Your Health, Cares!

IOMT & MICT

GENIUS

MEDWEL
Your Health, Cares!

Medical Solution Guide

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Medical Box System

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To perfectly realize WITMED (Wise Information Technology of Medical) functions, MEDWEL launched various medical grade embedded systems with excellent computing power and flexibility.

Medical Panel PC & Display

31

Medwel medical grade Panel PC and display worked as human machine interface (HMI) to connect medical personnel and medical equipment, improve operational efficiency and enhance the quality of medical care.

Medical Board

41

MEDWEL provides mainboard, COM-e and PCIe interface Isolation module to meet customer needs in different medical applications. The special isolated circuit design that can ensure to pass the medical grade requirement.

About MEDWEL

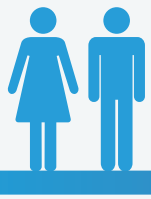
MEDWEL
Your Health, Cares!

MEDWEL was founded on November 3rd, 2016, and is a subsidiary of the Portwell & Posiflex group. It has been dedicated to the medical industrial PC market since its inception in the Portwell Group in 1995. The Portwell Group is also a member of the Intel IoT alliance and AMD Premier, with a global organization comprising 14 branches worldwide, which allows for the best vertical integration for the supply chain and excellent quality control for production in Taiwan.

MEDWEL is an ISO-9001 and ISO-13485 (Medical) certified company, and its production is based on Portwell's ISO-9001, 14001, 13485 (Medical), and OHSAS 18000 certified manufacturer. The manufacturer has been audited by many first-tier companies worldwide. Additionally, MEDWEL has an ISO-17025 certified in-house test lab for EMI/ESD/Noise/Vibration/Chamber and HALT tests. MEDWEL mainly offers medical embedded hardware solutions to customers around the world.

