Wincomm Edge AI Ready Solution

www.wincomm.com.tw

Wincomm Edge AI ePlatform

Edge AI Ready Solution

Forseeing the trend of AI in all fields of applications, such as smart hospitals, intelligent medical image processing to assisted diagnostic surgery, intelligent industrial automation, smart building and so on. There are many advantages that can be realized through the use of AIoT and AIoMT. In its most basic form, it simplifies the performing tasks that are typically done by humans. And those tasks are carried out significantly faster and cost saving in longterm usage.

Wincomm has well experienced on building the e-Platform to integrate with AI ready accelerator cards versus SW tool kits and makes it an ideal edge AI inference computing to speed up your solution toward more efficient while lower down overall ownership in the long term usage. With edge AI ready design, Wincomm provides versatile product combinations for your options, such as GPU, Intel® VPU acceleration cards, and these solutions are well integrated plus fully customization service to fulfill your end-to-end solution. Within years, our integration design has been proved as a valuable computing platform and these AI ready solutions are now ready to secure and expand your future business.

Edge AI Ready Solution

Medical Edge AI Inference System

Accelerator Cards
Vision AI GPU/VPU

The Latest Version MDR, Safety & EMC Certified

Front IP65 Water Proof, IPx1 for Whole System

Friendly Touch Hot keys for Easy Clean

Industrial Edge AI Modular Panel PC

Flexible Modular Design for Easy Maintenance

Intelligent SW Thermal Management for Optimizing PC Performance

Min. Ventilation Grille & Front IP66 for Dust & Water Proof

Wincomm
intel market ready ✔
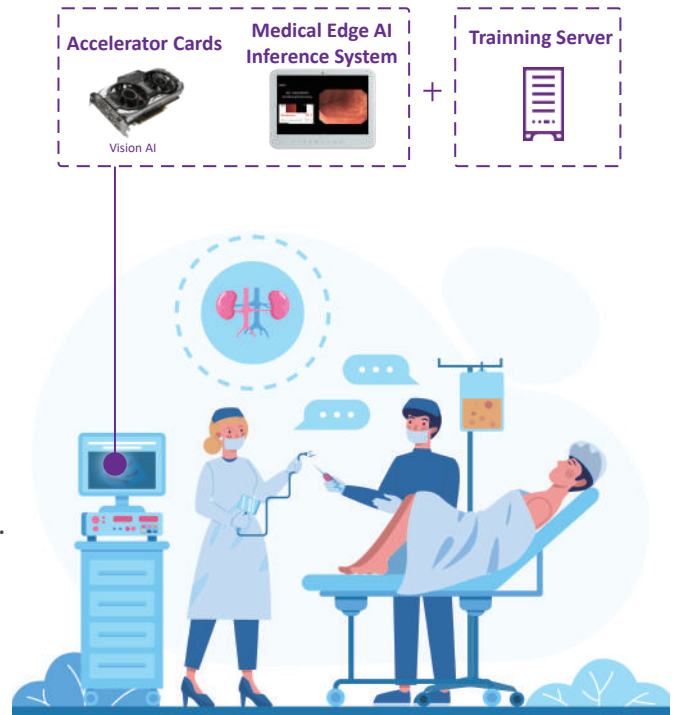Smart EMR Market Ready

Edge AI Medical Grade Ready for Endoscopy Diagnostic

Wincomm (intel) market ready ✓
Smart EMR Market Ready

Patients need better and faster care, doctors need techniques that are trustworthy, and hospitals and administrators need tools that are cost effective. Medical AI can answer all of these needs.

To make such a technology operate properly, different disciplines must work together. One such case is where the engineers at Wincomm worked closely with the team at CYBERNET SYSTEMS CO., LTD. to develop the EndoBRAIN and EndoBRAIN-EYE tools that deploy AI to detect and analyze colorectal polyps and other lesions in an endoscopy. That HW/SW solution integration is deployed on Wincomm's WMP-K series of panel PCs. EndoBRAIN and EndoBRAIN-EYE were recently approved for use by the PMDA (Pharmaceuticals and Medical Devices Agency), a regulatory body in Japan.

