370M	EAI-2100	MXM 3.1 Type A	○	Windows® 10/11

MACNICA

Advantech PEG GPU 製品 サポート PC ページリンク

AIR-520

- 4U Edge AI Server powered by AMD EPYC 7003 series processor, provides up-to 64 cores, 768GB DRAM, four PCIe x16 expansion slots

AIR-510

- 4U AI Ready Edge System with Intel® Rapter Lake S Platform and NVIDIA Certified with RTX 6000 Ada

GPU Maker	Maker	GPU Series	Model	Card Type	Linux	Microsoft®
NVIDIA®	ADVANTECH	Quadro® RTX 2000 Ada	NVIDIA RTX 2000 Ada	Dual slot, Full height	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® RTX 2000 Ada	NVIDIA RTX 2000E Ada	Single slot, Low profile	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® RTX 4000 Ada	NVIDIA RTX 4000 Ada	Single slot, Full height	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® RTX 4000 Ada	NVIDIA RTX 4000 SFF Ada	Dual slot, Low profile	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® RTX 4500 Ada	NVIDIA RTX 4500 Ada	Dual slot, Full height	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® RTX 5000 Ada	NVIDIA RTX 5000 Ada	Dual slot, Full height	○	Windows® 10/11
NVIDIA®	ADVANTECH	Quadro® RTX 6000 Ada	NVIDIA RTX 6000 Ada	Dual slot, Full height	○	Windows® 10/11

COM-HPC®

1. SECO
2. ADLINK
3. ADVANTECH

SECO COM-HPC® Client Module

SOM-COM-HPC-A-MTL

- COM-HPC® Size A Client Module
- Intel® Core™ Ultra Processors Family (codename: Meteor Lake -H and -U)

SOM-COM-HPC-A-RPL

- COM-HPC® Client module Size A, with 13th Gen Intel® Core™ processors (Codename: Raptor Lake – H/P/U series)

SOM-COM-HPC-A-TGL-H

- COM-HPC® Client module Size A with 11th Gen Intel® Xeon® W-11000E Series, Core™ vPro® and Celeron® (formerly Tiger Lake-H) Processors for FuSa applications

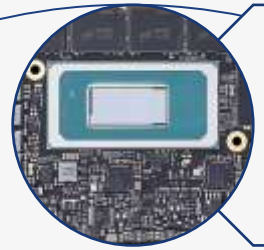
SOM-COM-HPC-A-TGL-UP3

- COM-HPC® Client module Size A with 11th Gen Intel® Core™ and Celeron® (formerly Tiger Lake-UP3) Processors

Return

All Lineup

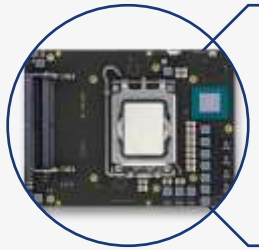
ADLINK COM-HPC® Sever/Client/Mini Module



COM-HPC-mMTL *New*

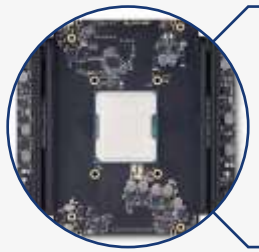
Preliminary

- Mini Type COM-HPC Module with Intel® Core™ Ultra Processor (Meteor Lake)



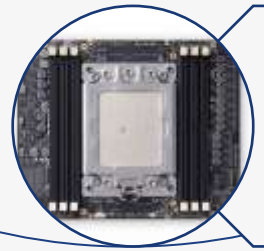
COM-HPC-cRLS

- COM-HPC Client Type Size C Module based on Intel® Raptor Lake-S platform



COM-HPC-sIDH

- COM-HPC Server Type Size D Module with Intel® Xeon® D-2700 Processor (formerly codename: Ice Lake-D)



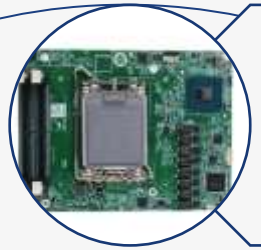
COM-HPC-ALT

- COM-HPC Server Type Size E Module with Ampere® Altra® SoC
- Up to 80 Arm-based cores at 150W TDP
- Up to 768GB DDR4 with 6 individual memory channels

Return

Server Lineup
Client Lineup

IEI COM-HPC® Sever/Client Module



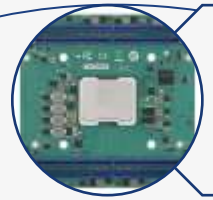
HUK-CR680

- Supports LGA1700 Intel® 12th/13th Desktop CPU (TDP up to 65W)
- Dual-channel DDR5 up to 4400MHz
- Support DisplayPort 1.2, HDMI™ & eDP

Return

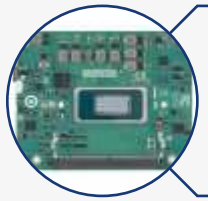
Server Lineup
Client Lineup

ADVANTECH COM-HPC® Server/Client Module



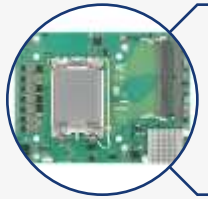
SOM-D580

•Intel® Xeon® D-2700 Processor (Ice Lake-D HCC) COM-HPC® Server Size D Module



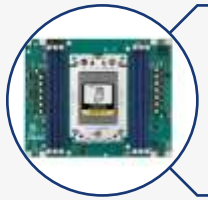
SOM-A350

•14th Gen Intel® Core™ processors (Meteor Lake) CPU, COM-HPC Client Size A Module



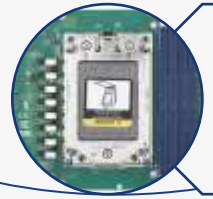
SOM-C350/R

•13th/12th Gen Intel® Core™ processors (Raptor Lake-S/ Alder Lake-S) desktop socket type CPU COM-HPC Client Size C Module



SOM-E781

•AMD EPYC™ 8004 COM-HPC® Server Size E module with proprietary pinout



SOM-E780

•AMD EPYC™ 7003 COM-HPC® Server Size E module with proprietary pinout

Return

All Lineup

COM Express®

1. SECO
2. ADLINK
3. ADVANTECH

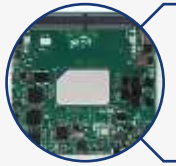
SECO COM Express® Type-6/7

SOM-COMe-CT6-ASL

- COM Express® 3.1 Type 6 Compact Module
- Intel Atom® Processors x7000E Series (Codename: Amston Lake and Alder Lake N)

SOM-COMe-BT6-MTL

- COM Express® 3.1 Type 6 Basic Module with Intel® Core™ Ultra Processors Family (Codename: Meteor Lake -H and -U)



SOM-COMe-CT6-EHL

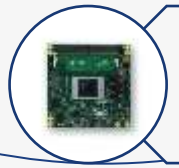
- COM Express® 3.1 Type 6 Compact Computer on Module (CoM)
- Intel® Atom® x6000E Series, Intel® Pentium® and Celeron® N and J Series Processors (formerly Elkhart Lake)

SOM-COMe-BT6-RPL-P

- COM Express® 3.1 Type 6 Basic Module
- 13th Gen Intel® Processors (formerly Raptor Lake-P)

SOM-COMe-CT6-TGL-U

- COM Express® Rel. 3.0 Compact Type 6
- Gen 11 Intel® Core™ (formerly Tiger Lake UP3) Processors



SOM-COMe-CT6-R8000 *New*

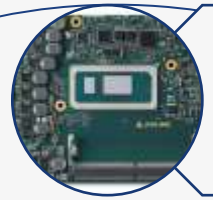
- COM Express® 3.1 Type 6 Compact Module with AMD Ryzen™ Embedded 8000 Series

Preliminary

Return

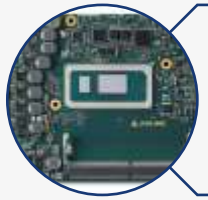
All Lineup

ADLINK COM Express® Type-6/10



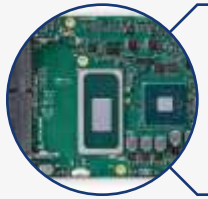
Express-RLP

- COM Express® Rel. 3.1 Basic Type 6
- Intel® 13th Gen, Core™(codenamed Raptor Lake-P) Processors



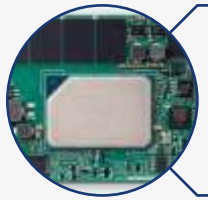
Express-ADP

- COM Express® Rel. 3.1 Basic Type 6
- Intel® 12th Gen Core™ (formerly Alder Lake-P) Processors



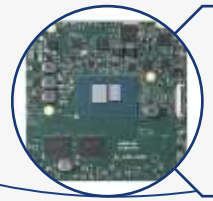
Express-TL

- COM Express® Rel.3.0 Basic Type 6
- Intel® 11th Gen Intel® Core™, Intel® Xeon® and Intel® Celeron® (formerly Tiger Lake-H) Processors



nanoX-EL

- COM Express® Mini Size Type 10 Module
- Intel® Atom® x6000 Processors (formerly Elkhart Lake)



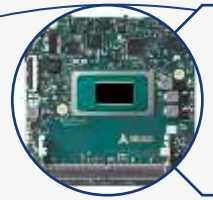
cExpress-ASL

- 7th Gen Intel® Atom® processor, up to 3.6GHz (formerly Amston Lake)
- Up to 16GB LPDDR5 (4800MT/s, in-band ECC)
- Soldered-down memory for enhanced shock resistance

Return

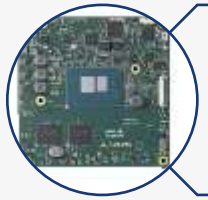
All Lineup

ADLINK COM Express® Type-6 Compact



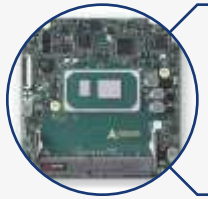
cExpress-MTL

- COM Express R3.1 Type 6 Compact size Module based on Intel® Core™ Ultra Processors



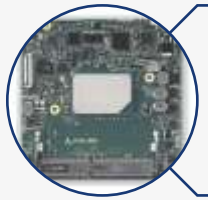
cExpress-ALN

- COM Express R3.1 Type 6 Compact size Module with 7th Gen Intel® Atom® & N series Processors



cExpress-TL

- COM Express® Rel. 3.0 Compact Type 6
- Intel® 11th Gen Core™ and Celeron® (formerly Tiger Lake-UP3) Processors



cExpress-EL

- COM Express® Rel. 3.0 Compact Type 6 module
- Intel® Next Generation Intel Atom® (formerly Elkhart Lake) Processor SoC

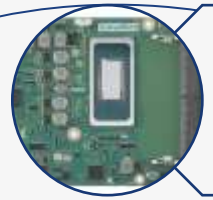
cExpress-AR

- COM Express Compact Size Type 6 Module with AMD Ryzen™ Embedded V2000 APU (Zen 2 architecture)

Return

All Lineup

ADVANTECH COM Express® Type-6/10

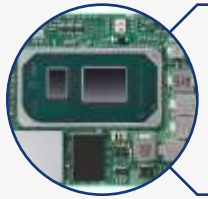


SOM-5885

- Intel® 14th Gen Core Processors (Code Name: Meteor Lake-U/H)
- COM Express Basic Type6 Module

SOM-5883

- Intel® 11th Gen Core Processors (Code Name: Tiger Lake-H) COM Express Basic Type6 Module

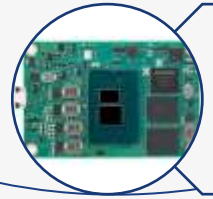


SOM-7583

- Intel® 11th Gen Core Processors COM Express Mini Module Type10

SOM-7532

- Intel® Pentium®/Celeron® and Atom® x6000 Series (Elkhart Lake) COM Express® Mini Type 10 Module



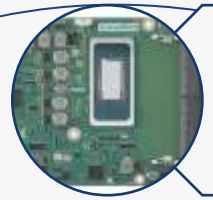
SOM-7533

- Intel® Core-i®/Pentium®/Celeron® and Atom® x7000 Series Processors (Alder Lake-N) COM Express® Mini Type 10 Module

Return

All Lineup

ADVANTECH COM Express® Type-6 Compact

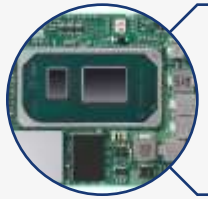


SOM-6884

•13th Gen. Intel® Core™ Processor (Code Name: Raptor Lake-P) COM Express® Compact Type6

SOM-6883

•11th Gen. Intel® Core™ Processor U-Series(Code Name: Tiger Lake-UP3) COM Express® Compact Type6

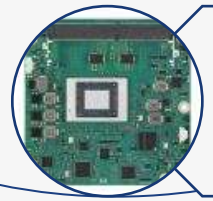


SOM-6833

•Intel® Core-i®/Pentium®/Celeron® and Atom® x7000 Series Processors (Alder Lake-N/Amston Lake) COM Express® Compact Type 6 Module

SOM-6832

•Intel® Pentium®/Celeron® and Atom® x6000 Series (Elkhart Lake) COM Express® Compact Type 6 Module



SOM-6873 *New*

•AMD Ryzen Embedded 8000 COM Express® Compact Type 6 Module

Preliminary

Type 6 - High Computing Performance all Lineup

Type 6 - Entry Computing Performance all Lineup

Return

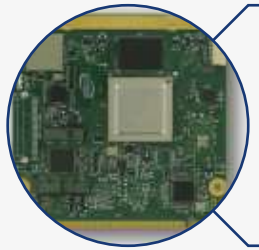
Qseven®

1. SECO
2. IEI
3. ADLINK

SECO Qseven® NXP

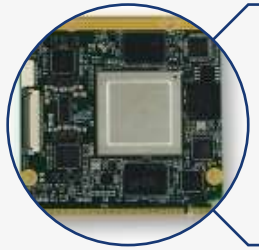
SOM-uQ7-MX8M-Mini-Nano

- μQseven® module with NXP® i.MX 8M Mini & NXP® i.MX 8M Nano Processors



SOM-Q7-MX8X

- Qseven® Rel. 2.1 module with NXP® i.MX 8X Applications Processors



SOM-Q7-MX8M

- Qseven® Rel. 2.1 module with NXP® i.MX 8 Applications Processors

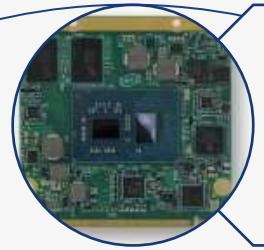
SOM-Q7-MX8

- Qseven® Rel. 2.1 module with NXP® i.MX 8M Applications Processors

Return

All Lineup

SECO Qseven® インテル® x86



SOM-Q7-EHL

- Qseven® Rel. 2.1 compliant module
- Intel® Atom® X6000E Series, Intel® Pentium® and Celeron® N and J Series SoCs (formerly Elkhart Lake)

SOM-Q7-APL

- Qseven® Rel. 2.1 module with Intel® Atom® X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors

Return

All Lineup

IEI Qseven® インテル® x86

iQ7-EHL

- Intel® Elkhart Lake Celeron® J6412 on-board SoC
- Support dual independent displays via HDMI and LVDS (or eDP)
- Support two USB 3.2 Gen2 and six USB 2.0

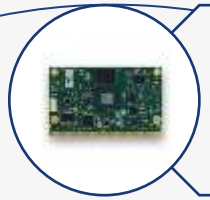
Return

Server Lineup
Client Lineup

SMARC®

1. SECO
2. ADLINK
3. ADVANTECH

SECO SMARC® NXP i.MX8/9, MediaTek Genio, Qualcomm QCS



SOM-SMARC-MX95

- SMARC® Rel. 2.1.1 module
- NXP i.MX 95 Applications Processors

SOM-SMARC-MX93

- SMARC® Rel. 2.1.1 Computer on Module (CoM)
- NXP i.MX 9 Applications Processors

SOM-SMARC-MX8M-Plus

- SMARC® Rel. 2.1.1 module
- NXP® i.MX 8M Plus Applications Processors

SOM-SMARC-MX8X

- SMARC® Rel. 2.1.1 module
- NXP® i.MX 8X Applications Processors

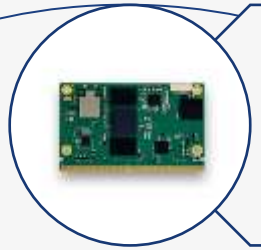
SOM-SMARC-MX8M

- SMARC® Rel. 2.1.1 module
- NXP® i.MX 8M Applications Processors

Return

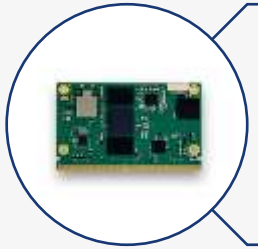
All Lineup

SECO SMARC® NXP i.MX8/9, MediaTek Genio, Qualcomm QCS



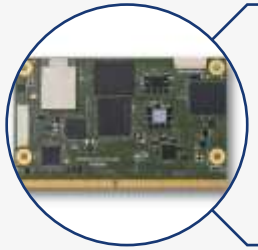
SOM-SMARC-Genio700

- SMARC® Rel. 2.1.1 Computer on Module
- MediaTek Genio 700 Applications Processors



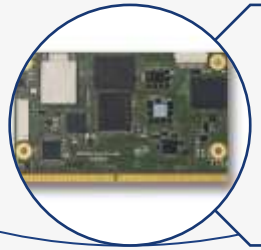
SOM-SMARC-Genio510

- SMARC® Rel. 2.1.1 module
- MediaTek Genio 510 Applications Processors



SOM-SMARC-QCS6490 *New*

- SMARC® 2.1.1 module powered by Qualcomm® QCS6490 processor



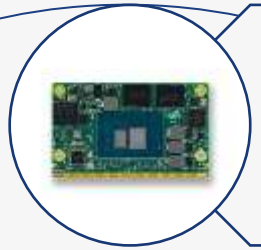
SOM-SMARC-QCS5430 *New*

- SMARC® 2.1.1 module with Qualcomm® QCS5430 processor

Return

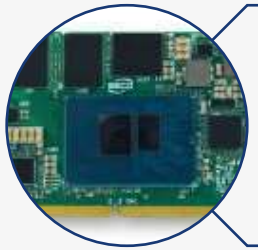
All Lineup

SECO SMARC® インテル® x86



SOM-SMARC-ASL

- SMARC® Rel 2.1 compliant module
- Intel Atom® Processors x7000RE(Codename: Amston Lake) Series for the Edge



SOM-SMARC-ADL-N

- SMARC® Rel. 2.1 compliant module
- Intel® Atom® processors x7000E Series, Intel® Core™ i3 processor, Intel® Processors N Series (Codename: Alder Lake N)

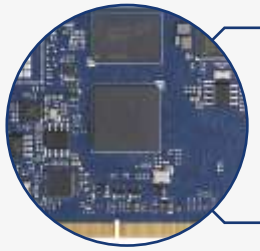
SOM-SMARC-EHL

- SMARC® Rel. 2.1.1 module
- Intel® Atom® x6000E Series and Intel® Pentium® and Celeron® N and J Series (formerly Elkhart Lake) Processors for FuSa applications

Return

All Lineup

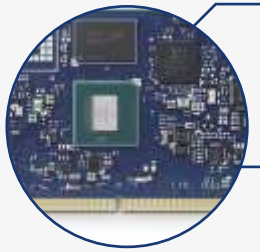
ADLINK SMARC® NXP i.MX8/9, MediaTek Genio



LEC-IMX95

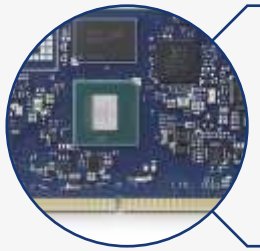
Preliminary

- NXP i.MX 95 with Hexa-core Arm Cortex-A55
- 1x Arm Cortex-M7 and 1x Arm Cortex-M33