Our Goal

Health



Offer high-tech MICT product for healthcare environment

Medical

Develop tech-edge technology to fulfill latest medical application

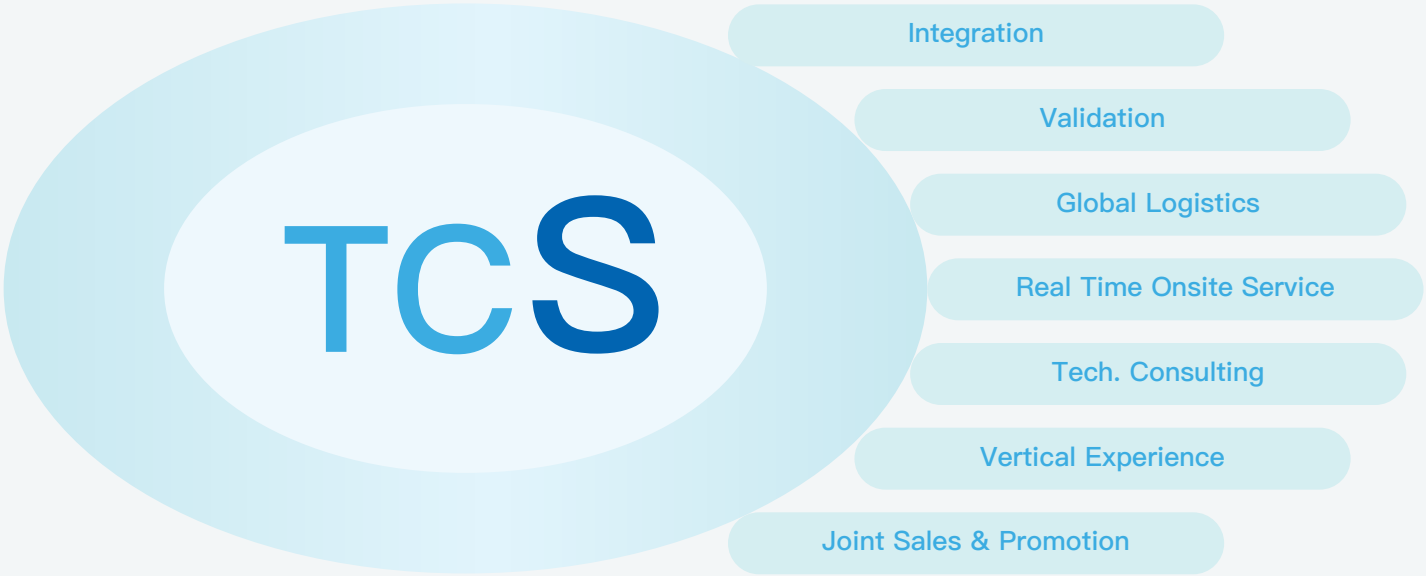
Care

Provide innovative and intelligent solution to clinical problems

Why MEDWEL

- 10 years longevity support
- Comply UL/EN 60601–1 regulations
- Reliable customized services
- 100% MIT with global service coverage
- Medical grade design and tools
- Comprehensive Platform (Intel/AMD/Xilinx)
- ISO 9001 & ISO 13485 certified
- Experienced team for medical application

Tightly Couple Service



Trusted Solutions

MEDWEL focuses on providing medical computing systems and information processing to customers worldwide to meet their every demand. With years of experience in the medical and healthcare market, MEDWEL is dedicated to providing advanced and trusted solutions.

Medical Regulation

Medical Regulation Service

As a medical device manufacturer, ensuring the safety and effectiveness of our products is always one of our top priorities. To achieve this, we must conduct medical safety standard testing to ensure that our products meet the relevant safety standards and regulatory requirements. The four testing requirements that are essential to medical safety standards are system insulation, external labeling, risk management, and electromagnetic compatibility.

System insulation

System insulation testing involves measuring the electrical resistance of the device's insulation, ensuring that it is sufficient to protect users and patients from electrical shocks.

External labeling

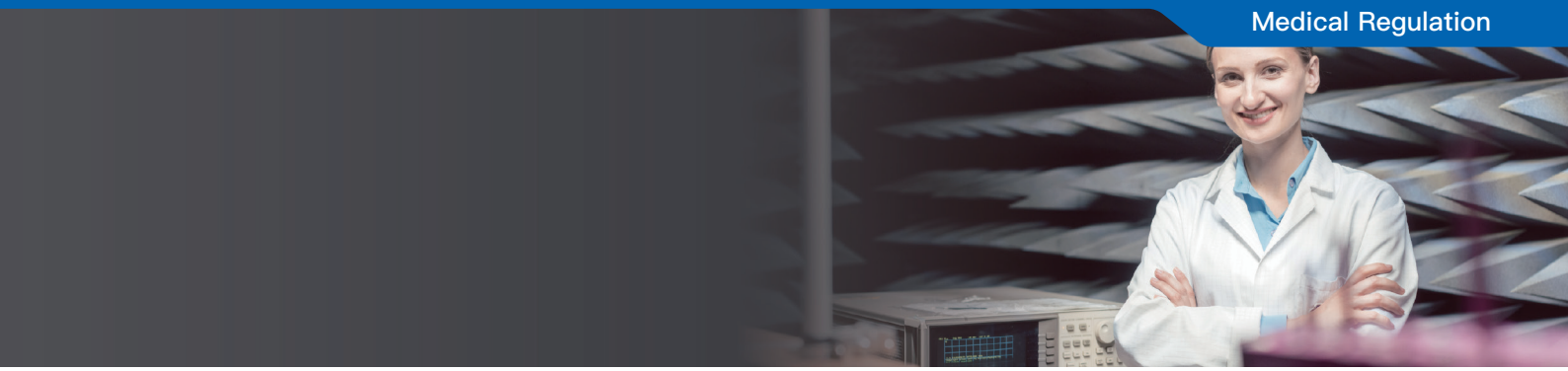
External labeling is essential to ensure that all safety warnings and product information are clearly visible and understood by users.

Risk management

Risk management testing is critical to identify and mitigate potential safety hazards associated with the product's use.

Electronic compatibility

Electronic compatibility testing ensures that the device will not cause interference with other electronic equipment, such as pacemakers.