Wincomm Medical AI Panel PC meets or exceeds all of these medical grade certification, and this WMP-K series are featured with an independent GTX1060 graphic card with 6 Gbytes of dedicated video memory, and an extra PCIe expansion slot to suit for complex imaging and AI applications.
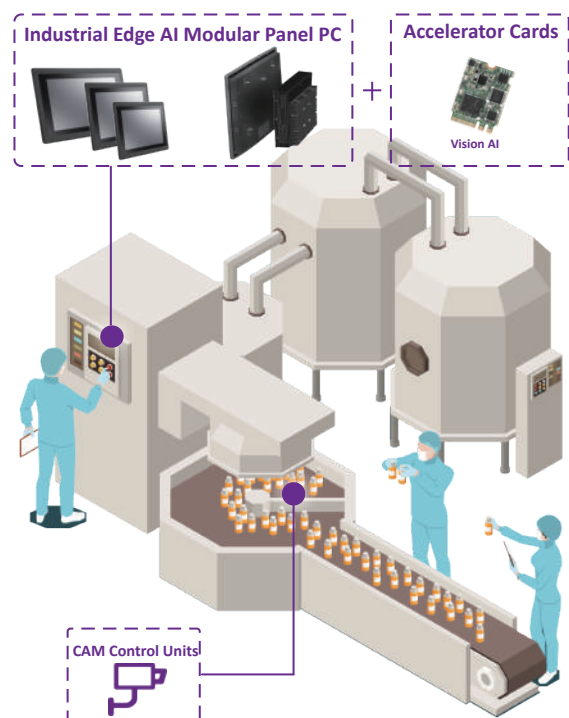
Accelerator Cards | **Medical Edge AI Inference System** | **Trainning Server**

Vision AI

Edge AI Equipped HMI for Food Processing Control

Wincomm (intel) market ready ✓
Smart Hygiene Control Market Ready

Since manufacturing products defects may cause effects to customer, or affect production efficiency, it is necessary to detect defects on the quality control of the product appearance. With AI inference machine, factory will arise the accuracy to classify defects, cut the cost and reduce errors by human daily reviewing work. Featuring flexible modularization panel versus box pc combination, WLPM-900 series are designed with docking structure and make it easy to maintain and reconfigure to sustain rapid change IIoT environment in a lower cost of overall ownership.

Wincomm Industrial AI Solution modular panel pc WLPM-900 series equipped with Intel® Core i processors and independent AI card, are ready to empower AI assisted performing in smart factory. To maintain high computing performance with fanless design, it is designed leveraged our own excellent smart thermal management by designing BIOS to control the CPU core speed away from overheating.

Industrial Edge AI Modular Panel PC | **Accelerator Cards**

Vision AI

CAM Control Units

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Product Selection Guide

Leading AIoMT & AIoT for Medical and Industrial Environments, Wincomm offers a wide range of HMI panel PC, BOX PC from medical grade to industrial grade to suit for artificial intelligent solutions in all kinds of applications.