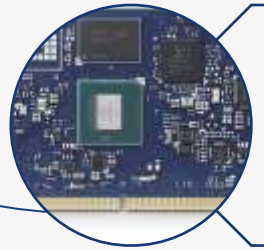
LEC-IMX8MM

- SMARC® revision 2.1 compliant module
- NXP® i.MX 8M Mini SoC



LEC-IMX8MP

- SMARC® revision 2.1 compliant
- NXP® i.MX 8M Plus



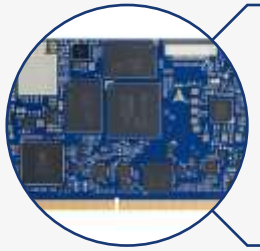
LEC-IMX8M

- SMARC® revision 2.1 compliant
- NXP® i.MX 8M

Return

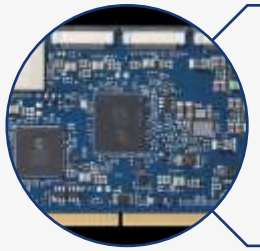
All Lineup

ADLINK SMARC® NXP i.MX8/9, MediaTek Genio



LEC-MTK-I1200

- SMARC specification 2.1.1 compliant
- MediaTek® Genio 1200 Platform



LEC-RB5N *New*

- SMARC specification 2.1.1 compliant
- Qualcomm® QRB5165 octa-core SoC

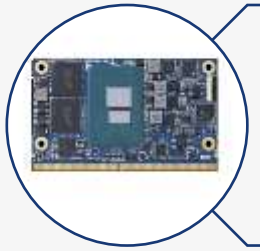
ADLINK

Return

All Lineup

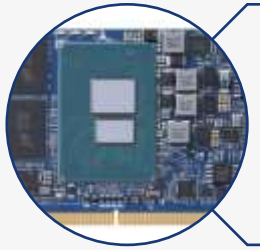
MACNICA

ADLINK SMARC® インテル® x86



LEC-ALN

- SMARC® 2.1 Short Size Module
- Intel® Core™ i3 Processors, Intel® Processors N Series and Intel® 7th Gen Atom® x7000E Processors



LEC-ASL

- SMARC revision 2.1.1 compliant
- Intel® Atom® x7000 series (Amston Lake) Processors

LEC-AL

- SMARC® revision 2.0 compliant
- Intel® Atom® E3900 Series, Pentium™ N4200 or Celeron™ N3350 Processor (formerly Apollo Lake)

Return

All Lineup

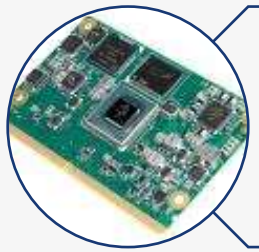
ADVANTECH SMARC® NXP i.MX8/9

ROM-5722

- NXP i.MX8M Plus Cortex®-A53 SMARC 2.0/2.1 Computer-on-Module
- NXP Arm® Cortex®-A53 i.MX8M Plus Quad/Dual up to 1.8 GHz

ROM-5721

- NXP i.MX8M Mini Cortex®-A53 SMARC 2.0/2.1 Computer-on-Module
- NXP i.MX 8M Mini processor with up to 4 Arm Cortex A53 cores



ROM-5720

- NXP i.MX8M Cortex®-A53 SMARC 2.0/2.1 Computer-on-Module
- NXP i.MX 8M processor with dual or quad ARM Cortex A53 cores

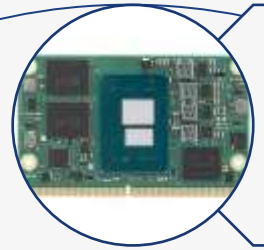
ROM-5620

- NXP i.MX 8X processor with 2-4 x Arm Cortex-A35 cores
- Onboard 2GB LPDDR4 memory and 16GB eMMC

Return

All Lineup

ADVANTECH SMARC® インテル® x86



SOM-2533

- Intel® Core-i®/Pentium®/Celeron® and Atom® x7000 Series
- SMARC2.1.1 Compliance

SOM-2532

- Intel® Pentium®/Celeron® and Atom® x6000 Series
- SMARC2.0 & SMARC2.1 Compliance

ADVANTECH

Return

All Lineup

OSM
(Open Standard Module™)

1. ADLINK
2. ADVANTECH

ADLINK OSM(Open Standard Module™)

OSM-IMX93

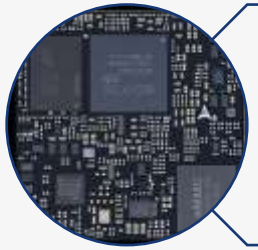
Preliminary

- NXP® i.MX93 series with 2-core Arm Cortex-A55 & M33
- In-SoC Arm Ethos U-65 microNPU
- OSM revision 1.1 compliant
- LVDS, DSI graphic output
- Dual GbE (one TSN capable)

OSM-IMX8MP

Preliminary

- OSM revision 1.1 compliant
- NXP® i.MX8M Plus series with 4-core Arm Cortex-A53 & M7
- n-SoC 2.3 TOPS NPU
- HDMI, LVDS, DSI graphic output interfaces
- Dual GbE (one TSN capable)



OSM-MTK510 *New*

Preliminary

- Hexa-core MediaTek Genio 510 SoC with 2x Arm Cortex-A78 and 4x Arm Cortex-A55
- MediaTek DLA+VPU AI engine up to 3.2 TOPS
- OSM revision 1.1 compliant
- Up to 8 LPDDR4L, up to 128GB eMMC
- HDMI/DP, eDP, DSI graphic output

Return

All Lineup

ADVANTECH OSM(Open Standard Module™)

ROM-2620

- NXP Arm® Cortex®-A35 i.MX 8ULP Dual up to 1.0 GHz
- 1 x Arm Cortex-M33 core
- Onboard LPDDR4 1GB, 2000MT/s memory

ROM-2820

- NXP i.MX 93 Cortex-A55 Dual-core (up to 1.7GHz)
- 1 x Arm Cortex-M33 core, 1 x Ethos®-U65 microNPU
- 1 x 2GB LPDDR4X up to 3733MT/s

ADVANTECH

ROM-2821

- NXP i.MX 91 with 1x Arm® Cortex®-A55 up to 1.7 GHz
- Onboard LPDDR4 1GB memory , up to 3700MT/s
- 1 x USB2.0, 1 x USB 2.0 OTG, 5 x UART, 2 x I2C, 24 x GPIO, 6 x PWM, 1 x CAN

AOM-2521 *New*

Preliminary

- NXP Arm® Cortex®-A55 i.MX95 Six Cores up to 2.0 GHz, 1 x Arm Cortex-M7 core & 1 x Cortex-M33 core
- Onboard LPDDR5 8 GB, 6400MT/s memory, Neural network accelerator built-in
- 1 x 4 lane MIPI-DSI,1 x Dual channel LVDS
- 1 x USB 3.2, 1 x USB 2.0, 5 x UART, 4 x I2C, 16 x GPIO, 3 x PWM, 2 x CAN-FD

Return

All Lineup

MACNICA

ADVANTECH AoM(AI on Module)

AOM-6731 *New*

- Snapdragon X1 Elite 12 Cores, up to 3.4GHz, 16GB LPDDR5x, 128GB UFS and 1x 4-bit SDIO for SD card
- Andreo Snapdragon X GPU supports DX12.2, OpenGL ES 3.2 and OpenCL 3.0
- Adreno VPU 5th Gen., 4K60P Codec with H.264/HEVC/VP9

AOM-2721 *New*

- Qualcomm QCS6490 OSM 1.1 Computer-on-Module
- 1 Kryo Gold plus up to 2.7 GHz, 3 Kryo Gold at 2.4 GHz, 4 Kryo Sliver at 1.9 GHz
- Andreo VPU 633 4K30 encode/Decode, Andreo GPU 643, OpenGL ES3.2/OpenCL 2.0

AOM-3821 *New*

- Rockchip RK3588 Arm Quad Cortex-A76 2.4GHz and Quad Cortex-A55 1.8GHz
- Onboard 4/8GB LPDDR4 memory and 32/64GB eMMC
- Supports HDMI, DP, eDP and HDMI IN

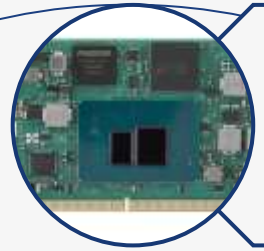
AOM-3841 *New*

- Rockchip RK3576 Arm Quad Cortex-A76 2.4GHz and Quad Cortex-A55 1.8 GHz
- Onboard 4/8 GB LPDDR4 memory and 32/64 GB eMMC
- Supports HDMI, DP and 1 x 4 lane MIPI-DSI

Return

All Lineup

ADVANTECH AoM(AI on Module)



AOM-5721 *New*

- 1 Kryo Gold plus up to 2.7 GHz, 3 Kryo Gold at 2.4 GHz, 4 Kryo Sliver at 1.9 GHz
- Andreo VPU 633 4K30 encode/Decode, Andreo GPU 643, OpenGL ES3.2/OpenCL 2.0
- SMARC compatible

AOM-5841 *New*

- SMARC compatible
- Rockchip RK3576 Cortex-A72x4 & Cortex-A53x4(AOM Module Nona)
- Onboard LPDDR4 4GB and eMMC16/32GB
- 1 xHDMI2.1 4K@120Hz, 1 x2Lan DPV1.4, 4K@120Hz, 1xMIPI CSI2

AOM-DB6700 *New*

- Advantech AOM-Nona/Compact Develop Board
- LVDS/eDP, DP, HDMI
- Support eSPI, CAN-FD, USB3.2 & up to 14 GPIO
- Support 4 types power input. Integrate x86 and ARM power input type

AOM-5521

- NXP Arm® Cortex®-A55 i.MX95 Six Cores up to 2.0 GHz
- 1 x Arm Cortex-M7 core & 1 x Cortex-M33 core
- Onboard LPDDR5 8 GB, 6400MT/s memory
- 1 x 4 lane MIPI-DSI (Optional), 1 x Dual channel LVDS, 1 x HDMI

Return

All Lineup

Single Board Computer
&
Motherboard

1. SECO
2. IEI
3. ADVANTECH

SECO 3.5”(inch) SBC

SBC-3.5-TGL-UP3

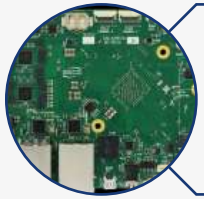
•3.5” SBC with the 11th Gen Intel® Core™ and Intel® Celeron® (formerly Tiger Lake UP3) Processors

SBC-3.5-MX8M-Mini

•3.5” SBC with the NXP® i.MX 8M Mini Processors

SBC-3.5-MX8X

•3.5” SBC with NXP® i.MX 8X Applications Processors



SBC-3.5-MX8

•3.5" SBC with NXP® i.MX8 Applications Processors

SBC-3.5-MX8M

•3.5” SBC with the NXP® i.MX 8M Applications Processors

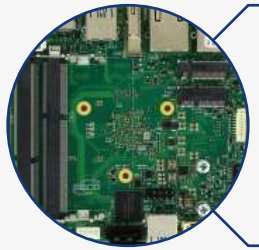
Return

All Lineup

SECO NUC™/Pico-ITX SBC

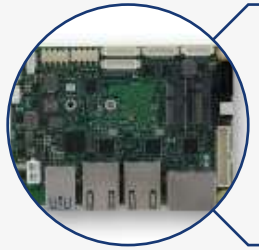
SBC-eNUC-APL

- embedded NUC™ SBC
- Intel® Atom™ X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors



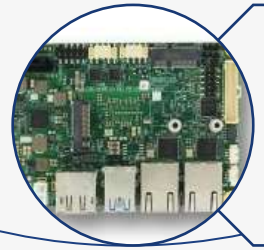
SBC-eNUC-BSW

- embedded NUC™ SBC
- Intel® Pentium® / Celeron® and x5-Series Atom™ SOCs



SBC-pITX-EHL

- Pico-ITX SBC
- Intel® Atom® X6000E Series, Intel® Pentium® and Celeron® N and J Series (formerly Elkhart Lake) SoCs



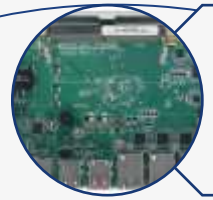
SBC-pITX-APL

- Pico-ITX SBC
- Intel® Atom® X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors

Return

All Lineup

IEI 3.5”(inch) SBC



WAFER-ASL *New*

- 3.5” SBC supports Intel® Atom ™ x7000 RE series on-board SoC, double display with DP, HDMI, triple 2.5 GbE, USB 3.2 gen 2, M.2, SATA 6Gb/s, COM and RoHS, -40° C~85° C

WAFER-EHL-x6000

- 3.5” SBC supports Intel® Elkhart Lake Atom ™ x6000 series on-board SoC, triple display with DP, HDMI and iDPM slot, dual 2.5 GbE, USB 3.2 Gen 2, M.2, SATA 6Gb/s, COM, iAUDIO, PSE Module, +12V~28V DC input, RoHS, -20° C ~85° C

WAFER-ADL-N

- 3.5 SBC supports Intel® Alder Lake-N/Amston Lake on-board SoC, triple display with DP, HDMI ™ and iDPM slot, dual 2.5 GbE, USB 3.2 gen 2, M.2, SATA 6Gb/s, COM and RoHS, -10° C ~ 60° C

WAFER-EHL2

- 3.5” SBC supports Intel® Celeron® J6412 on-board SoC, triple display with DP, HDMI ™ and IDPM slot, dual 2.5 GbE, USB 3.2 Gen 2, M.2, SATA 6Gb/s, COM, iAUDIO and RoHS, -10° C ~60° C

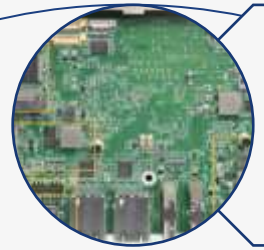
WAFER-IMX8MP

- 3.5” SBC supports NXP i.MX 8M Plus Processors with 4GB LPDDR4 memory & 16 GB eMMC NAND FLASH on board default, dual display and MIPI_CSI, I²C , GPIO, dual GbE Lan, USB 3.2 Gen 1, Full RS-232, 0° C~70° C and RoHS

Return

All Lineup

IEI 3.5”(inch) SBC

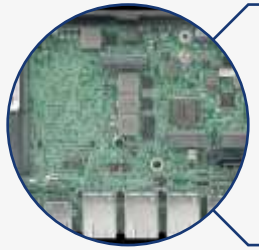


WAFER-EHL

•3.5 " SBC supports Intel® Celeron® J6412 on-board SoC, triple display with DP, HDMI™ and IDPM slot, dual 2.5 GbE, USB 3.2 Gen 2, M.2, SATA 6Gb/s, COM, iAUDIO and RoHS, -10° C ~60° C

WAFER-ADL-P

•3.5 SBC supports Intel® Alder Lake-P/Raptor Lake-P Core™ i7/i5/i3 and Celeron® processor with 8GB LPDDR4x memory on board default, with DP, HDMI™, dual 2.5 GbE, USB 3.2 gen 2, M.2, SATA 6Gb/s, COM, PCIe x4 for riser card and RoHS



WAFER-TGL-U

•3.5 " SBC supports Intel® Tiger Lake-UP3 Core I™ Celeron® Proccessor, with HDMI™, DP, iDPM, triple 2.5 GbE Lan port, USB 3.2, M.2, SATA 6Gb/s, COM, Audio and RoHS, -10° C ~60° C

WAFER-JL

•3.5 " SBC with Intel® 10nm Jasper Lake Celeron® N5105 Processor with Dual Displays, DDR4, Triple Intel® 2.5 GbE, USB3.2, M.2, SATA, COM, SoC, RoHS

Return

All Lineup

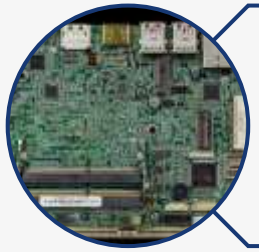
IEI EPIC / Pico-ITX SBC

NANO-EHL

- EPIC SBC supports Intel® Celeron® on-board SoC, with 8GB LPDDR4x memory on board default, with DP, HDMI, iDPM, M.2 A key, M.2 B key, USB 3.1, SATA 6Gb/s, COM, iAUDIO, PCIe x4 (x2 signal) for riser card and RoHS

NANO-ADL-P

- EPIC SBC supports Intel® Alder Lake-P Core™ i7/i5/i3 and Celeron® processor with 8GB LPDDR4x memory on board default, with Dual HDMI, DP, IDPM, M.2 A key, M.2 B key, USB 3.2, SATA 6Gb/s, COM, IAUDIO, PCIe x4 for riser card and RoHS



NANO-AL

- EPIC SBC
- Intel® 14nm Intel® Pentium®/Celeron®/Atom™(formerly Apollo Lake)

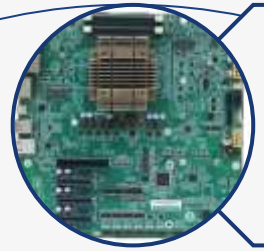
Hyper-EHL

- Pico-ITX SBC supports Intel® Celeron J6412/N6210 on-board SoC, with 4GB LPDDR4x memory on board default, with HDMI, iDPM, M.2 M key, USB 3.2, iSATA 6GB/s, COM, PCIe x4 for riser card and RoHS

Return

All Lineup

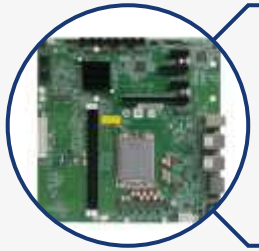
IEI Micro-ATX Motherboard



IMB-MTL *New*

Preliminary

- micro-ATX motherboard supports 14th Gen. Intel® mobile Meteor Lake-H on-board processor, DDR5, 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



IMB-ADL-H610

- micro ATX motherboard supports LGA1700 Intel® 12th/13th/14th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual LAN, USB 3.2, SATA 6Gb/s and RoHS

IMB-ADL-Q670 *New*

- micro-ATX motherboard supports LGA1700 Intel® 12th/13th/14th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS

Return

All Lineup

IEI ATX Motherboard

IMBA-R680

- ATX motherboard supports LGA1700 Intel® 12th/13th/14th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR5, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, and RoHS

IMBA-ADL-Q670

- ATX motherboard supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, iAUDIO and RoHS

IMBA-ADL-H610

- ATX motherboard supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, 2.5GbE LAN, USB 3.2, SATA 6Gb/s and RoHS

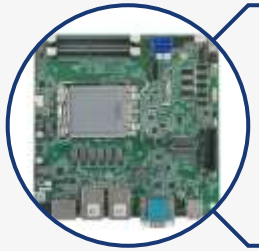
Return

All Lineup

IEI Mini-ITX SBC/Motherboard

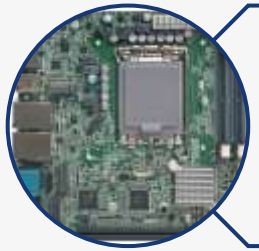
KINO-ADL-P

•Mini-ITX SBC with Intel® Alder Lake-P/Raptor Lake-P SoC Processor, DDR4 SO-DIMM, 12~28V DC input, Triple Display, Triple Intel® 2.5GbE, USB 3.2, SATA 6Gb/s, RoHS



KINO-ADLPS

•Mini-ITX SBC support Intel® Alder Lake-PS Core™ i7/i5/i3 and Celeron® processor, DDR4 SO-DIMM, triple display with DP, HDMI™ and iDPM slots, SATA, Dual Intel 2.5GbE, USB3.2, M.2, RoHS



KINO-ADL-H610

•mini-ITX SBC supports LGA1700 Intel® 12th/13th/14th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual 2.5GbE LAN, USB 3.2, SATA 6Gb/s and RoHS

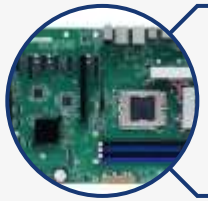
Return

All Lineup

IEI ATX/micro-ATX/Mini-ITX Motherboard - AMD

IMB-AM5

- micro-ATX motherboard supports AMD 7000 & 8000G PHX1 series processor, DDR5, triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



IMBA-AM5

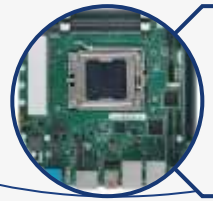
- ATX motherboard supports AMD 7000&8000G PHX1 series processor, DDR5, triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS

IMBAX-SP6 *New*

- Server grade ATX motherboard, supports AMD SP6 Siena 8-64 cores, 70W-225W TDP ,DDR5, 4 x 2.5GbE LAN, 4 x M.2 slot, RoHS

IMB-V3000 *New*

- micro-ATX motherboard supports AMD V3000 series processor, DDR5, dual 10GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