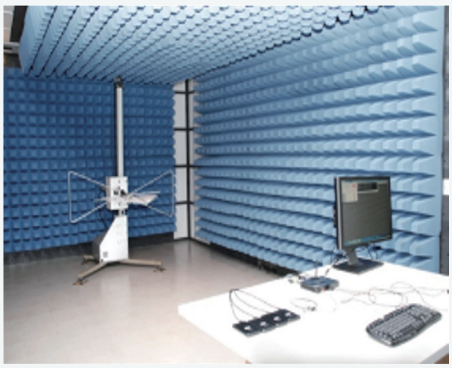
System Production Flow

(IEC EN UL) 60601–1 3rd

Classification, Identification, Marking And Documents, Power Input, Limitation Of Voltage And/or Energy, Enclosures And Protective Covers, Mechanical Strength–Stability In Normal Use, Abnormal Operation And Fault Conditions... Basic safety and functional tests (leakage current test, grounding Impedance test, insulation withstand voltage test, working temperature test, waterproof test, flame resistance test, electromagnetic compatibility test, biocompatibility test), risk assessment report, feasibility assessment report.

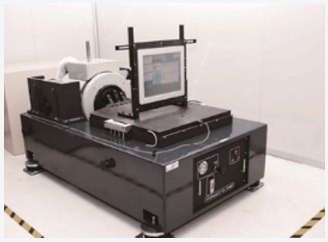
(IEC EN) 60601–1–2 4th

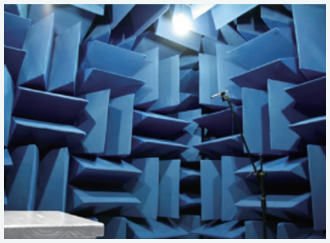
- lectromagnetic Interference (EMI),
- Electrostatic Discharge (ESD),
- Radiated Susceptibility (RS),
- Surge (Surge),
- Electrical Fast Transient (EFT) ,
- Power Frequency Magnetic Field (PFMF),
- Conducted Susceptibility(CS),
- Voltage dips,
- short interruptions and voltage variations immunity (DIP).

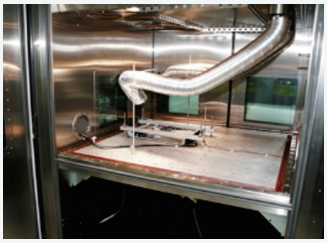


Reliability test

Temperature and Humidity Test (IEC 60068–2–1, 60068–2–14, 60068–2–78), IP Rating Test (IEC 60529, 60598), Vibration Test (IEC 60068–2–64), Drop Test (ISO 2248)), Impact test (IEC60068–2–27).







Medical Regulation

Regulation Brief

In the classification, IEC 60601–1 2nd edition and IEC 60601–1 3rd edition seems has different naming but has almost the same requirement in Isolation voltage and creepage: Type B is equal to 1 MOOP / Type BF is equal to 2 MOOP / 1 MOPP is new requirement in 3rd edition/ Type CF is equal to 2 MOPP.

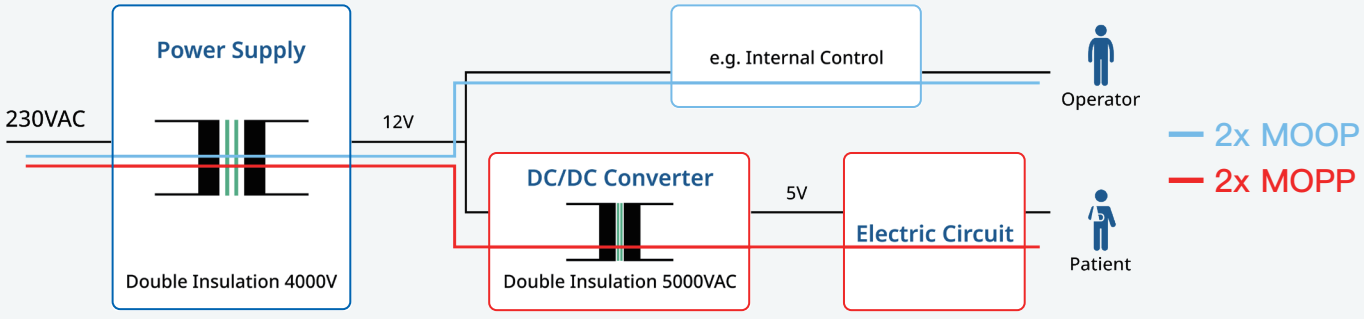
General Standard	Collateral Standards			
60601–1	60601–1–1	60601–1–2	60601–1–3	60601–1–4
• Medical Electron Accelerators • High Frequency surgical Equipment • Electrically Operated Hospital Beds • Infant Phototherapy Equipment	Medical Systems	EMC	Rediation Protection	Software