Edge AI Medical PC Platform

	Medical Panel PC					Medical Box PC	
	WMP series					WPC series	
Product Name	**15C**	**22H**	**19K**	**22K** (by project)	**24K**	**766**	**766E**
Model							
Main System							
CPU	Intel® Skylake/ Kaby Lake Core i5/i7	Intel® Kaby Lake Core i5/i7	Intel® Coffee Lake Refresh Core i5/i7			Intel® Skylake Core i5/i7	Intel® Skylake Core i5/i7
Graphic	Intel® integrated HD Graphics	Intel® integrated HD Graphics Optional GPU MXM3.1 Type A GTX-1050	Intel® integrated HD Graphics Optional GPU MXM3.1 Type B GTX-1060 / RTX-2060			Intel® integrated HD Graphics 530	
Memory	up to 32G	up to 32G	up to 64G			up to 32G	up to 32G
Chipset	Soc	Intel® Q170	Intel® Q370			Intel® Q170	Intel® Q170
OS support	Win7 /Win8 / Win10	Win10	Win10			Win7 /Win8 / Win10	Win7 /Win8 / Win10
Display							
Size	15.6"	21.5"	19"	21.5"	23.8"		
Resolution	1366 x 768 (SXGA)	1920 x 1080 (FHD)	1280 x 1024 (SXGA),	1920 x 1080 (FHD)	1920 x 1080 (FHD)		
Color Numbers	16.7M	16.7M	16.7M	16.7M	16.7M		
View Angle (H/V)	170/160	178/178	170/160	178/178	178/178	—	
Contrast	500:1	3000:1	1000:1	3000:1	3000:1		
Brightness (nits)	400	250	350	250	250		
Touch Panel & IO							
Type	Full Flat P.cap Touch	Full Flat P.cap Touch	Full Flat P.cap Touch			—	—
USB	USB 3.0 x 4	USB 3.0 x 4	USB 3.1 gen II x 4			USB 3.0 x 4	USB 3.0 x 4
COM	RS232 x 1 RS232/RS422/RS485 X 1	RS232 x 1 RS232/RS422/RS485 X 1	RS232 x 1 RS232/RS422/RS485 X 1			RS232 x 5, RS232/422/485 x 1	RS232 x 5, RS232/422/485 x 1
LAN	RJ45 x 2	RJ45 x 2	RJ45 x 2			RJ45 x 2	RJ45 x 2
Audio	3.5mm phone jack connector * 2 (Mic-In, Line-Out)						
Video	DP x 2	DP x 2	DP x 2			DP x 1 DVI-D x 1	DP x 1 DVI-D x 1
Storage & Expansion							
Storage	500G HDD	128G SSD	128G SSD			64G SSD	64G SSD
Expansion Slot	PCI-E*4 x 1 Mini PCIe x 1 M.2 Type E key x 1	PCI-E*4 x 1 Mini PCIe x 1 M.2 Type E key x 1	PCI-E*4 x 1 M.2 Type E key x 1			Mini PCIe x 2	PCI-E*16 x 1 Mini PCIe x 2
Mechanical & Environmental							
Weight (kg)	5.0	7.5	7.5	TBD	9.0	3.0	4.0
Operating Temp.	0~35°C	0~40°C	0~40°C	0~40°C	0~40°C	0~35°C	0~35°C
Cooling	Fanless	Fan	Fan			Fanless	Fanless
IP rating	IP65 at front side/ IPx1 for whole system	IP65 at front side	IP65 at front side/ IPx1 for whole system			—	—
Power							
Power Input	DC 9~32V	DC 14~28V	DC 14~19V	TBD	DC 14~19V	DC 9~28V	DC 9~28V
Power Adapter/ Battery	AC 100~240V / UPS Battery	AC 100~240V / Hot-swappable Battery	AC 100~240V / UPS Battery			AC 100~240V	AC 100~240V / UPS Battery
Certification							
Certification	CE: EN 60601-1-2:2015(V4.0), MDD: EN 60601-1:2006/A1:2013(V3.1) VCCI: 2016-11, Class B (PSU/Battery with PSE) FCC: Part 18 Class B UL: ANSI/AAMI ES60601-1:2012 (V3.1) cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) ISO 14971 / IEC62133 / Energy star 6.1 compliance		CE: EN 60601-1-2:2015(V4.0), MDR: MDR 2017/745 VCCI: 2016-11, Class B (PSU with PSE), FCC: Part 18 Class B, UL: ANSI/AAMI ES60601-1:2012 (V3.1) cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) ISO 14971 / IEC62133 / Energy star 6.1 compliance			CE: EN 60601-1-2:2015(V4.0), MDD: EN 60601-1:2006/A1:2013(V3.1) VCCI: 2016-11, Class B (PSU/Battery with PSE) FCC: Part 18 Class B UL: ANSI/AAMI ES60601-1:2012 (V3.1) cUL: CAN/CSA-C22.2 No. 60601-1:2014 (V3.1) ISO 14971 / IEC62133 / Energy star 6.1 compliance	