KINO-AM5 *New*

- Mini-ITX SBC with AMD Ryzen ™ 7000 & 8000G & 9000 Series Desktop Processors, DDR5 SO-DIMM, Triple Display, Dual Intel 2.5GbE , USB3.2, M.2, RoHS

Return

All Lineup

ADLINK ATX Motherboard

IMB-M47-R680E

- Intel® 12/13/14th Core™ Processors with R680E chipset
- 4x 288-pin Long-DIMM DDR5 up to 4400MHz, maximum 128GB (32GB per DIMM)

IMB-M47

- Intel® 14/13/12th Gen Core™ Processors with Q670 chipset
- 4x 288-pin Long-DIMM DDR5 4800 MHz , up to 128GB (32GB per DIMM)

IMB-M47H

- Supports 14/13/12th Gen Intel® Core™ i9/i7/i5/i3 CPU
- Intel® H610E Chipset
- Dual-channel DDR5 4800MHz memory up to 64GB

IMB-C47H *New*

- 14/13/12th Gen Intel® Core™ i9/i7/i5/i3 processors and H610 chipset
- 2x DDR4 3200 MHz memory up to 64GB

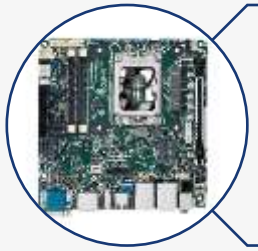
IMB-C47 *New*

- 14/13/12th Gen Intel® Core™ i9/i7/i5/i3 processors and Q670 chipset
- 4x DDR4 3200 MHz memory up to 128 GB
- Four independent display: DVI-D, HDMI, VGA, eDP

Return

All Lineup

ADLINK Mini-ITX Motherboard



AmITX-RL-I

- 14/13/12th Gen Intel® Core™ i9/i7/i5/i3 processors and Q670 chipset, up to 65W
- Dual-channel DDR5 4800 MHz memory up to 64 GB
- Quad. independent display: HDMI 2.0b, HDMI 1.4b, DP 1.4a, LVDS or eDP

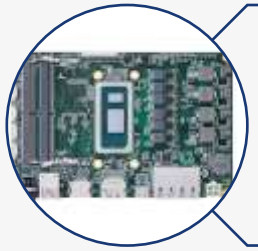
AmITX-ALN *New*

- Intel Alder Lake N SoC processors, N97
- Single channel DDR4 3200 MHz memory up to 32 GB
- Triple independent display: HDMI 2.0b, DP 1.4a (from Type C), VGA, LVDS or eDP

Return

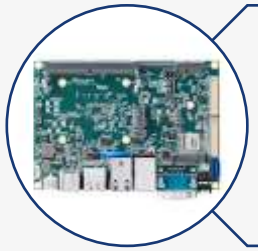
All Lineup

ADLINK 3.5” SBC



SBC35-RPL

- 13th Gen Intel® Core™ i7/i5/i3 processor
- Dual-channel DDR5 4800MHz memory up to 64GB
- Four independent display: eDP/LVDS (default eDP) HDMI, DP, USB Type-C

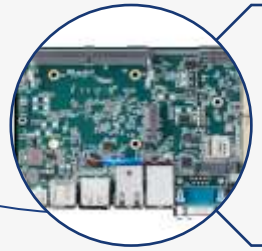


SBC35-ALN

- Intel® N97 Processor
- DDR5 4800MHz memory up to 16GB
- Three independent display: eDP/LVDS HDMI, DP

SBC35-MTL *New*

- Intel® Core™ Ultra Processor delivers efficient, high-performance computing.
- Integrated NPU enhances AI processing capabilities for real-time applications.
- Reserved MIPI-CSI Signal Pathway for camera Integration.



SBC35-ASL *New*

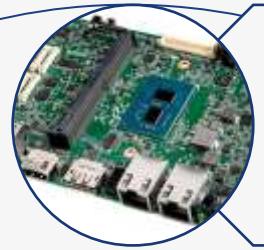
Preliminary

- Intel® x7835RE/x7433RE/x7211RE Processor
- DDR5 4800MHz memory up to 16GB
- Three independent display: eDP/LVDS HDMI, DP

Return

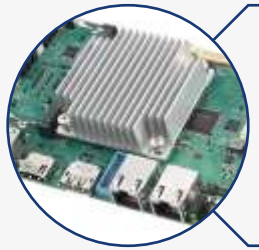
All Lineup

ADVANTECH 3.5”(inch) SBC



MIO-5152

- Intel® Atom® x6000E series and Intel® Celeron® N and J series 3.5" SBC
- Single Channel DDR4-3200 up to 32G
- Support 3 independent displays via LVDS, DP1.4, and HDMI2.0 up to 4K@60Hz



MIO-5154

- Intel® Core™ i3-N305 Processor and Intel® Processor N-series 3.5" SBC
- Single Channel DDR5-4800 up to 16GB
- 3 independent display: LVDS + HDMI + DP

MIO-5375

- 11th Gen. Intel® Core U-series i7/i5/i3/Celeron 3.5" SBC w/ MIOe
- Dual Channel DDR4-3200 up to 64GB
- 4 simultaneous displays: LVDS/ eDP*, HDMI, DP, USB Type-C

MIO-5377

- 12th Gen. Intel® Core i7/ i5/ i3 P-series 3.5" SBC
- Dual Channel DDR5-4800 up to 64GB
- 4 simultaneous displays: LVDS/HDMI/DP/USB-C Alt. DP

Return

All Lineup

ADVANTECH 3.5”(inch) SBC

MIO-5377R

- 13th Gen. Intel® Core i7/ i5/ i3/ U300E P/U-series 3.5" SBC
- Dual Channel DDR5-4800 up to 64GB, IBECC support by SKU

MIO-5376

- AMD Ryzen Embedded R2000 Processor with Quad Cores, TDP 15W/ 28W
- Dual Channel DDR4-2667 up to 32GB

MIO-5379 *New*

Preliminary

- Intel Core Ultra Processors (Code Name: Arrow Lake U/H), up to 14 Cores, TDP 28W/15W
- Dual Channel DDR5-6400 up to 96GB, with IBECC support
- 4 simultaneous displays: eDP + 2x HDMI + USB-C with DP Alt.

MIO-5354

- Intel® Atom® x7835RE/x7433RE/x7211RE (Extended Temperature SKU)
- Single Channel DDR5-4800 up to 16GB, support IBECC
- 3 independent display: LVDS + HDMI + DP

AFE-R360

- Intel® Core™ Ultra 7/5 Processors, up to 16 Cores, TDP 28/15W
- Support MIPI-CSI through 120Pin B2B connector
- 3x LAN, 5x USB (incl. 1x USB4), 4x UART, 2x CAN-FD

Return

All Lineup

ADVANTECH 3.5”(inch) ARM-Based SBC

MIO-5355 ***New***

Preliminary

- Powerful but Low Power: 8x Kryo 670 CPU from 1.9 up to 2.7 GHz + Adreno GPU 643 + 12.3 TOPs iNPU
- Rugged Design with On-board design: LPDDR5 & UFS
- Various OS Support: Windows on Arm and Ubuntu

ADVANTECH

Return

All Lineup

ADVANTECH EPIC / Pico-ITX SBC

MIO-4370

- 14th/13th/12th Gen. Intel® Core™ Processor up to 24 Cores, TDP 35W
- DDR5 4800 up to 32GB + 3 simultaneous display: Dual HDMI+eDP
- Dual High Speed 2.5G Ethernet with TSN, 2x COM, CANbus, TPM

MIO-2363

- Intel Atom x6000E Series PICO-ITX SBC
- Support 12-24V wide voltage range -40~85° C operating temperature
- 2x GbE LAN, 2x USB3.2, 2x RS-232/422/485, I2C

ADVANTECH

MIO-2364

- Intel® Core™ i3-N305 Processor, Intel® Processor N-series, and Intel Atom® Processor x7000E Series Pico-ITX SBC
- Dual independent display: LVDS + HDMI
- GbE (optional PoE/PD, 802.3at), 4 USB, COM, SMBus/I2C

MIO-2375

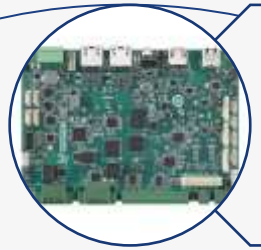
- 11th Gen. Intel® Core U-series i7/i5/i3/Celeron Pico-ITX SBC
- Dual independent display: eDP/MIPI-DSI, DP up to 8K
- Rich I/O interface with GbE x 2, USB 3.2, COM Port, DIO SMBus, TPM2.0

Return

All Lineup

MACNICA

ADVANTECH ARM-Based EPIC



AFE-E420 *New*

- NXP® i.MX93 with Single/Dual Arm® Cortex-A55
- Single Display: LVDS or HDMI
- Supports Yocto BSP

ADVANTECH

Return

All Lineup

ADVANTECH Mini-ITX Motherboards

AIMB-288E

- THIN AI Motherboard 12th Gen Intel® Core™ Processor (Alder Lake)
- MXM GPU integration

AIMB-289

- 12/13/14th Gen Intel® Core™ Desktop Processors (LGA1700), Up to 24Core. Support H610E chipset
- Dual channel DDR5 5600MHz, max. 96GB with two SODIMMs

AIMB-278

- 12/13/14th Gen Intel® Core™ Processor (Meteor Lake/Raptor Lake/Alder Lake)
- Mini-ITX with Q670E, PCIex16 Gen5, 2.5GbE

AIMB-208

- Intel® 12th/13th Gen Core™ (Raptor Lake-S) i9/i7/i5/i3 LGA1700
- Mini-ITX with 2 DP/HDMI/LVDS,2 SATA III, 6 COM, 2 LAN, 4 USB3.2 Gen1x1, and 6 USB2.0

AIMB-279

- 12/13/14th Gen Intel® Core™ Processor (Meteor Lake/Raptor Lake/Alder Lake)
- Mini-ITX with Q670E/H610E, PCIex16 Gen4, 2.5GbE, DC in power input

Return

All Lineup

ADVANTECH Mini-ITX Motherboards

AIMB-219

- Intel® Core™ i3 and Processor N-series (Alder Lake-N)
- Mini-ITX with DP/HDMI/LVDS(or eDP)/M.2 B & E-key/3 USB 3.2 Gen2x1/5 USB 2.0/1 USB Type-C/6 COM

AIMB-218

- Intel® Pentium/Celeron Quad Core/Dual Core(Elkhart Lake)
- N6210/N6211/J6412/J6413/J6426/x6413E
- Mini-ITX with DP++/HDMI/eDP/LVDS, 8 USB, 6 COM, and Dual LAN

ADVANTECH

AIMB-229

- High perf. Zen CPU 8 cores / 16 threads & 64GB DDR4 SODIMM
- AMD Radeon Graphics core with up to 7 compute units and Quad 4K display support
- Supports 8 x PCIe , 2 x M.2 expansion slots, 6 x COM, 2 x USB 2.0, 6 x USB 3.1 connectors

AIMB-292 *New*

Preliminary

- 12/13/14th Gen Intel® Core™ Desktop Processors, max. 24 Core, support Q670E chipset
- Integrated NVIDIA MXM Graphics
- Quadruple displays with 3 DP and 1 LVDS (or eDP), up to 4K

Return

All Lineup

MACNICA

ADVANTECH Mini-ITX ARM-Base Motherboards

AIMB-293 *New*

Preliminary

- AI-enabled Mini-ITX offer 45 TOPS AI acceleration with Qualcomm 12 Cores processor
- THIN and low profile with essential IO connection
- QFCS slim and quiet thermal solution release power for extreme performance

ADVANTECH

Return

All Lineup

ADVANTECH Micro-ATX Motherboards

AIMB-588

- Intel® 12th Gen Core™ (Alder Lake-S) i9/i7/i5/i3 LGA1700
- MicroATX with2 DP++/HDMI/eDP /8 SATA/6 COM

AIMB-588B1

Preliminary

- Intel® 12/13/14th Gen Core™ i9/i7/i5/i3 processors with Q670E/ R680E/ H610E chipsets

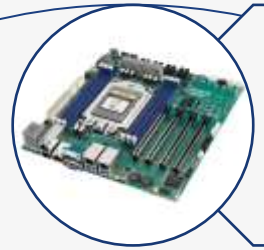
AIMB-508

- Intel® 12/13/14th Gen Core™ i9/i7/i5/i3 processors with H610E chipsets
- PCIe x16 slot Gen4, PCIe x4 slot Gen3, PCI slot

Return

All Lineup

ADVANTECH Micro-ATX Motherboards



AIMB-592

Preliminary

- AMD EPYC 7003 Zen 3 Core
- MicroATX with 4 PCIe X 16 Slots, 2x10GbE LANs, 2x2.5GbE LANs

AIMB-522

- AMD Ryzen™ Embedded 5000 Series processors MicroATX with 1 DP
- HDMI, VGA, 2 GbE LANs, 2 2.5GbE LANs

AIMB-523

- AMD Ryzen™ Embedded 7000 Series processors, MicroATX with 6 2.5GbE LAN, DDR5, PCIe x16 Gen5

Return

All Lineup

Box型PC

1. ADLINK
2. IEI
3. ADVANTECH

ADLINK Box型 PC MVP Series

MVP-6100 Series

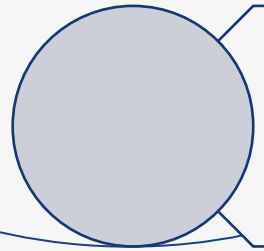
- Value Family 9th Generation Intel® Xeon®/Core ™ i7/i5/i3 & 8th Gen Celeron® Processor-Based Expandable Computer

MVP-6200

- 14/13/12th generation Intel® Alder Lake-S socket type processor (LGA 1700)
- Scalable with ADLINK AFM (Adaptive Function Module) slot, enabling fast application-specific access

MVP-5200

- 14/13/12th generation Intel® Alder Lake-S socket type processor (LGA 1700)
- Scalable with ADLINK AFM (Adaptive Function Module) slot, enabling fast application-specific access
- Supports 1x MXM 3.1 Type A/B form factor GPU module expansion (MVP-5207-MXM)



Return

All Lineup

ADLINK Box型 PC DLAP Series

DLAP-8000 Series

- Intel® 14th/13th/12th-Gen Core™ 35W/ 65W LGA1700 CPU
- Up to 128GB DDR5 4800MHz (4x SODIMM slots)

DLAP-4000 Series

- Embedded System supporting FHFL dual-width PEG slot with 8th/9th Generation Intel® Core™ i7/i5/i3 in LGA1151 Socket

ADLINK

DLAP-4100 Series *New*

- 14/13/12th Gen Intel® Core™ i9/i7/i5/i3 processors and Q670 chipset, up to 65W
- Dual-channel DDR5 4800 MHz memory up to 64 GB
- Three independent display: HDMI 2.0b, HDMI 1.4b, DP 1.4a

Return

All Lineup

MACNICA

ADLINK Box型 PC MXC/MXE Series

MXE-200

- NXP Arm® Cortex®-A53 i.MX8M Plus Quad/Dual up to 1.8 GHz
- Onboard LPDDR4 2 GB / 4 GB, 4000MT/s memory

MXE-230 Series

- Alder Lake N Intel® N97 Processor
- DDR5 4800MHz memory up to 16GB
- Two independent display: 1 HDMI, 1 DisplayPort (up to 4K 60Hz)

MXE-310 Series *New*

Preliminary

- Streamlined size at 180 x 130 x 70 mm
- Seamlessly integrated with the Hailo-8 AI accelerator delivering 26 TOPS
- Dual DDR5 4800MHz memory up to 64GB

MXC-3300 *New*

Preliminary

- Intel® Processor N series and Atom x series
- DDR5 4800 MHz memory up to 16G
- Wide-temp operation from -20° C to 60° C (0.6m/s Air Flow)

Return

All Lineup

ADLINK Box型 PC Others

RQP-T33/35/37

- Embedded Real-Time Robotic Controller with 11th Gen Intel® Core ™ Processor
- x86-64 mainstream architecture for ROS 2 development

AVA-1000 ***New***

- EN50155 compliant
- NXP i.MX8M Plus with Quad Cortex-A53&Intel Atom® 7th Gen series Amston Lake
- Wide range 24-110VDC power input with ignition

AVA-7200 ***New***

- EN 50155:2021 certified Edge AI platform.
- NVIDIA Ampere GPGPU (A2000/A4500) and Intel® 13th Gen Raptor Lake mobile processor.
- Isolated DC 24-110V (200W) or 72-110V (300W) input, configurable by BOM.

EMP-100 Series

- Palm size and slim design (H: 28mm)
- Intel® Celeron® N6210/J6412 processor
- Support 2x HDMI output,12V DC input

EMP-520 ***New***

- 14th Gen Intel® Core ™ Ultra 7/5-Based Advanced Compact Box PC
- 4x independent displays support EDID Emulation
- VESA mount (optional)

Return to Intel BOX

Return to Arm BOX

All Lineup

IEI Box型 PC (Fanless DIN-Rail embedded)

DRPC-124-EHL

- Fanless system Intel® Celeron® J6412 2.0 GHz (up to 2.6 GHz, quad-core, TDP 10W)
- Four GbE LAN, CE/FCC compliant

DRPC-140-EHL

- Fanless system Intel® Celeron® J6412 2.0 GHz (up to 2.6 GHz, quad-core, TDP 10W)
- Four RS232/422/485 Serial port, Two isolation CAN Bus interface, CE/FCC compliant

DRPC-242-ADL-P

- Fanless DIN-Rail Embedded System
- Alder Lake 12th Gen Intel® Core ™ Solution (up to 12 cores)

DRPC-240-TGL-U, DRPC-W-TGL

- Fanless DIN-Rail Embedded System with Tiger Lake 11 th Gen Intel® Core ™ Solution (up to 4 cores)
- 240 : ethernet 4 port, 2 display out
- W : ethernet 3 port, 3 display out

DRPC-W-EHL, DRPC-W-JL

- EHL : Fanless DIN-Rail Embedded System, Elkhart Lake Intel® Celeron ™ Solution (up to 4 cores)
- JL : Fanless DIN-Rail Embedded System, Jasper Lake Intel® Celeron ™ Solution (up to 4 cores)

DRPC-W-EHL1

- Fanless DIN-Rail Embedded System, Intel® Elkhart Lake Atom ™x6000 Series Solution

Return

All Lineup

IEI Box型 PC

TANK-XM811AI-RPL

- 14th Gen. Intel® Core™ i9 & i7 Processor
- 13th Gen. Intel® Core™ i9 & i7 Processor

TANK-630-EHL

- Intel® Celeron® J6412 2.0 GHz

TANK-XM810 TANK-XM811

- XM810 : High-Performance 10th/11th Generation Intel® Core™ Processor
- XM811 : High-Performance 12th Generation Intel® Core™ Processor

FLEX-BX210-Q470

- 2U AI Modular PC with 10/11th Generation Intel® Core™/Xeon® processor

TANGO-7010(Core™ i), TANGO-3010(Celeron®)

- Industrial mini-PC with a space-saving chassis
- Intel® Celeron® (formerly Elkhart Lake), Intel® 12th Gen Core™ (formerly Alder Lake-P)

Return

All Lineup

IEI Medical Box型 PC

HTB-230D-R680E

- AI box PC with 10.1” touch panel and 13th generation Intel® Core™ i9 processor
- IEC/EN 60601-1, IEC/EN 60601-1-2

HTB-150-N6210

- Intel® Celeron® Processor N6210 (code name: Elkhart Lake)
- IEC/EN 60601-1, IEC/EN 60601-1-2

Return

All Lineup

ADVANTECH Box型 PC

ARK-1125C

- Intel® Atom® Processor x7211E DC SoC with Four Serial Ports, HDMI, GbE, GPIO, Remote Switch, USB x4

ARK-1125H

- Intel® Processor N200 QC SoC with Dual HDMI, Dual GbE, Dual Serial Ports, Dual CANBus, Remote Switch, USB x4

ARK-1221L

- Intel Atom x6413E QC and Celeron N6210 DC SoC with GbE, COM, USB, HDMI/DP and DIO ports DIN-Rail Fanless Box PC

ARK-1250L

- Intel® 11th gen Core™ i processor with Triple LAN/ Quadruple COM Din-Rail Fanless Box PC