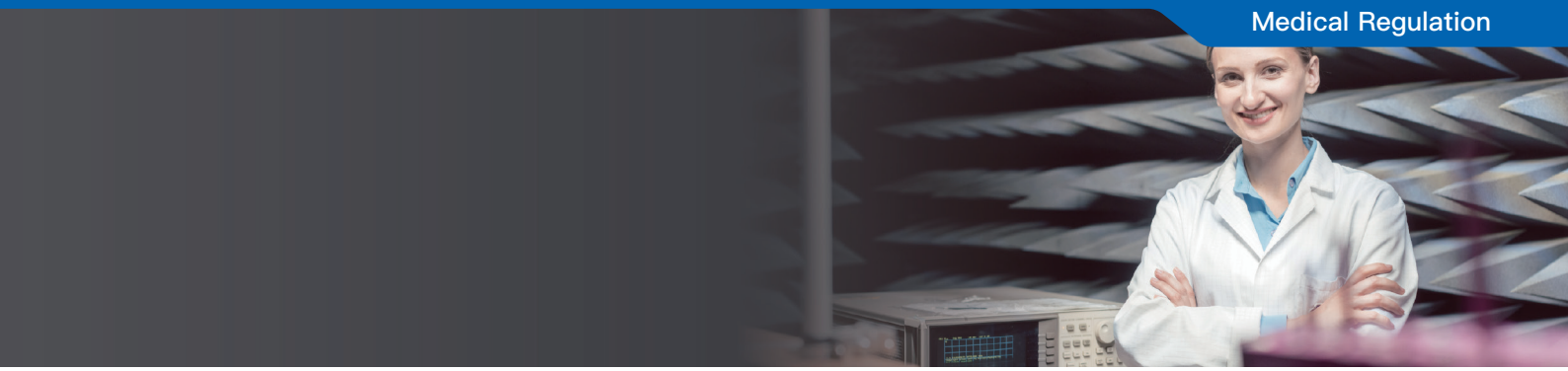
MOOP
Means of operation protection

2nd Edition Requirements by Classification			
Classifications	Isolation	Creepage	Insulation
One MOOP	1500 V ac	2.5 mm	Basic
Two MOOP	3000 V ac	5 mm	Double
One MOOP	1500 V ac	4 mm	Basic
Two MOOP	4000 V ac	8 mm	Double

MOPP
Means of patient protection

2nd Edition Requirements by Classification			
Classifications	Isolation	Creepage	Insulation
Type B	1500 V ac	2.5 mm	Basic
Type BF	3000 V ac	5 mm	Double
Type CF	4000 V ac	8 mm	Double





IEC 60601–1 3rd edition requires differing levels of isolation, insulation, creepage, and leakage depending on the MOP level. There are many Government Regulatory Authority in the world as below:

IEC 60601–1 main modified parts from 2nd edition to 3rd edition				
Edition		IEC 60601–1 Edition 2	IEC 60601–1 Edition 3	
			MOOP	MOPP
Creep age/Clearance (250Vac)	Basic Insulation	4mm/2.5mm	2.5mm/2mm	4mm/2.5mm
	Double Insulation	8mm/5.0mm	5mm/4mm	8mm/5.0mm
Dielectric Test (<354Vpk)	Basic Insulation	1500Vac	1500Vac	1500Vac
	Double Insulation	4000Vac	3000Vac	4000Vac
Leakage Current Remark: The main difference is ESD standard 3rd version: Contact 6KV, Air 8KV 4th version: Contact 8KV, Air 15KV		Earth current 0.3mA (NC) 1.0mA (SFC)	Earth current 5.0mA (NC) 10mA (SFC)	
		Case current 0.1mA (NC) 0.3mA (SFC)	Touch current 0.1mA (NC) 0.3mA (SFC)	

	Us	EU	Japan	Canada	Australia
Regulatory Body	Food &Drug Administration(FDA)	Competent Authority (CA)	Ministry of Healthand and Labor Welfare(MHW)	Health Canada (HC)	Therapeutic Goods Administration(TGA)
Premarket Reviewer (For product)	FDA+ Accredited Persons	Notified Body (NB)	PMDA or RCB	HC	TGA
Quality System Auditor	FDA+ Accredited Persons	NB	PMDA or RCB	Registrar (3rd Party) CMDCAS	TGA
Post martet Compliance &Enforcement	FDA	NB +CA	PMDA	HC	TGA

Improve efficiency

MEDWEL has complete system research and development experience, from design, research and development, testing, certification, to production, so it can help customers to make detailed modifications and adjustments to products that have not passed the safety regulations, and verify them through in–plant EMI, EMC and reliability testing equipment, to help customers get evidence quickly.

Design Service

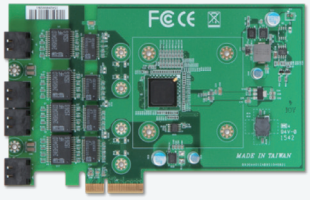
Medical Regulation Service

Medwel has a wealth of knowledge and experience to design medical-standard mechanisms, systems and motherboards, and can also assist customers in customizing medical-grade products.

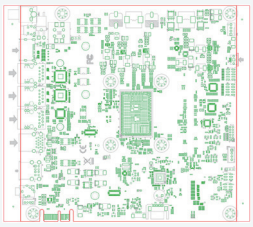
Design Capability

Board Design

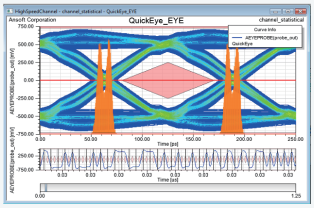
Professional design Know-How in board level development and validation



Medical grade EMC and safety



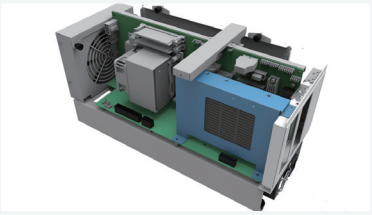
Board circuit and layout design



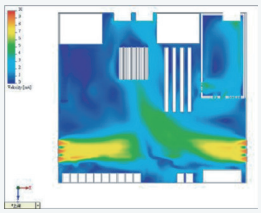
Signal simulation and validation

System Design

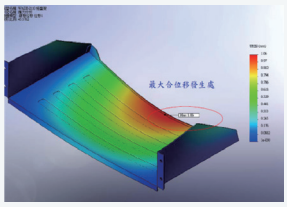
Complete mechanical design and system integration capability



Mechanical and ID design



Thermal analysis



Stress analysis

Test & Validation

- Environmental Test Procedure
- Compatibility Test Procedure
- Performance Test Procedure
- Static Reliability
- EMC Tests
- Reliability Test Procedure

Firmware Development

- FW Technology
- EC Automation Service

Success Story

Innovative Medical Technology

MEDWEL products have been successfully applied in the fields of MRI/CT, ultrasound, and telemedicine, bringing significant innovation to the global medical technology industry. With its excellent technology and unique design, MEDWEL's products optimize the processes and efficiency in these medical applications, while providing better quality and convenience for medical services.

MRI/CT

Success experience

MRI/CT field requires high-precision medical imaging with strict control and management.