Edge AI Modular Panel PC Platform

WLP Panel PC Series					
Product Name	**WLPM- 900**				
	915	917	919	922	924
Model					
Main System					
CPU	Intel® 9th Gen Coffee Lake-S Core i7/i5/i3 Processors, 2.2~3.6GHz, 35W, w/ Q370 Chipset				
Graphic	Intel® UHD Graphics 630				
Memory	Dual Channel Support 2666MHz DDR4 SODIMM X2, up to 32GB				
OS support	Win 10 (64 bit)				
Display					
Size	15" 4:3	17" 4:3	19" 4:3	21.5" 16:9	23.8"16:9
Resolution	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Color Numbers	16.7M	16.2M	16.7M	16.7M	16.7M
View Angle (H/V)	160/160	170/160	170/160	170/160	178/178
Contrast	800:1	1000:1	1000:1	1000:1	3000:1
Brightness (nits)	450	350	350	250	250
Touch Panel & IO					
Type	Full Flat R-Touch (Default) P-Cap Touch (Option)				P-Cap Touch
IO	4 x USB3.1, 2x RS232, 1 x RS232/RS422/RS485, 2 x RJ-45, 2 x 3.5mm phone jack connector(Line-out, Mic-in), 3 x DP1.2				
Storage & Expansion					
Storage	1 x 2.5" SATA HDD 1 x M.2 M.Key 2280 PCIex4 for NVMe SSD				
Expansion slot	1 x M.2 Key E 2230 w/ PCIex1, USB2.0 and CNVI for Wireless 1 x mini-PCIe for Full/Half w/ PCIex1 and USB2.0 1 x PCIex16 (25W max.)				
Mechanical & Environmental					
Operating Temp.	Operation: 19V DC Input 0~50℃				
IP rating	IP66 Front				
Cooling	Fanless				
Power					
Power Input	DC19~28V				
Power Adapter	150W (PSU with PSE)				
Certification					
Certification	CE / FCC / VCCI Class B				

Accelerator Cards

GPU	GTX-1050	GTX-1060	RTX-2060
Model			
IC	NVIDIA CUDA® Cores		
Form Factor	PCIe 3.0	PCIe 3.0	PCIe 3.0
Operation Temp.	Up to 97℃	Up to 94℃	Up to 97℃
OS Support	Win 7-10 Linux	Win 7-10 Linux Free BSP X86	Win 7-10 Linux
Others (Embedded Memory)	Up to 4GB	Up to 6GB	Up to 6GB

VPU	VEGA-320	AI Core-X	AI Core-XP4/XP8
Model			
IC	Intel® Movidius Myriad X VPU		
	VPU x 1	VPU x 1	VPU x 4, VPU x 8
Form Factor	M.2	Mini PCIe	PCIe x 4 (Full Length)
Operation Temp.	-20-60℃	0-60℃	0-50℃
OS Support	Windows® 10 Ubuntu 16.04 Centos 7.4	Windows® 10 Ubuntu 16.04	Windows® 10 Ubuntu 16.04
Others (Support Framwork)	TensorFlow, Caffe, MXNET		

About Wincomm Corp.

Wincomm is one of Taiwan's leading manufacturer of industrial computer and embedded computer products. Wincomm designs and develops all in one panel PC, rugged box PC and embedded software products for a broad range of industries and applications.

Wincomm aims to provide hardware and software integrated solutions for the most variant environments such as industrial automation/ human machine interface control, digital signage / infotainment Kiosk, and medical computing.