ARK-1251 *New*

- Intel® Core Ultra U series processor with three LAN, four COM, HDMI, DP, GbE, GPIO, Remote Switch, USB x 6

Return

All Lineup

ADVANTECH Box型 PC

ARK-3534B

•Intel® Core™ 12th &13th Gen i3/i5/i7/i9 LGA1700 Expansion Fanless Box PC

ARK-3534C

•Intel® Core™ 12th&13th Gen i3/i5/i7/i9 LGA1700 Expansion Fanless Box PC

ARK-3534D

•Intel® Core™ 12th&13th Gen i3/i5/i7/i9 LGA1700 Expansion Fanless Box PC

ARK-3533

•Intel® Core™ 12th& 13th gen processors i3/i5/i7/i9 LGA1700 Expansion Fanless Box PC

Return

All Lineup

Panel PC

1. ADLINK
2. IEI
3. ADVANTECH

ADLINK Panel PC

STC2-EHL Series

Preliminary

- Intel Atom® x6000E series processors (Elkhart Lake)
- 15.6”/21.5” 16:9 LCD panel with LED backlight with 50,000 service life
- With up to 1920 x 1080 resolution
- 10-point PCAP touchscreen

SP2-EHL Series

- High power efficiency with Intel Atom® x6000E series processors (formerly Elkhart Lake)
- Extensive I/O and function expansion through wire-to-board connectors and custom function modules
- Comprehensive expansion and customization options for fast and easy integration with all form factors, kiosks, and all-in-one panel PC applications

ADLINK

SP2-IMX8 Series *New*

- NXP i.MX8M Plus high-performance processor
- PCAP touch screen (7"/10") with true flat design
- 32GB eMMC and external Micro SD slot for storage expansion
- Expansible I/O design from edge I/O

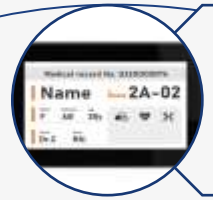
Titan2 *New*

- 11th Gen Intel® Core™ i5/i3 BGA type processor
- 15.6”/21.5”/23.8” FHD with projected capacitive touchscreen
- Full IP69K rating for dust and water ingress

Return to Intel
Return to Arm
All Lineup

MACNICA

IEI Medical Panel PC



IASO-W07A-N6210

- Intel® Celeron® Processor N6210
- PCAP touch allows multi-touch, multi-layer gloves and water-on-screen operation
- 6 ports USB 3.2 Gen1

IASO-W10B-IMX8M

- NXP i.MX 8M Mini Quad-core Cortex-A53 1.8 GHz
- Programmable LED light bar on both side
- 10-point PCAP touch with optical bonding

IASO-W10B-N6210

- 10.1 " Medical Panel PC with Intel® Celeron® N6210 processor
- Programmable LED light bar on both side
- 10-point PCAP touch with optical bonding

POCm-W22C-RPL

- Medical Panel PC, 13th Gen Intel® Core™ i5/ i7 processor (Raptor Lake-P)
- Anti-bacteria housing with IP65 front bezel protection
- PCAP touch allows multi-touch, multi-layer gloves and water-on-screen operation

POCm-W24C-RPL

- Medical Panel PC, 13th Gen Intel® Core™ i5/ i7 processor (Raptor Lake-P)
- Anti-bacteria housing with IP65 front bezel protection
- PCAP touch allows multi-touch, multi-layer gloves and water-on-screen operation

Return

All Lineup

ADVANTECH Panel PC

PPC-315SW ADL_N

- Intel® Processor N97, Quad-Core, 2.0GHz
- 15.6" true-flat TFT LCD with projected capacitive touch control
- Fanless design with low power consumption

PPC-318SW ADL_N

- Intel® Processor N97, Quad-Core, 2.0GHz
- 18.5" true-flat TFT LCD with projected capacitive touch control
- Fanless design with low power consumption

PPC-415W

- 15.6" true-flat Full HD LCD panel with projected capacitive touchscreen, anti-glare coating
- Intel® Core™ i7-1365URE/i5-1345URE/i3-1315URE processor with fanless system design
- Supports PCIe x4 or PCI expansion

PPC-415 EHL

- 15" XGA TFT LCD with resistive (default) or projected capacitive (by request) touchscreen
- Intel® Atom™ x6425E quad-core, 2.0 GHz processor
- Fanless, slim design

PPC-419 EHL

- 19" SXGA TFT LCD with resistive (default)or projected capacitive(by request) touchscreen
- Intel® Atom™ x6425E quad-core, 2.0 GHz processor
- Fanless, slim design

Return

All Lineup

Touch Monitor

1. ADLINK
2. ADVANTECH

ADLINK Industrial Touch Panel

OM Series

- 7"/12.1"/15"/17"/19" (Fullscreen) LCD panel with LED backlight with up to 50,000 service life
- 10.1"/15.6"/18.5"/21.5"/23.8"/27"/32"/43" (Widescreen) LCD panel with LED backlight with up to 50,000 service life
- 10-point PCAP touchscreen (glove-use available)

IM Series

- 21.5"/23.8"/27.0" 16:9 LCD (robust panel direct from AUO)
- 10-point PCAP touchscreen (glove-use available)
- Anti-fingerprint surface treatment for ease of cleaning and enhanced readability

ADLINK

Return

All Lineup

IEI Medical Panel PC

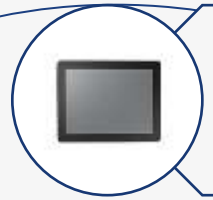
MPOCm-W24

- Mobile Medical Monitor, IP65 front bezel, 2 variable DC outputs
- 10-point PCAP touchscreen, 23.8” FHD medical monitor, Internal Wi-Fi antenna
- Supporting up to 3 pcs 9000mAh hot swappable battery pack
- EN 62368-1 Ed.2 (60601-1 Compatible), EN 55032 + EN 55035 (60601-1-2 Compatible)

Return

All Lineup

ADVANTECH Industrial Touch Panel



IDS-3315

- Front IP65 for waterproof and dustproof
- 15" XGA LCD panel with LED backlight for 20% power saving and environmental protection
- -20 ~ +60 ° C wide range operating temperature

IDS-3319

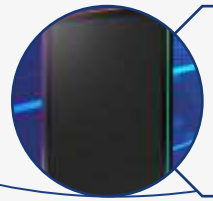
- Front IP65 for waterproof and dustproof
- 19" SXGA LCD panel with LED backlight
- -20 ~ +60 ° C wide range operation temperature

IDP31-101W

- HDMI Interface, Multi-touch PCT touch overlay
- Thin profile, enclosure – no need for additional enclosures or metalwork
- Wide view-angle 89° /89° /89° /89° for portrait and landscape mode

IDP31-156W

- Multiple signal interface with HDMI, VGA and DVI
- Multi-touch by projected capacitive touchscreen solution, Built-in speakers (optional)
- Thin profile, light enclosure - no need for additional enclosures or metalwork



CRV-430JP

- Enhanced solution for casino slot machines, gaming, signage, kiosksand other public information terminals
- VGA, Display port, HDMI interface. Integrated Projected Capacitive (PCAP) Multi-touch
- 43" in Ultra HD (3840 x 2160) with 1500R curvature

Return

All Lineup

Edge AI PC
Application Focus PC

1. ADVANTECH

ADVANTECH Edge AI Box型 PC

AIR-150

- Intel 13th gen. Core i3/i5 up to 14 Watt with 10 Cores
- Empowered by Hailo-8 M.2 AI module up to 26 TOPS

AIR-310

- Support Intel ® 14th Gen. Core™ i3/i5/i7/i9 processor up to 65W
- Support MXM 3.1 Type A GPU card up to 60W

AIR-510

- Intel® Raptor Lake S Platform to support 13th Gen Intel® Core™ processors
- NVIDIA Certified with RTX 6000 Ada graphic card

AIR-520

- 4U Edge AI Server powered by AMD EPYC 7003 series processor, provides up-to 64 cores, 768GB DRAM, four PCIe x16 expansion slots

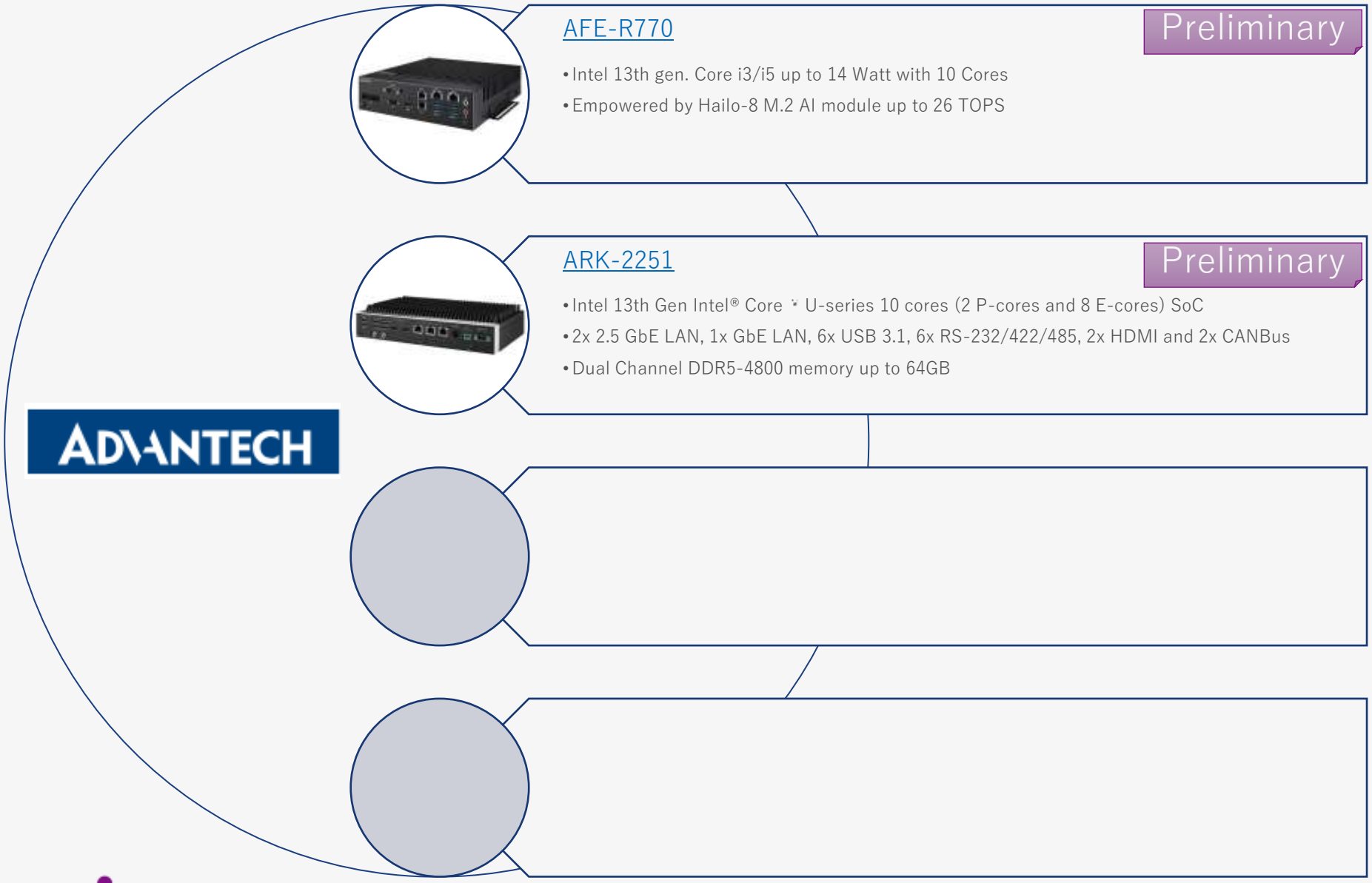
EI-53

- Intel 13th Gen. Core i7/i5/Celeron up to 14 Watt with 10 Cores
- Compact Fanless 156 x 112 x 60mm dimensions

Return

All Lineup

ADVANTECH Application Focus Box 型PC



AFE-R770

Preliminary

- Intel 13th gen. Core i3/i5 up to 14 Watt with 10 Cores
- Empowered by Hailo-8 M.2 AI module up to 26 TOPS

ARK-2251

Preliminary

- Intel 13th Gen Intel® Core ™ U-series 10 cores (2 P-cores and 8 E-cores) SoC
- 2x 2.5 GbE LAN, 1x GbE LAN, 6x USB 3.1, 6x RS-232/422/485, 2x HDMI and 2x CANBus
- Dual Channel DDR5-4800 memory up to 64GB

Return

All Lineup

ASUS
NUC製品ご紹介

1. NUC 製品紹介

ASUS NUC Products

ASUS NUC 14 Pro+

- インテル® Core™ Ultra 9、Ultra 7、およびUltra 5プロセッサ, インテル® Arc™ GPU
- インテル® AIブースト（長時間のAIワークロードを低消費電力で処理するために特別に設計されたIntelの最新NPU）

ASUS NUC 14 Pro

- インテル® Core™ Ultra 5、Ultra 7プロセッサ
- インテル® Arc™ GPU

ASUS NUC 13 Pro

- 第13世代インテル Core™i7-1370Pプロセッサ
- インテル® Iris® Xᵉ グラフィックスまたはインテル® UHD グラフィックス内蔵

ASUS NUC 13 Rugged

- インテル® Atom® x7211E, cTDP 6W, インテル® Atom® x7425E, cTDP 12W
- インテル® UHD グラフィックス内蔵

※ハイトタイプ、その他薄型タイプや vPRO® 対応品がございますので、お気軽にお問い合わせください。

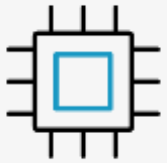
HAILO 製品ご紹介

1. 会社紹介
2. プロダクト紹介

HAILO 会社概要

- 設立：2017年
- Office：本社/イスラエル　支社/アメリカ、ドイツ、日本、台湾
- 独自のデータフロー・アーキテクチャで特許取得
- 従業員数：300人
- 戦略的投資家(NEC様,ABB様)を含め$350Mの資金調達を実施