- High-quality and stability of images
- Scalability design
- Improve treatment outcomes
- Advanced capabilities

Ultrasound

Success experience

Ultrasound is a non-invasive detection technology used in the diagnosis of many diseases.

- High quality images output
- Efficient data processing
- Competitive image processing solutions
- Safety protection

Telemedicine

Success experience

Telemedicine helps doctors and patients overcome geographical and time constraints.

- Noise cancellation
- DSP power tune with SW
- MIC intelligibility at ward
- Slim & compact

Human Machine Interface (HMI)

MEDWEL's HMI products have a slim looking and features of electrical stability and safety . In clinical, these devices can be used as presenting information and control for medical supplier's equipment. Compared to those products for consumer or industrial applications, MEDWEL's products solve many problems for our customers to meet those requirements of longevity, higher electrical safety. Hospitals using MEDWEL's HMI products will avoid difficulty in replacing these devices.

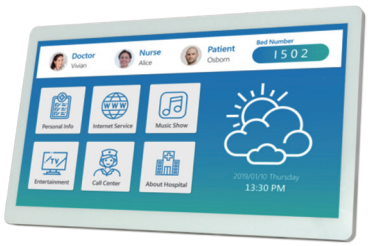
Medical HMI Solution

Safe Protection

High level protection for medical equipment

Elegant Design

Medical outlook with elegant and slim design



Medical Field

Whole system cleanable and silent fan-free PC for hospital

Stable Support

10 years longevity support and industrial level test

The Advantage of Medical HMI

Paperless

Patient medical record and medical imaging digitalized

Intuitively

Directly control the medical equipment in better user experience

Virtualization

Rely on information system like HIS, NIS to get patient information

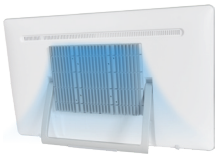
HMI Medical Application

MEDWEL AIO PPC (HMI) are design for hospital application, like bedside terminal and nursing cart computer. Medical personnel can operate them with gloves, cleaning with mild detergent and alcohol.

Bedside Terminal

Nursing Cart

Glove touch&
Alcohol cleaning



Fan-free
silent environment

Safe Protection & Stable Support

Long-term longevity is treated as key feature in medical PC field.MEDWEL support 10 years longevity for each model to ensure customers can deserve best support.

Flammability Resistance
UL94 v0 level plastic enclosure

Water and dust proof
IP65 front panel

Medical Certified
IEC 60601,FCC Part 18 class B certified

MEDWEL HMI Panel PC Products

Advanced

MEDS-P2203
21.5" AIO Panel PC
Coffee Lake

MEDS-P2205
21.5" AIO Panel PC
Tiger Lake

Entry Level

MEDS-P1002
10.1" AIO Panel PC
Apollo Lake

MEDS-P1900
18.5" AIO Panel PC
Elkhart Lake

MEDS-P1600
15.6" AIO Panel PC
Elkhart Lake

MEDS-P2202
21.5" AIO Panel PC
Apollo Lake

Smart Measurement

MEDWEL smart measurement system is a solution using an medical grade computer as an IoT gateway with a good fusion-like outlook to uploaded the measured data to the hospital HIS automatically. Medical panel PC is incredible date collected system for physiological parameters (ex. blood pressure, BMI). Our target is improve efficiency and convenience for patients and doctors.