AI Chipmaker

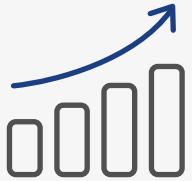


Patented & field proven ML architecture

Founded in 2017

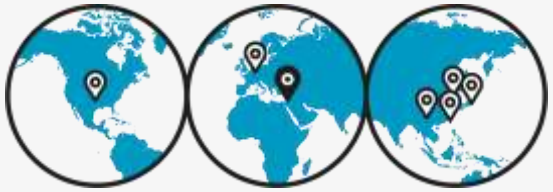
2nd Generation in mass production

>10x Revenue Growth 2021-2023



>300 Customer Programs

10s of products in production



$350M funding

Including NEC & ABB

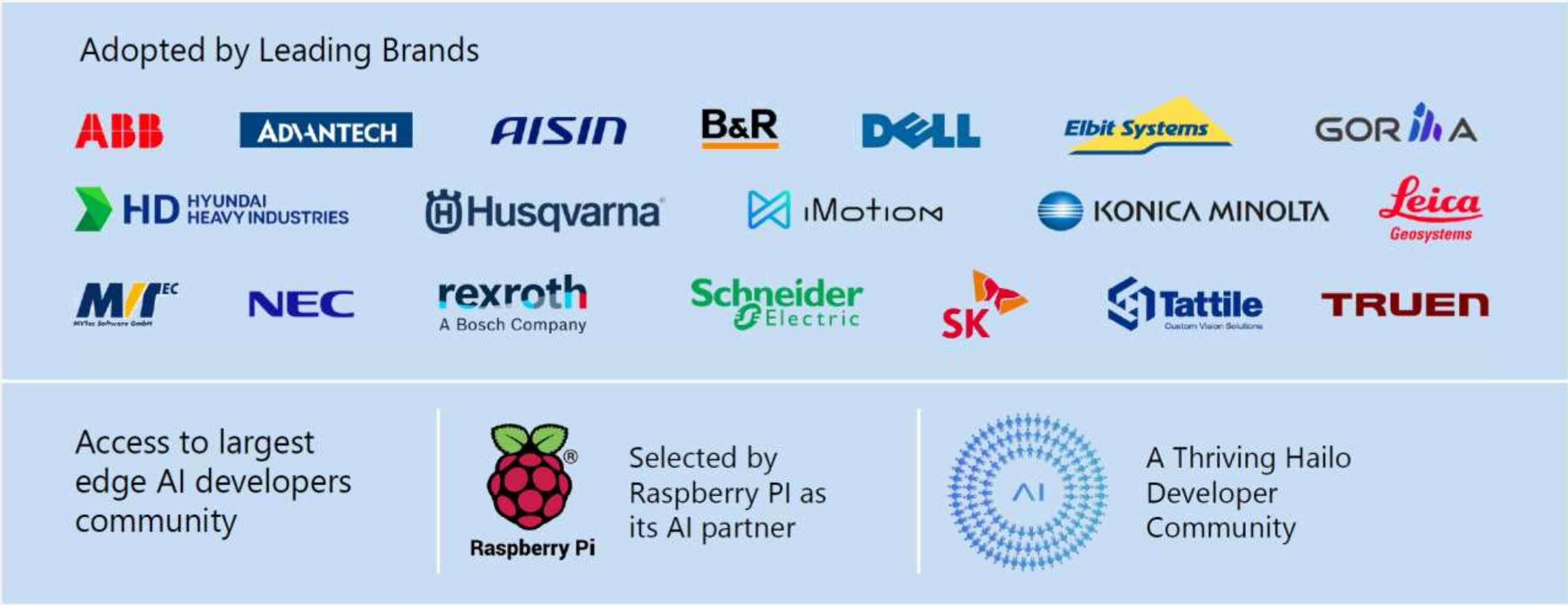
>300

70% of R&D are software engineers

MACNICA

HAILO 会社概要

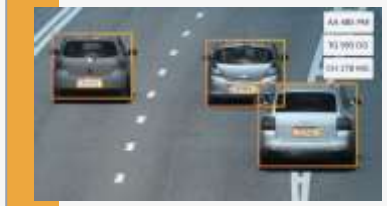
- グローバルブランドでも採用



エッジコンピューティング活用事例

- Hailo の強力でスケーラブルな AI テクノロジーにより、さまざまな市場で新しい機能が可能になります

Security



ITS, 境界監視, アクセスコントロール

Automotive



ADAS, 自動運転, 周辺監視

Industrial Automation



AMR/AGV, AOI, ビルマネジメント, Robotics, マシナリ

Retail



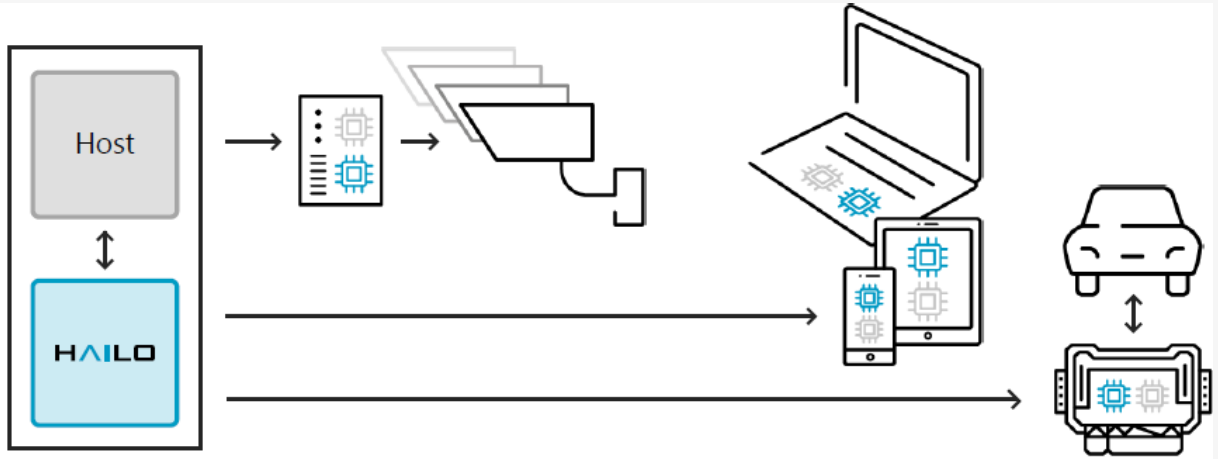
POS, サプライチェーン管理

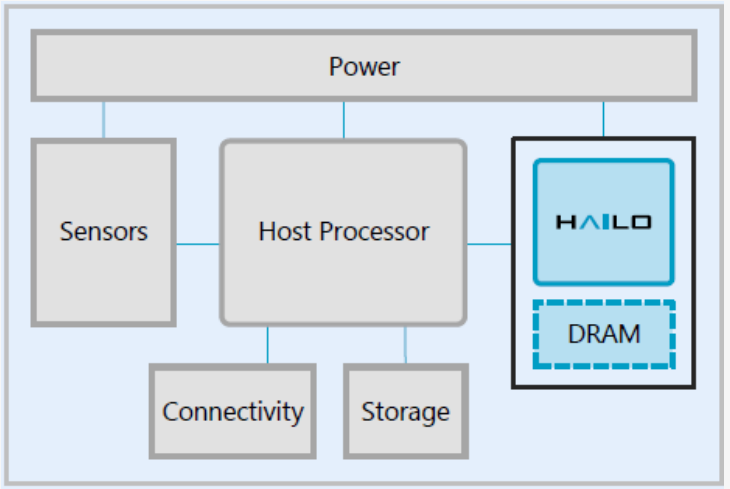
AIプロセッサーのポートフォリオ

- 多様なユースケースに対応するAIプロセッサーのポートフォリオ
- すべてのプロセッサーをサポートする単一のソフトウェア・スイート

AI Accelerators

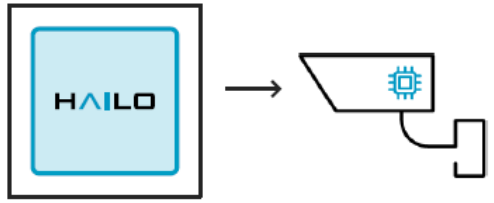
Hailo-8, Hailo-10

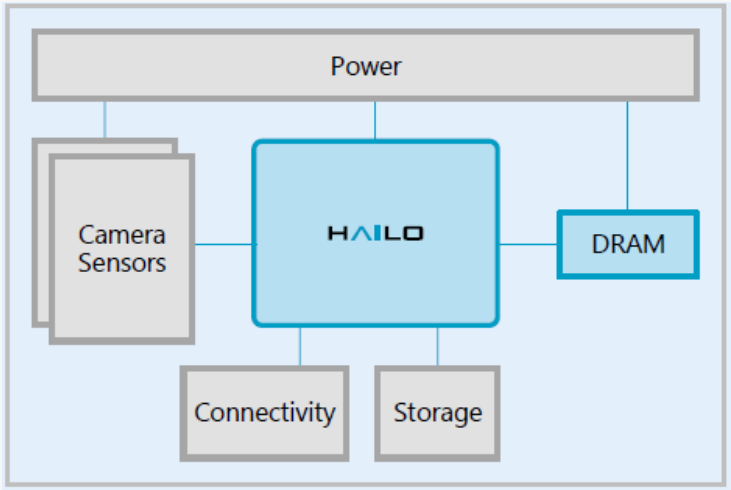




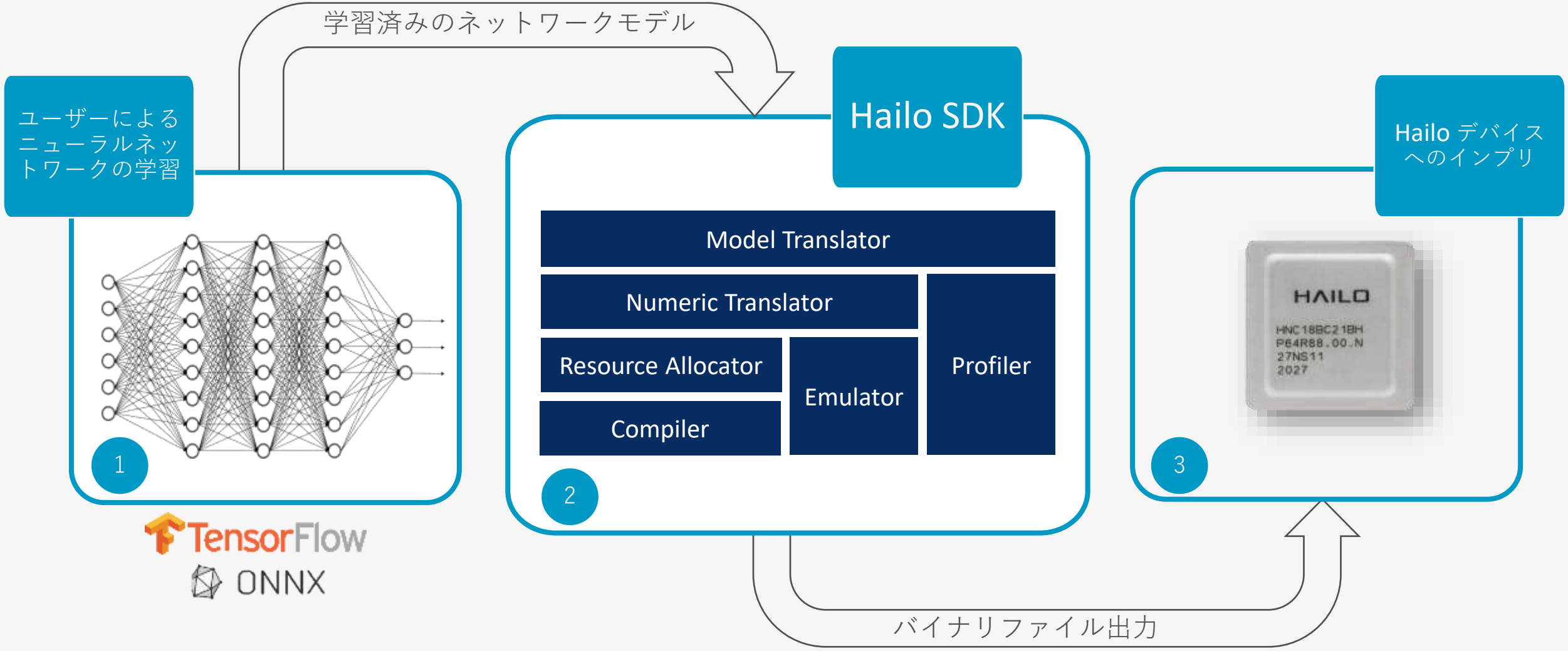
AI Vision Processors

Hailo-15





Hailo データフローコンパイラー



Hailo8 採用例

Idein Inc. × AISIN

エッジAIカメラ「ai cast（読み：アイ キャスト）」は、
“Raspberry Pi” に “Hailo-8 エッジAIプロセッサ” を搭載したAIカメラです

大手自動車部品メーカーの
アイシン製で**信頼品質**

設置環境になじむ**デザイン**

コンパクトな手のひらサイズ

※「ai cast」は商標登録中

Actcast

「Actcast」と連携済みのため
最短手順でデータ取得が可能

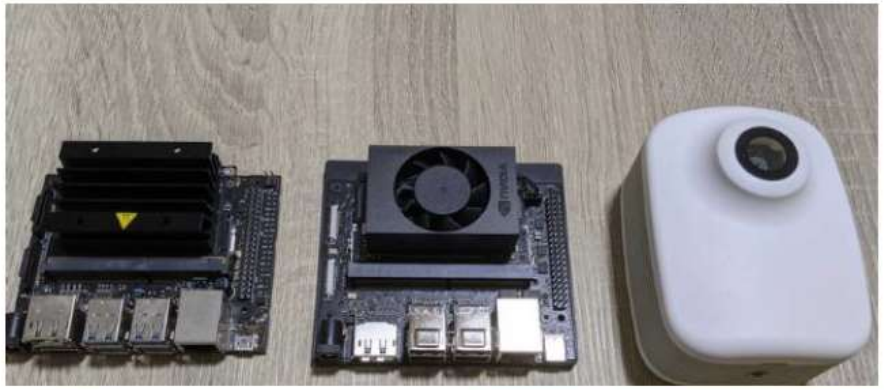
Hailo-8
エッジAI
プロセッサ

＋

Hailo-8の性能を引き出す
Ideinの技術力

https://note.com/idein/n/n63728d3c107e

Jetson Nano/Jetson Orin Nano/ai cast



Raspberry Pi単体
解像度: 192x192
検出可能物体の種類: 1種類
検出方法: 位置 + 大きさ
モデル: mobilenet v2 ssd

「ai cast」
解像度:**640x640**
検出可能物体の種類:**80**種類
検出方法: 位置 + 大きさ + **形状**
モデル: YOLOv5L segmentation

Raspberry Pi Compute Module4 + Hailo-8

速度比較

デバイス	ランタイム/精度	FPS	infer latency(ms)	all latency(ms)
Jetson Orin Nano	trtexec/FP32	49.0	20.9	44.5
Jetson Orin Nano	trtexec/FP16	97.8	10.7	36.9
Jetson Orin Nano	trtexec/INT8	126.3	8.6	36.5
Jetson Nano	trtexec/FP32	6.5	153.3	224.8
Jetson Nano	trtexec/FP16	10.6	93.7	154.5
ai cast	Hailo8/INT8	250.5	8.6	35.6

精度比較

デバイス	ランタイム/精度	mAP@IoU0.50:0.95	mAP@IoU0.50	mAP@IoU0.75
Jetson Orin Nano	TensorRT/FP32	35.2	52.2	38.1
Jetson Orin Nano	TensorRT/FP16	35.2	52.2	38.0
Jetson Orin Nano	TensorRT/INT8	31.0	46.8	33.7
ai cast	Hailo8/INT8	34.3	51.8	37.1

消費電力比較

デバイス	アイドル時(W)	デモ推論時(W)	ベンチマーク時平均(W)
Jetson Orin Nano (INT8)	6.8	8.8	12.7
Jetson Nano (FP16)	1.5	5.1	8.8
ai cast	3.7	4.5	7.8

https://note.com/idein/n/n63728d3c107e

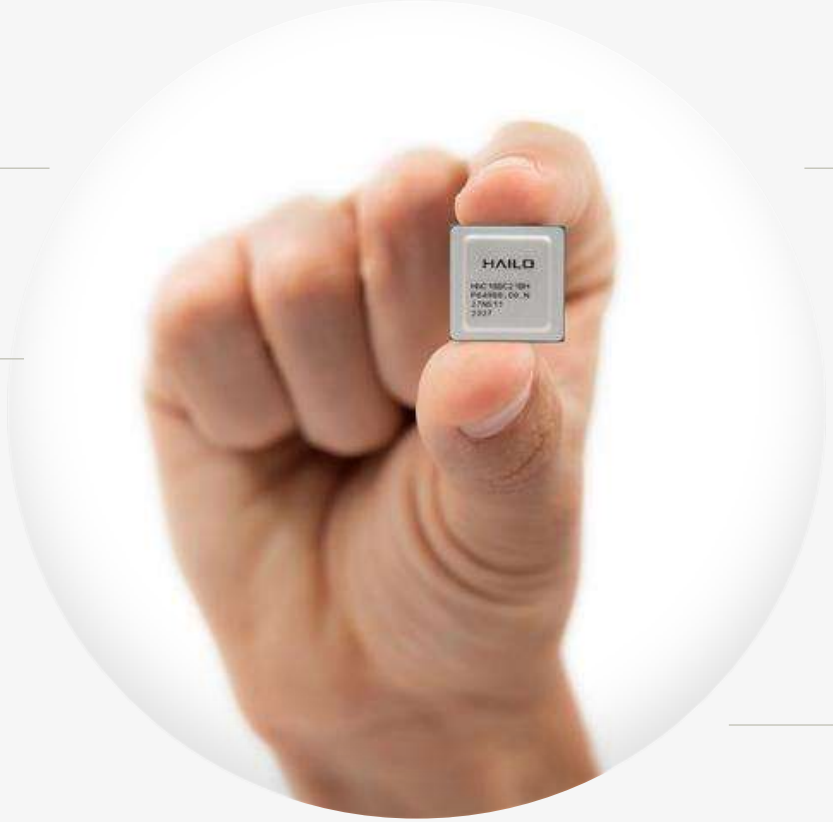
Hailo-8

Hailo-8™ の優位点

低消費電力/ハイパフォーマンスなエッジAIプロセッサー

ハイパフォーマンス
- 13-208 TOPS

効率的なAI アーキテクチャ
- 外部 DRAM 不要
- 低消費電力
- 低レンテンシ



多用途

包括的なソフトウェア
- 成熟したデータフローコンパイラ
- 効率的なRTライブラリ
- サンプル （ Model Zoo ）

広範囲の温度対応
- Industrial: -40°C to 85°C
- Automotive: -40°C to 105°C

Scalable & Flexible
- Multi-streams
- Multi-model
- Multi-chip

Hailo-8™ プロダクト

- チップ、M.2・PCI Express モジュールを用意

Hailo-8L Entry-Level AI Accelerator

CoB –
13 TOPS

M.2 Entry-Level AI Acceleration Modules
13 TOPS


Key B+M
2 lanes


Key A+E
2 lanes

Hailo-8 AI Accelerator

CoB –
26 TOPS

M.2 AI Acceleration Module
26 TOPS

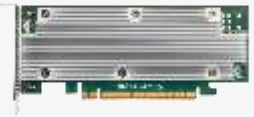

Key M
4 lanes


Key B+M
2 lanes


Key A+E
2 lanes

Hailo-8R mPCIe AI Acceleration Module
13 TOPS

Hailo-8 Century High Performance PCIe Cards



Small Form Factor
52-104 TOPS

0802, 0803, 0804

Wide Host Compatibility
104-208 TOPS

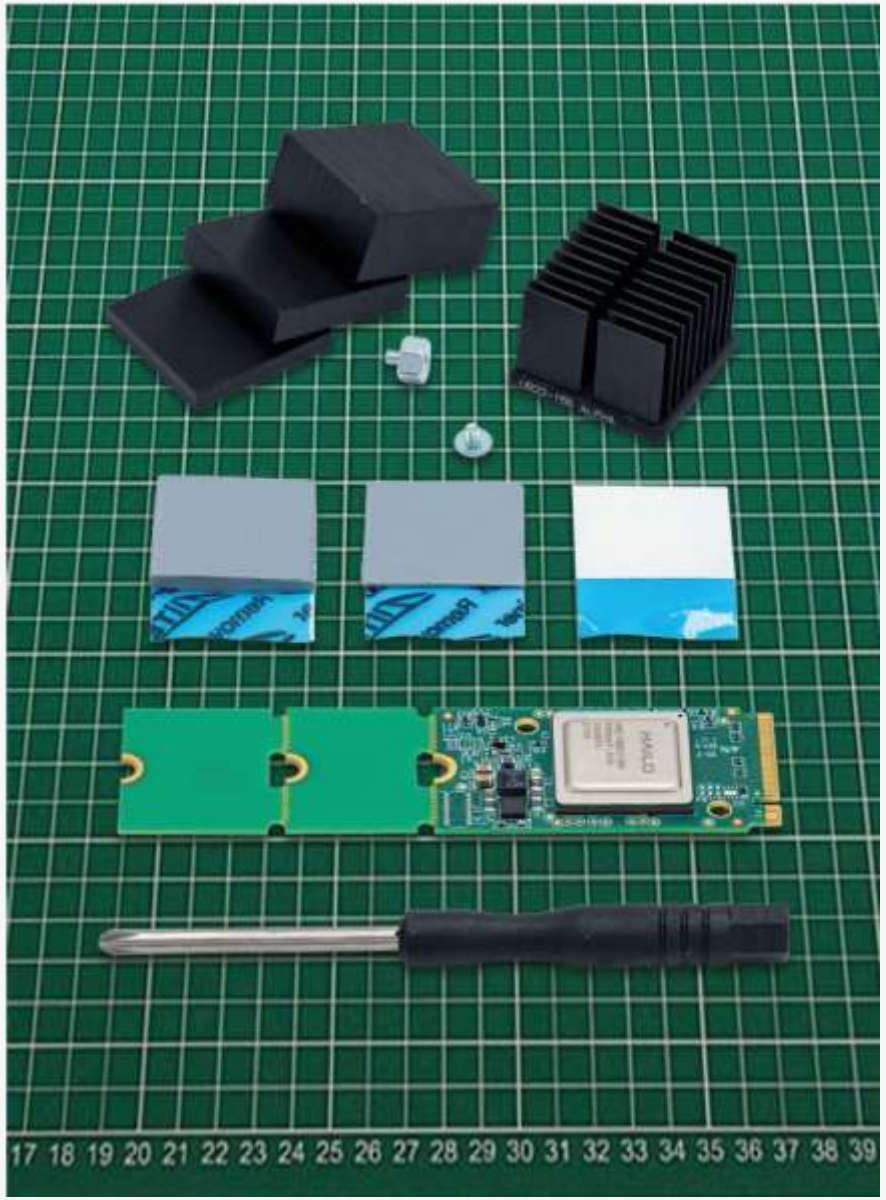
0804S, 0805S, 0806S, 0807S, 0808S

Get Started with Hailo

- AI accelerator module for developing and prototyping edge AI applications
  - M.2 Module (key M, key A+E or key B+M) with Hailo-8 AI accelerator processor
- Local support by Hailo's Field Application Engineers or distribution partners
- Online Developer Zone:
  - Documentation and knowledge base
  - Online service
  - SW download
  - Reference designs, rich model library, and more resources
- Monthly software training webinars

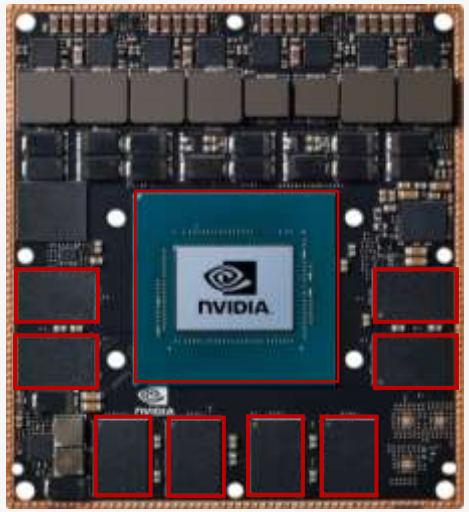
Start breathing AI into your edge products — Sign Up

Hailo-8 Starter Kit $265



圧倒的なAIパフォーマンス

NVIDIA AGX Xavier



Nvidia:汎用的なGPU
+ 外部メモリが必須

Hailo-8™

HAILO:専用AI Chip
専用品のため外付け
メモリ不要

ResNet-50 ベンチマーク

Device	Total Power [Watt]	Total Power Efficiency [TOPS/W]
Hailo-8™	1.7	2.8
Nvidia Xavier AGX	32	0.14

Conditions:
- TOPS (8-bit): Xavier 32 TOPS, Hailo-8 26 TOPS
- 224x224 image resolution feed @ 656 FPS
- 8-bit precision
- Batch size = 1