Smart Measurement Solution

Graphical User Interface

Guide user with intuitive instructions and display data

IC card reader

Identifying patient with National Health Insurance (NHI) card

Medical Panel PC

Medical grade panel pc with LAN and Wi-Fi/ BT connectivity

Blood Pressure Machine

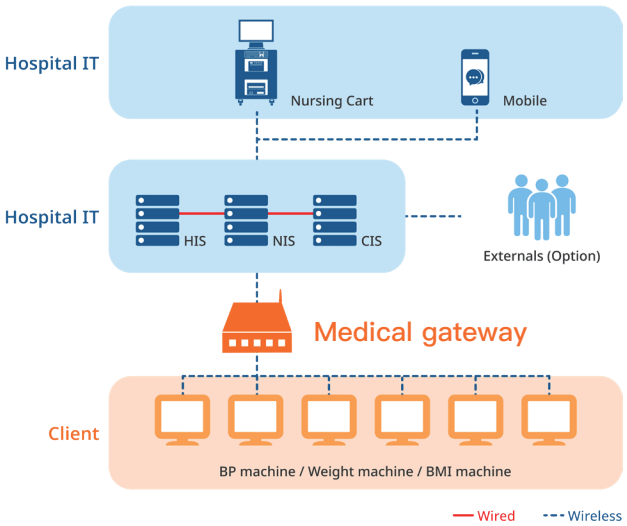
EX: OMRON HBP-9020

Product Function

In-house software

Our software has user-friendly screen layout, which has stepwise design to represent the current step, and will guide user to do next step to complete operation for this measurement.

- Connected devices monitoring
- On-Line S/W update
- Integrated report system results



MEDS-P1002 Hardware

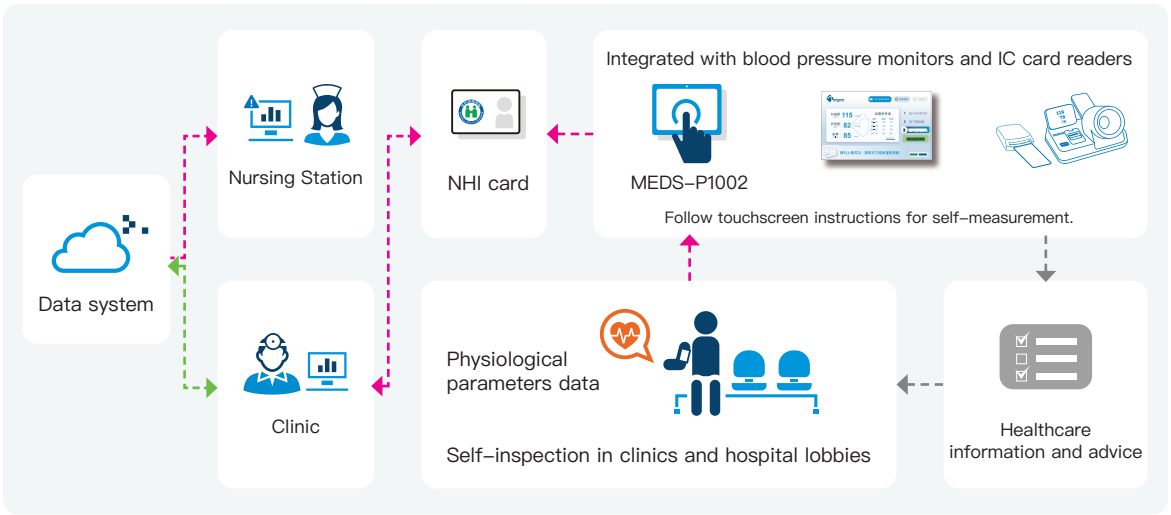
MEDS-P1002 is a medical grade touch computer suitable for the HMI of the smart measurement system.

- Plastic case with fan free design and slim size
- Waterproof and dust-proof housing
- Comply with EN 60601-1, CE/FCC Class B

MEDS-P1002

The Advantage of Smart Measurement

In the real case of smart measurement solution, the system identities patient via NHI card, personal ID card or barcode on wrist of patient. After collecting the physiological data, the system will upload the data automatically to the hospital database. This solution reduces the workload for busy nursing staff to increase the time focused on interaction between nursing staff and patients. In summary, this solution declines the likelihood of typo errors by nursing staff as well as improve the quality of caring process in clinical.



Reduce

Paperwork and transcription errors

Greatly improves

Productivity and service quality

Smart Measurement Success Story

MEDWEL has successfully installed the smart measurement system in couples of medical center and regional hospitals in Taiwan. The MEDS-P1002 computer as a gateway of the solution has deployed in the wards such as children's wards, internal medicine wards and others to assist nursing staff on measuring the data of patient's weight, height and blood pressure and so on.