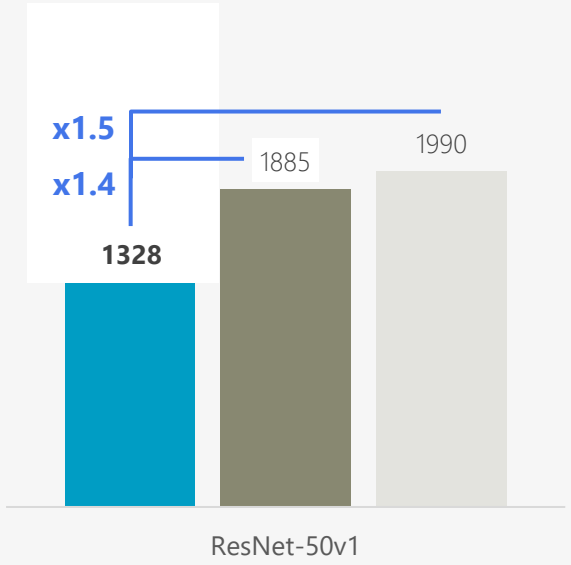
15倍の面積効率

20倍の電力効率

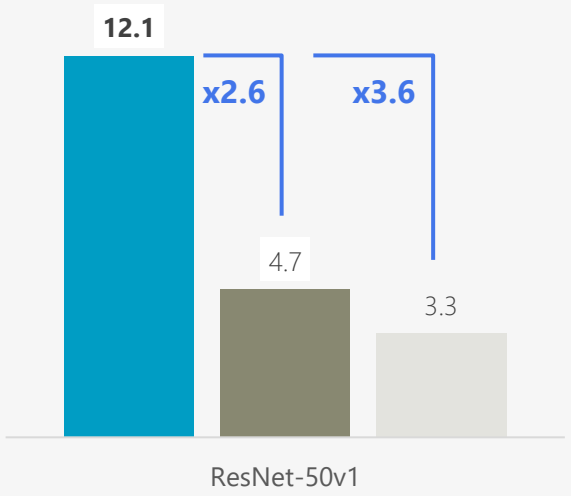
Deep Learning Performance Comparison

1 x Hailo-8 vs. Orin NX 8GB/16GB

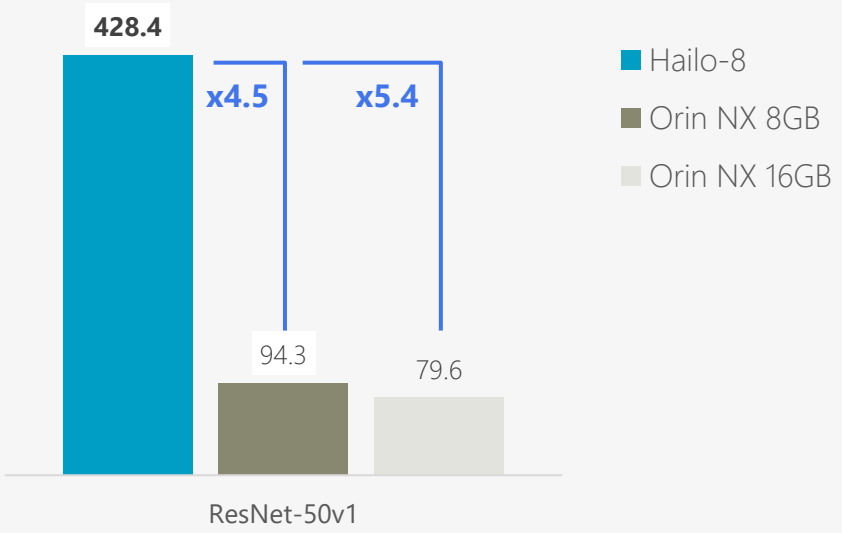
Performance (FPS)



Cost Efficiency (FPS/$)



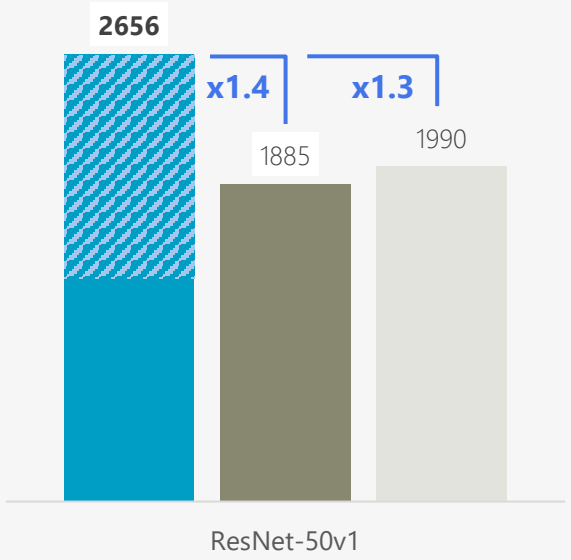
Power Efficiency (FPS/W)



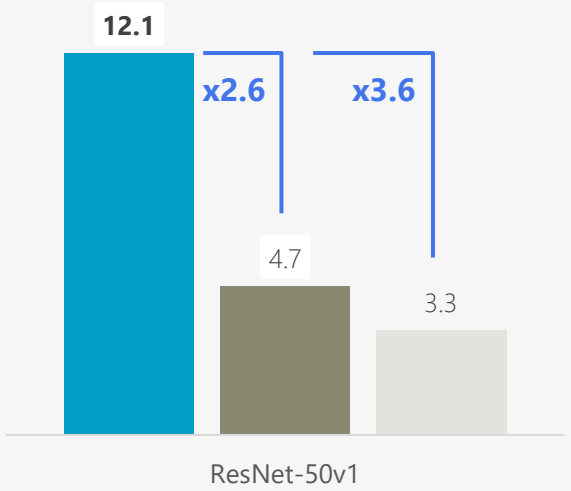
Deep Learning Performance Comparison

2 x Hailo-8 vs. Orin NX 8GB/16GB

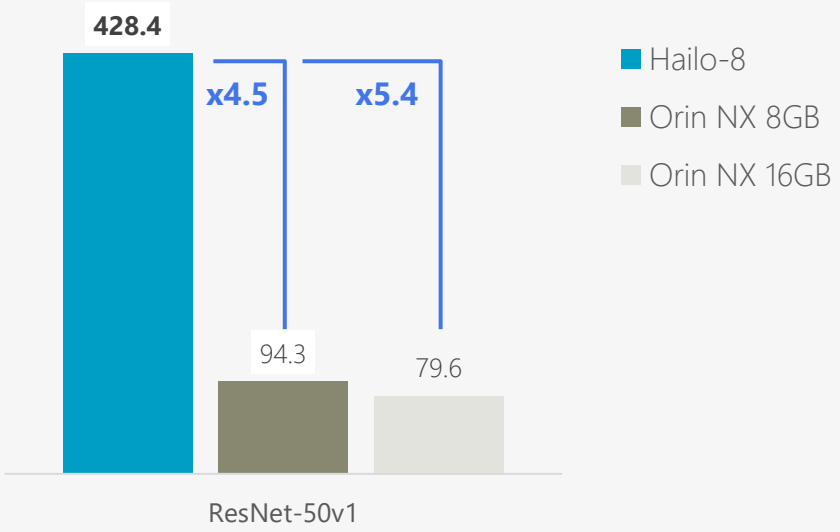
Performance (FPS)



Cost Efficiency (FPS/$)



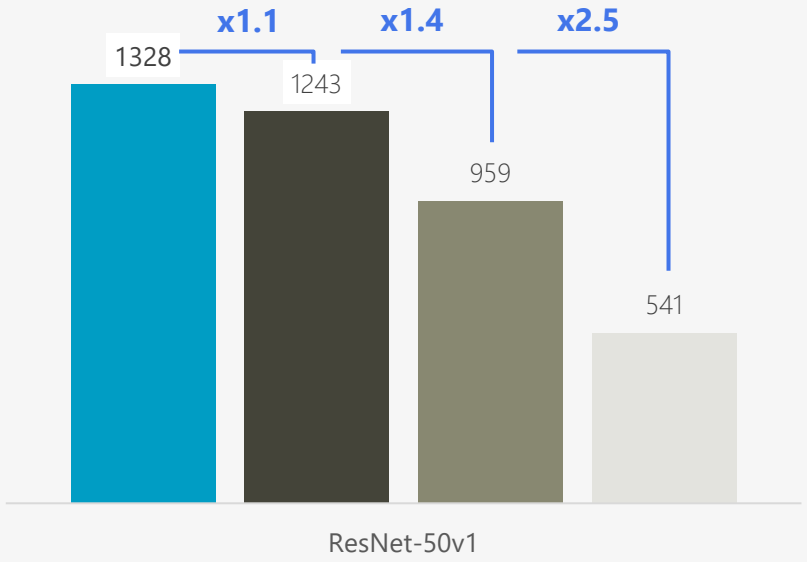
Power Efficiency (FPS/W)



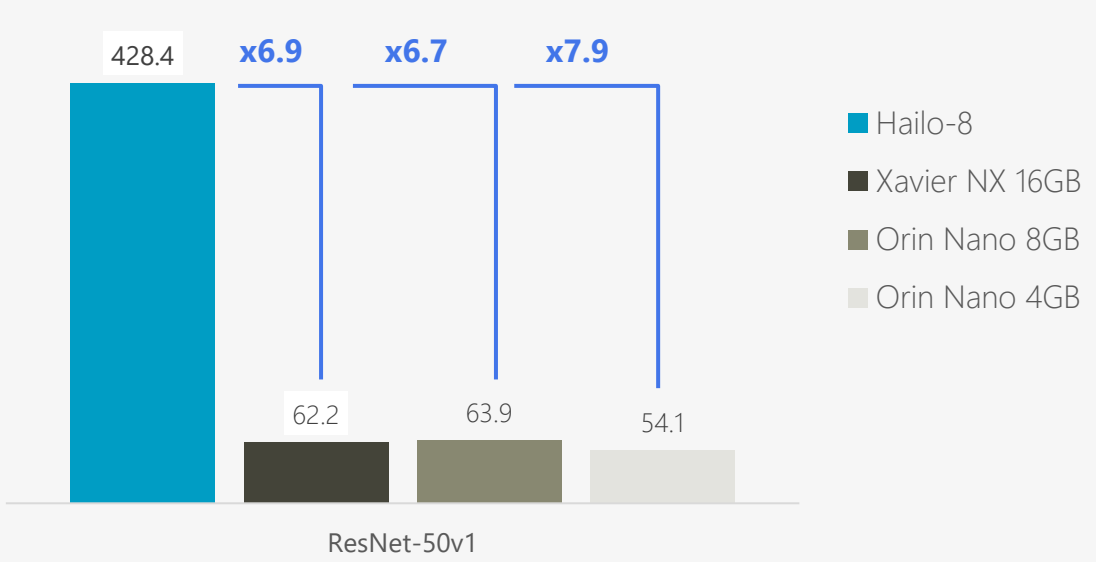
Deep Learning Performance Comparison

Hailo-8 vs. Xavier NX & Orin Nano 4GB/8GB

Performance (FPS)



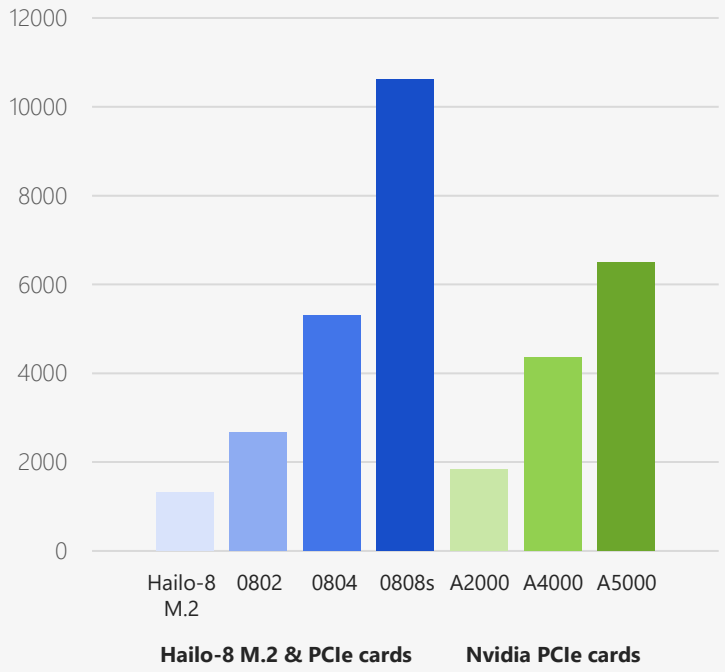
Power Efficiency (FPS/W)



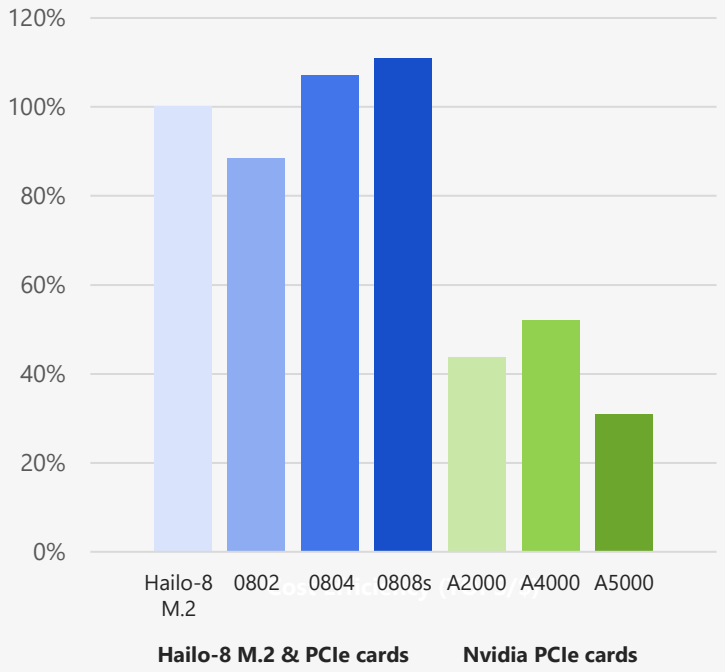
Hailo-8™ vs. Nvidia – FPS比較

Hailo-8 M.2 & Century vs. Nvidia GPU PCIe Cards

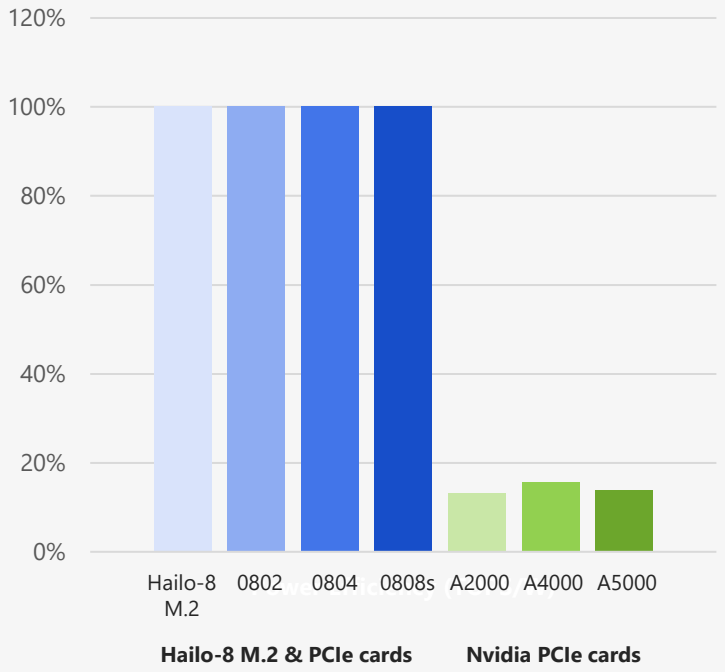
Performance
(ResNet-50FPS)



Cost Efficiency
(FPS/$)



Power Efficiency
(FPS/W)



Hailo-8 Measured Benchmarks*

NN Model	Input Resolution	FPS	Power (W)	FPS/W
Classification				
ResNet-50 v1	224x224	1,332	3.4	391
MobileNet_v2_1.0	224x224	2,444	2.1	1,163
EfficientNet_M	240x240	897	3.5	254.2
ViT Base	224x224	126	2.5	52.5
Object Detection				
SSD_MobileNet_v1	300x300	1,016	2.2	461.8
YOLOv5m	640x640	218	4.7	46.3
Semantic Segmentation				
stdc1	1024x1920	59	3.1	19

https://hailo.ai/products/ai-accelerators/hailo-8-ai-accelerator/#hailo8-benchmarks

Notes:

1. *Batch 8*
2. *Measurements were taken at room temperature through PCIe interface on Hailo-8 evaluation board*
3. *System host: Intel® Core™ i5-9400 CPU @ 2.90GHz; Models compiled with Hailo Dataflow Compiler version 3.26.0 (SW version 2024-01)*

Hailo-10H

Hailo AI Accelerator for GenAI

Hailo-10H Generative AI M.2 Module 【Coming Soon】

- Powerful, scalable & efficient AI offering

High Performance

- Best performing edge processor
- Enables old generation / low-cost CPUs to run generative AI applications

Scalability & Versatility

- Enable consistent solution across different platforms, form-factors and CPU brands and generations
- Supporting a wide range of AI models including LLMs and other advanced Generative AI models

Low Power Consumption

- Low power consumption supporting mobile PC power envelope and enabling longer battery life while running intensive GenAI application

Easy Integration

- Software – Comprehensive and field-proven software suite with a rich model zoo for easy development
- Hardware – standard compact form factor (M.2 2422) that can be integrated to existing designs

Hailo のパートナーとエコシステム

- お客様へパートナーの幅広いエコシステムと完全なソリューションを提供

Hardware

AAEON / ADVANTECH / ADLINK / Analog Tech / AXIOMTEK / BASLER / Compulab / DELL / FOXCONN / HPC SYSTEMS / iBASE / iEi / kontron / Lanner / maris / MicroSys / MiTAC / NEXCOM / premio / Portwell / SolidRun / SUPERMICRO / Variscite / Vecow

Software

- Industrial: 36ZERO VISION / DEEP VISION CONSULTING / MVTec / VISION / VISION SYSTEM
- Automotive: LeddarTech
- Security: CVEDIA / INNOVATRICS / ISARSOFT / neurosoft
- Defense: AXON
- Retail: Idein Inc.

Alliances

ctrlX AUTOMATION / FORXAI Video Security Solution / KONICA MINOLTA / rexroth A Bosch Company

Silicon

REGISTERED PARTNER NXP / RENESAS / socionext

Distribution

AIT group / EBV Elektronik An Avnet Company / INSEM / MACNICA / KAGA ELECTRONICS GROUP

HAILO お役立ち情報 Web Links

水色：リンク先

最新性能データ

NN Model Benchmark データ毎の
入力解像度, FPS, Power, FPS/watt

the Hailo Blog

Hailo に関する情報
実使用デモが掲載されています

MACNICA 記事

小型/低消費電力 Edge-AI システムの
構築をやってみました
i.MX8M Plus + Hailo-8 M.2
Module

製品採用例

Hailo-8™ 搭載製品・Solution
事例①：NSK 様 ①
事例②：HPC SYSTEMS 様 ①②
事例③：明電舎 様 ①

Hailo 搭載 PC

購入してすぐ評価可能な Hailo-8™ 組
み込み済みの PC です
Advantech AIR-150
Lanner LEC-7242H
AxiomTEK RSC101

Hailo Model zoo

Public トレーニング済みモデル群
GIT hub へのリンク

CyberLink FaceMe®のご紹介

1. 概要
2. CyberLink社 FaceMe® のご紹介

CyberLink社 FaceMe® 概要

CyberLink

世界有数の開発者が在籍 マルチメディアソフトウェア AIによる顔認識アプリを開発中	PowerDVD, PowerDirector, PhotoDirector PC 市場：4億本以上出荷 App市場：3億本以上ダウンロード	1996年設立、2000年上場 2015 年に Perfect Corp 分割 現在の評価額は 14 億ドル 今年 Nasdaq 上場予定

FaceMe®
AIを活用した全方位型顔認証ソリューション

精確性	・99.81%の認識精度
安全性	・100%なりすまし防止
パフォーマンス	・ワークステーション当たり240ビデオストリーム
コスト	・低コストSoC端末にも搭載可能

MACNICA

顔認証システムの使用例

進行中

採用済

客層の分析

・来場者/来店者の属性（年齢,性別）の分析
・客層に合わせたサイネージ切替

オフィス/店舗の人流解析

AIカメラを用いた
人物トラッキング

顔認証
＋
骨格推定

入退室管理

・セキュリティエリア等への入退室管理システムを提供
・様々なシーンで「スピーディでかつ確実な」顔認証機能を利用可能

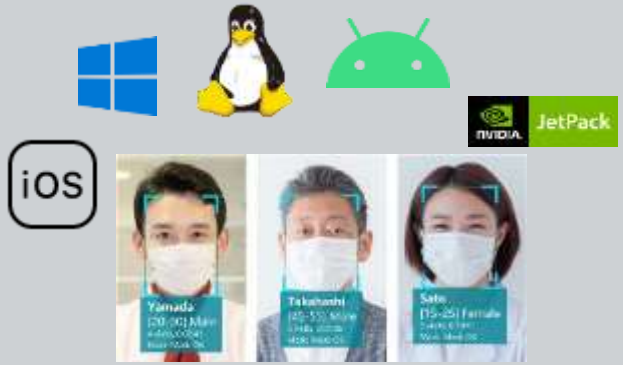
作業者のログ取得

・顔認証を用いた本人確認とログ取得
・食品工場などICカードなどを所持できない環境で活用

オフィスのDX化

・入退出管理（共連れ履歴確認 etc）
・ビルマネジメントシステムとの連携
- エレベーターの呼び出し
- 立ち入りエリアの制限 etc..

提供タイプ＆機能比較

	FaceMe® SDK	FaceMe® Platform	FaceMe® SECURITY
特徴	**AI 顔認証エンジン** • AI / IoT 機器でのエッジベースからサーバーへの組み込みまで対応 • マスク、帽子、ヘルメット、ゴーグル着用などさまざまなシチュエーションで認証可能 	**Webベースの統合型顔認証API** • HTTPS APIベースのAPIプラットフォーム • 管理サービス（コンソール）、API、イベントログや通知などのシステムサービスで構成  ↑ 出退勤管理インターフェース ↓年齢層 & 性別	**IP カメラシステム向け顔認証システム** • リアルタイム監視、発報が可能なパッケージソリューション • IPカメラとの接続で、ウォークスルー認証によるドアアクセスコントールを実現可能 • API連携で外部システムとの連携も可能  ↓管理用アプリ
システム開発の柔軟性	高		低

FaceMe®とは？

PC・モバイル向けにマルチメディアソフトウェア
AI関連技術を自社開発する、サイバーリンク(本社:台湾)が提供する

組み込み向け AI顔認証ソフトウェア開発キット

モバイル・組み込みデバイス・IoT・サーバー・クラウドなど
既存のサービスや自社ソフトウェア・ハードウェア製品へ

世界最高水準の顔認証機能を追加する為の開発キットです

CyberLink

AI 顔認識ソフトウェア FaceMe® 特徴

- 高精度モデル：本人認識率: 99.7%, 誤認識率: 10-6.(100万分の1)
- なりすまし防止
  - 3Dカメラによる生体認識率: 98.2%, フェイク検出率: 100%

顔検出

映像から検出された顔から高精度の顔モデルを生成

顔認識

顔の特徴を抽出し、データベースから個人を識別

顔属性分析

Aiで年齢、性別、感情などの顔に関する属性を推測

高度な画像前処理

TrueTheater™ 技術を用いて前処理段階で画質を向上

なりすまし対策

安全で正確な生体認証環境を実現

マスクの検出と顔認識

マスクを着用していても個人を高精度で特定可能

すぐに可能な入退管理向けシステムを用意

開発不要！顔認証入退管理システムを提供

顔認証用端末　管理用システム　外部連携＊

世界最高水準の速度と精度を実現したFaceMe®を使用

アメリカ国立標準技術研究所（NIST）の顔認証技術ベンチマークテストにおいて、本人認識率99.83%

顔認証を用いた入退管理をすぐに使用することが可能

認証用端末とデーターベース管理用アプリを提供

電気錠など他システムとの連携も可能！（*要個別相談）

アクセス制御シナリオ（ドアの開閉やゲート連携、その他勤怠システム）の拡張

顔認証を用いるメリット

01 高いセキュリティ

ICカード使用時と比較し不正利用（貸し借りや共用 etc）のリスクを低減可能

02 ランニングコストの削減

ICカード(物理キー）の管理工数（発行、臨時発行、無効化/再発行）とコスト

03 利用者の利便性の向上

ハンズフリー、ウォークスルー認証が可能

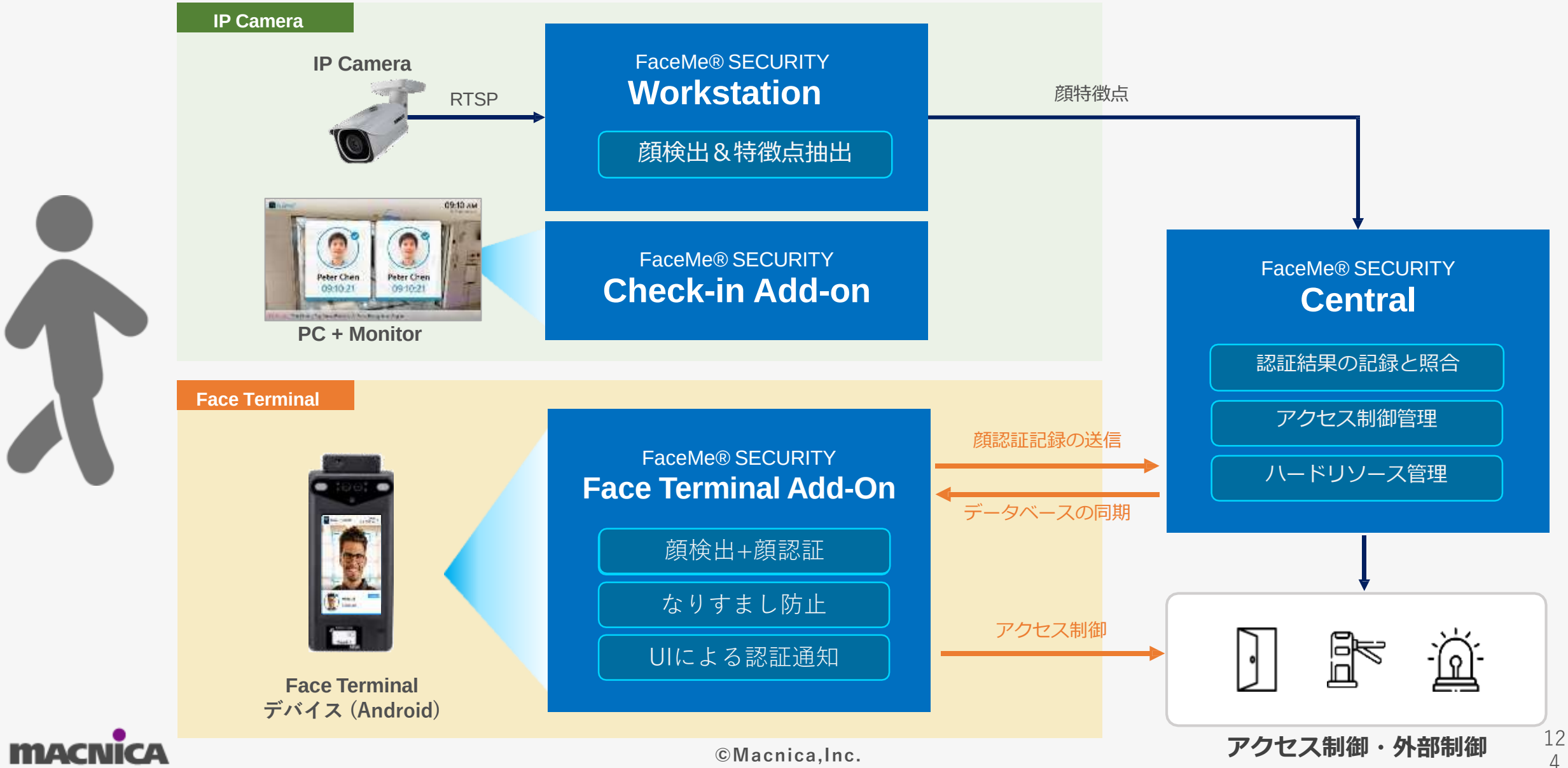
04 管理者の利便性の向上

画像がログとして残るため、いつ、どこで、誰（本人）が使用したの特定が容易

MACNICA

Android 端末とのセットソリューション

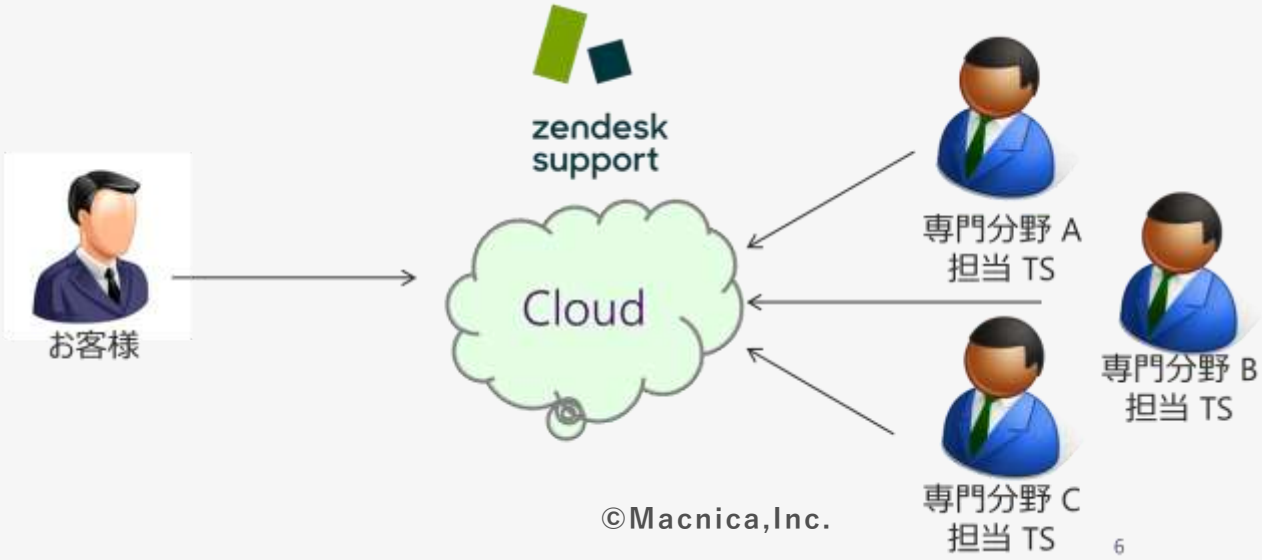
- FaceMe SECURITY + Face Terminal Add-on 構成



マクニカ
アルティマカンパニー技術サポート体制

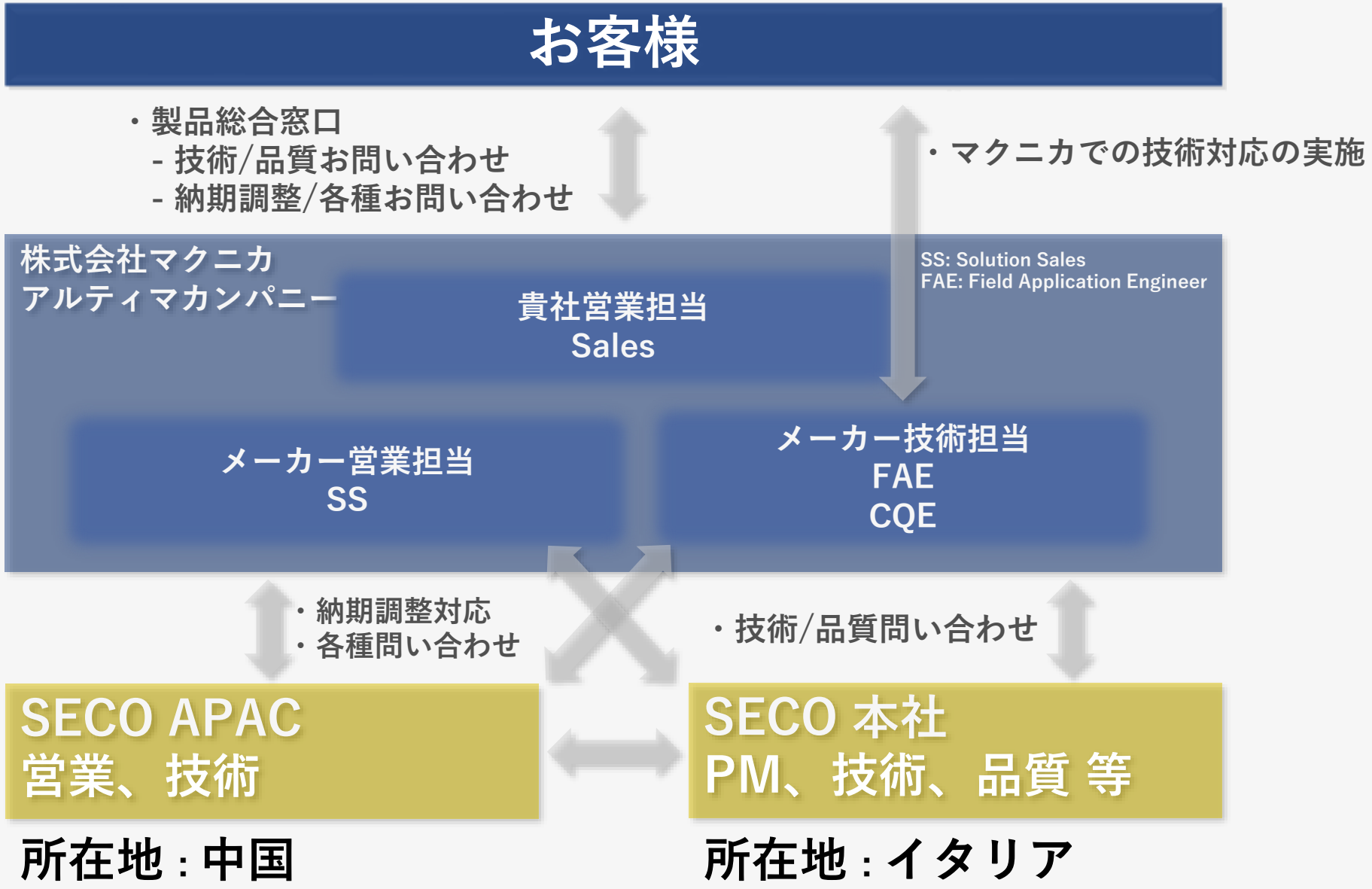
マクニカ技術サポート窓口 (My Support システム)

- Zendesk でのサポート対応
  - IPC製品　: support-cots@malt.zendesk.com
  - Hailo製品: support-hailo@malt.zendesk.com
  - 迅速で正確な回答
    - 専門の技術者をアサインして、迅速なレスポンスと質の高い回答を提供します
  - 問題のステータス管理
    - お問い合わせ毎に質問を管理し、回答漏れ・ミスコミュニケーションを防止します
  - 対応履歴の明確化
    - お問い合わせ毎に履歴を保持し、問題が長期化した際も過去の経緯のトラッキングを容易にします

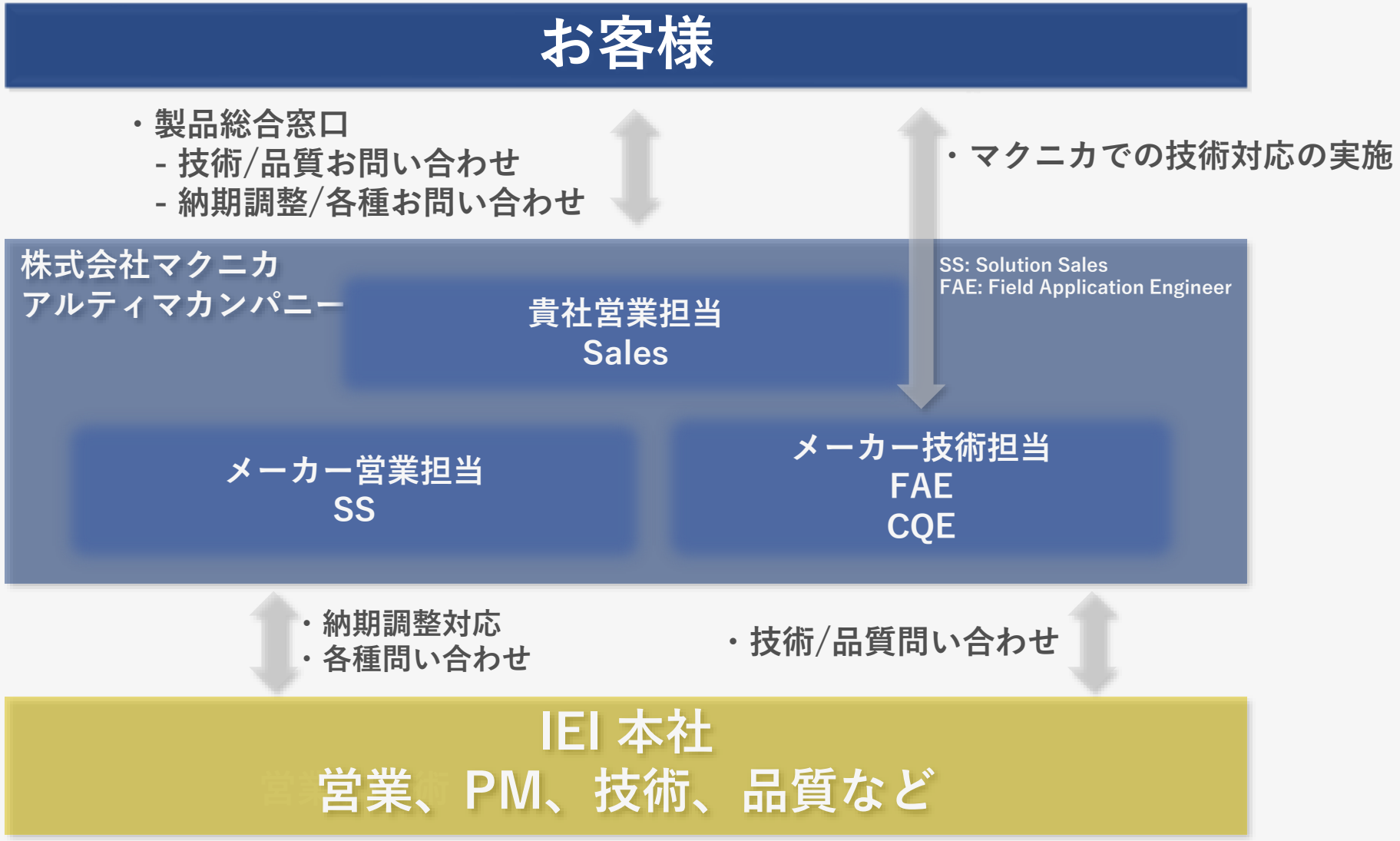


Appendix

マクニカアルティマカンパニー SECO 製品サポート体制図

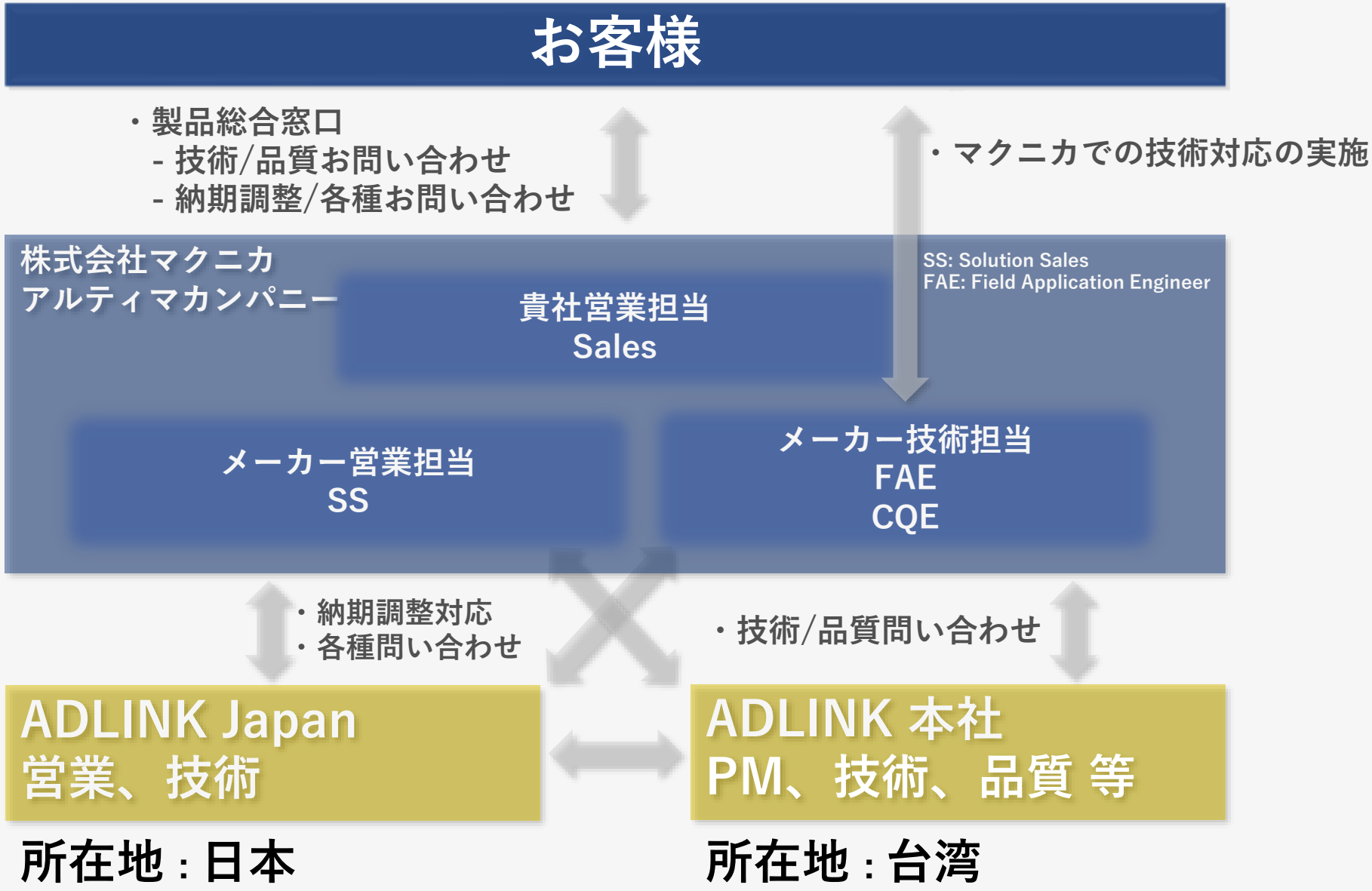


マクニカアルティマカンパニー IEI 製品サポート体制図

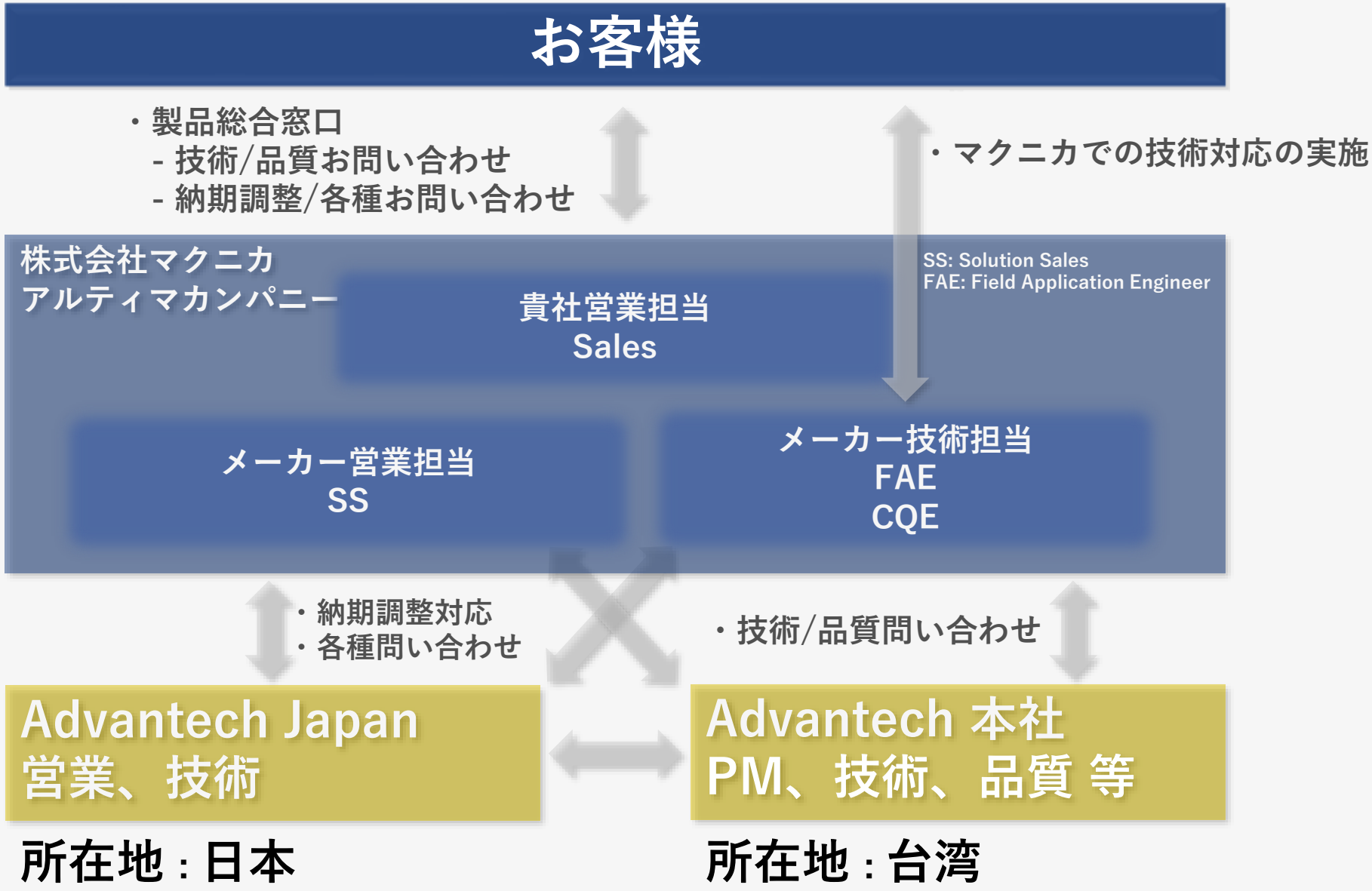


所在地：台湾

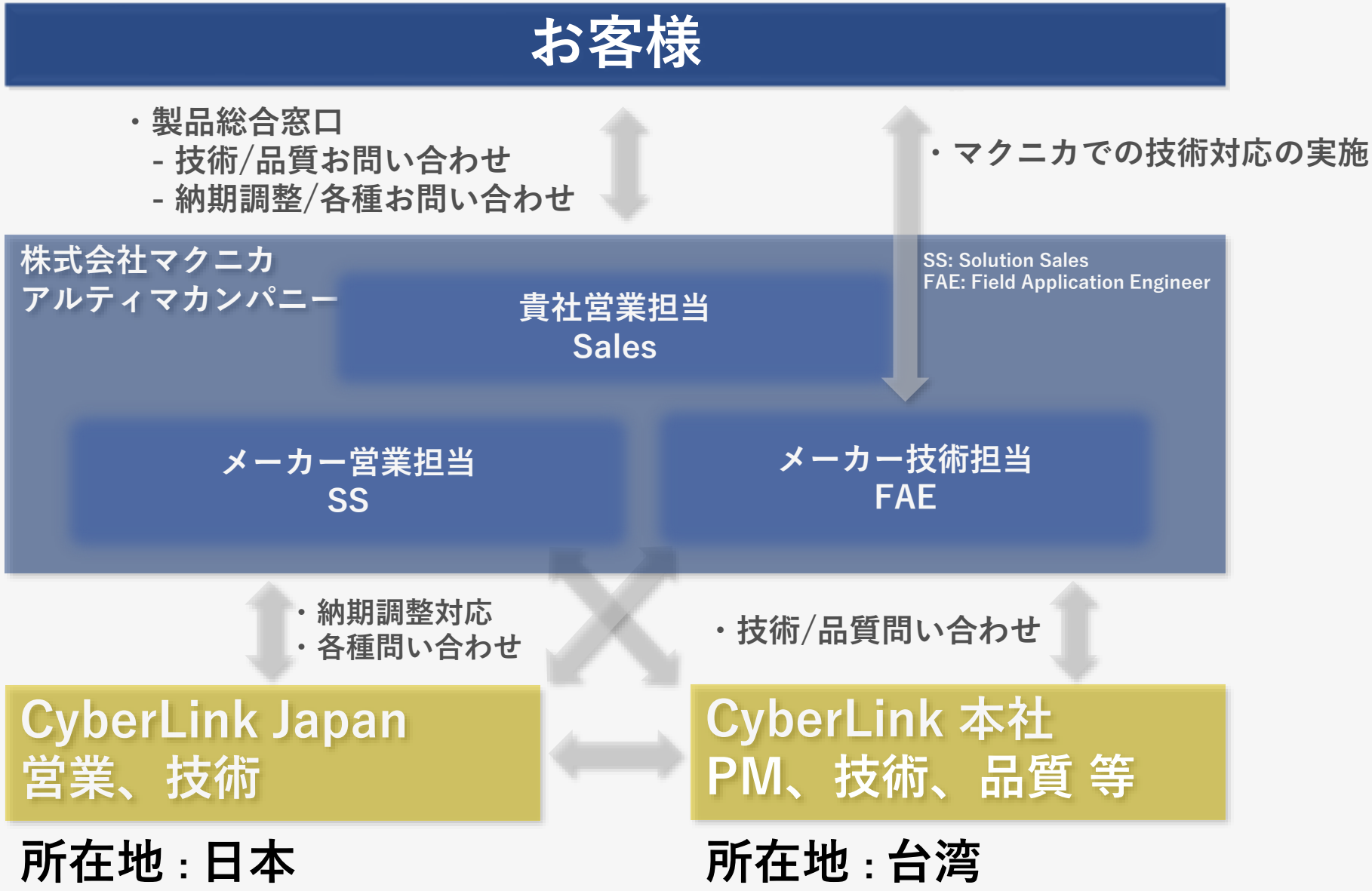
マクニカアルティマカンパニー ADLINK 製品サポート体制図



マクニカアルティマカンパニー Advantech 製品サポート体制図



マクニカアルティマカンパニー CyberLink 製品サポート体制図

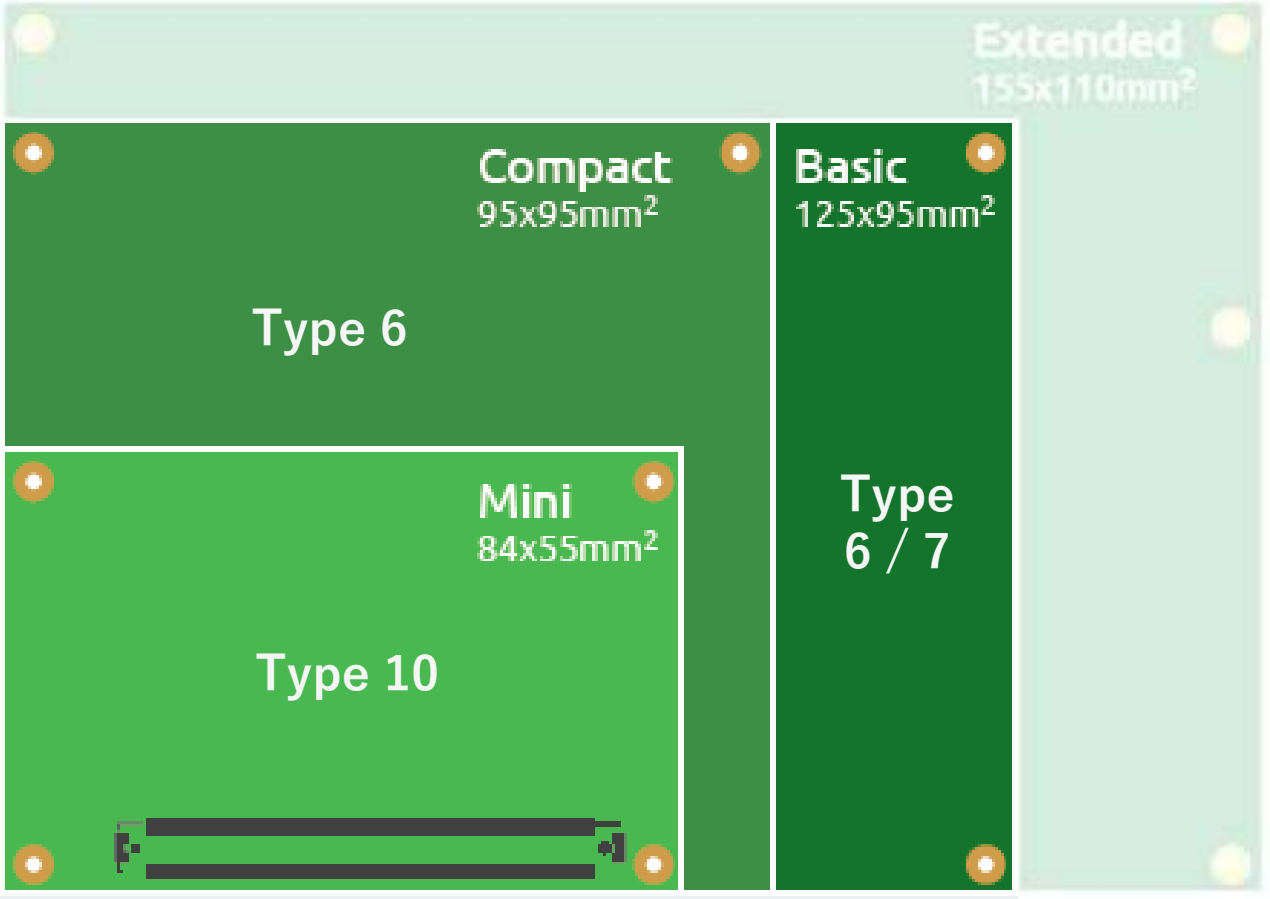


組み込み CPU module サイズ比較

	COM Express® (Type 10)	Qseven® (μQseven®)	SMARC®
Graphic I/F	最大 2（独立）	最大 3（独立）	最大 3（独立）
LVDS	1x single ch LVDS/eDP	2x dual ch LVDS/eDP	2x dual ch LVDS/eDP/MIPI DSI
Video I/F	1x DVI/HDMI/DP	1x DVI/HDMI/DP	1x HDMI/DP++ & 1x DP++
Camera Input	–	2x MIPI-CSI (flat foil connector on module)	上限 4x MIPI CSI
Audio	1x HDA	1x HDA/I2S	1x HDA & 2x I2S
Ethernet	1x Gbit	1x Gbit	2x Gbit
Wireless I/F	–	–	Bluetooth & WLAN オプション
Storage	2x SATA	2x SATA	1x SATA
PCI Express	4 レーン	4 レーン	4 レーン, 2x SERDESサポート
USB	8x USB2.0 / 2x USB3.0	8x USB2.0 / 2x USB3.0	6x USB2.0 / 2x USB3.0
Industrial I/F	2x Serial / CAN	4x Serial / CAN	2x Serial / CAN
GPIO	8 pin	8 pin	14 pin
SPI	1x	1x	1x
LPC	1x	1x	1x eSPI
SMB	1x	1x	1x
I2C	1x	1x	1x
Total Pin Count	220 pin	240 pin	314 pin

PCIe 以外の SERDES I/O をサポート

COM Express® サイズ比較

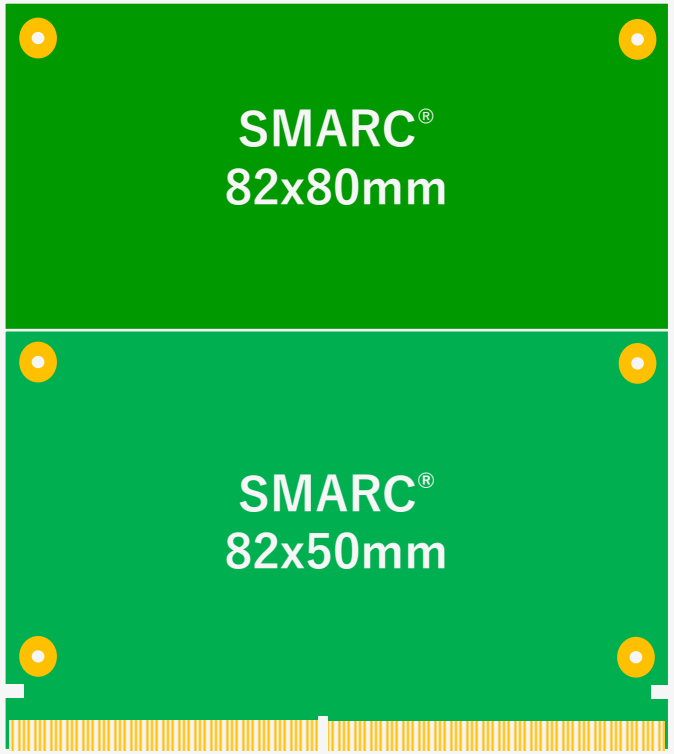


※Type 毎にピン互換なし、キャリアボードが異なる

COM Express® モジュールサイズ:

- Mini: 55 × 84 mm
  - 電力効率の高いシステム
  - Type 10
- Compact: 95 × 95 mm
  - 組み込みシステム
  - Type 6
- Basic: 95 × 125 mm
  - 標準 x86 システム
  - Type 6, Type 7
- Extended: 110 × 155 mm
  - 最大パフォーマンス

SMARC® サイズ・特徴

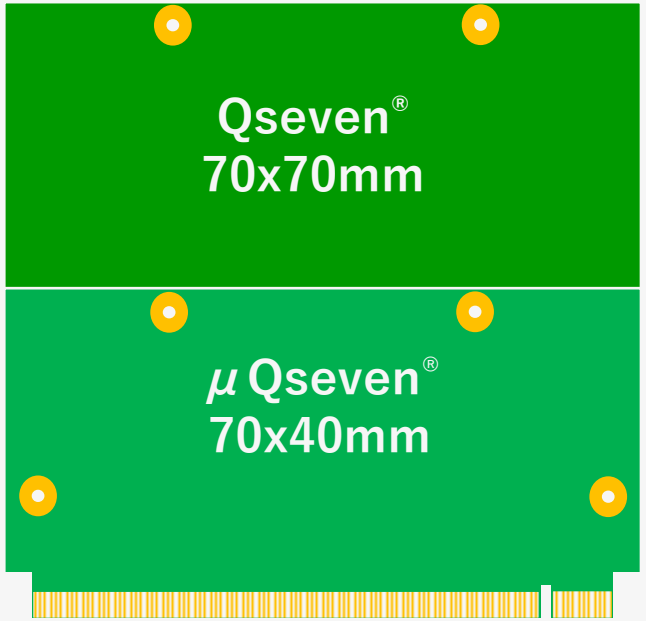


※サイズ関係なくピン互換

SMARC® モジュールサイズ:

- 82 × 50 mm
- 82 × 80 mm
- X86 および ARM® CPU 使用
- 低消費電力向けモジュール規格
- 6W 未満から最大 15 W のデバイス
- コネクタは MXM3 エッジコネクタ
- Fanless, Passive Cooling でデザイン
- I/O 電圧のデフォルトが 1.8V
- MIPI-CSI 用のコネクタの推奨場所等も規定されている

Qseven サイズ・特徴



※Type 毎にピン互換

Qseven® モジュールサイズ:

- μQseven® : 70 × 50 mm
  - 電力効率の高いシステム
- Qseven® : 70 × 70 mm
  - 組み込みシステム
- x86 低消費電力のモジュール規格
- コネクタは MXM エッジコネクタ
- 12W 以下のデバイスで設計推奨
- I/O コネクタの場所を規定
- GPIO は 3.3V で規定

世代別 CPU Mark 比較表 Core™, Atom™ シリーズ

CPU世代	第14世代 (Meteor Lake)	第13世代 (Raptor Lake)	第12世代 (Alder Lake)	第11世代 (Tiger Lake)	第9世代 (Coffee Lake Refresh)	第8世代 (Coffee Lake)
Core™ i7 Core™ Ultra 7 比較	Ultra 7 165H *New*	i7-13800H	i7-12800H	i7-11850H	i7-9850H	i7-8850H
	30596	27319	24992	20656	11159	10279
	https://www.cpubenchmark.net/compare/5816vs5246vs4778vs4342vs3478/					
Core™ i5 Core™ Ultra 5 比較	Ultra 5 135H *New*	i5-13500H	i5-12500H	i5-11500H	i5-9400H	i5-8400H
	24276	23085	21455	16170	7908	7996
	https://www.cpubenchmark.net/compare/5817vs5151vs4750vs4399vs3508/					
Core™ i3 比較		i3-1315U	i3-12100T	i3-1125G2	i3-9100T	i3-8100T
		13537	12859	9860	5500	5320
		https://www.cpubenchmark.net/compare/5300vs4754vs3995vs3893/				

CPU世代	Amston Lake	Alder Lake-N	第7世代 （Elkhart Lake）	第5世代 （Apollo Lake）	第3世代 （Bay Trail）
Atom™ 比較	x7835RE *New*	x7425E	x6425E	E3940	E3840
	8710	5570	3882	1941	704
	https://www.cpubenchmark.net/compare/6085vs5783vs4753vs3259vs2124/				