Blood Pressure Machine

OMRON	Parama-Tech
HBP-9020 HBP-9030	FT-205

BMI Machine

NAGATA	KongHo
UWE HW-210	HW-3030 HW-3050

Sitting Scale

NAGATA
BW-3132 BW-3138

Baby Scale

NAGATA
BLW-326 BW-20 BW-0365 BW-0378

Telemedicine

Telemedicine, a rapidly developing medical technology, has become increasingly popular due to its convenience and efficiency. By integrating computer, communication, and medical professional technologies, telemedicine enables remote interaction between doctors and patients, allowing them to diagnose, treat, and care for patients without the need for physical contact. This approach has been especially useful during the ongoing disease pandemic, as it allows for social distancing measures to be observed while providing medical care.

Telemedicine Solution: Medical Cart

Use virtual technology to have doctors connect to their patients, regardless of geographical distance and hospital environment.

Long battery life 8hr

Clear stereo voice

Easy storage &use

10X optics 2MP Video

Auto sound tracking

Audio far-field pickup

The Advantages of Telemedicine solution

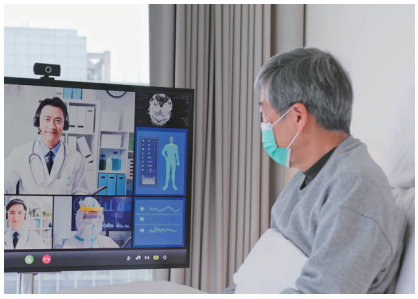
Cost and time savings

Reduce the cost of healthcare by avoiding unnecessary emergency room visits, hospitalizations, and travel expenses.

Medical resource sharing

Reduced healthcare disparities

Telemedicine can help reduce healthcare disparities by providing access to healthcare services in underserved areas or for patients with mobility or transportation issues.



Reduce virus transmission

Better outcomes

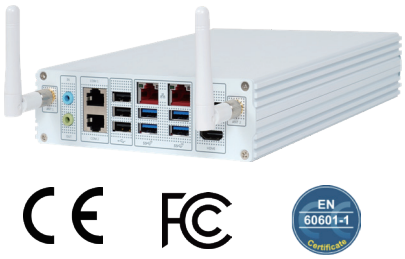
Improve healthcare outcomes by enabling earlier detection and treatment of medical conditions, as well as better patient monitoring and follow-up.

24/7 monitoring

Product Features

A medical-grade PC for telemedicine solution should have the following special designs to meet the needs of our medical box system.

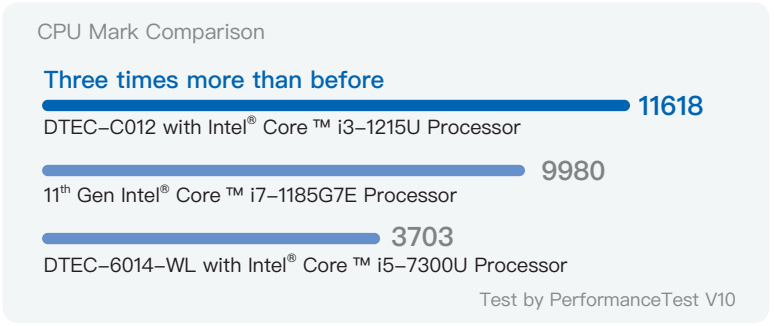
- Cable-free design
- Multiple OS applications
- Fan-less
- IEC 60601-1 Medical certified
- Mobility and convenience
- Audio and video processing capability
- High performance



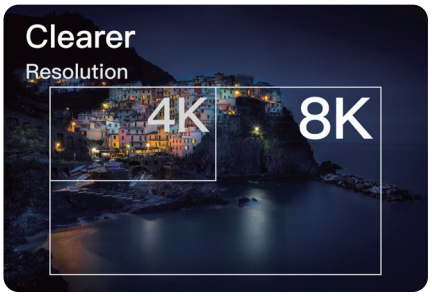
Product Function

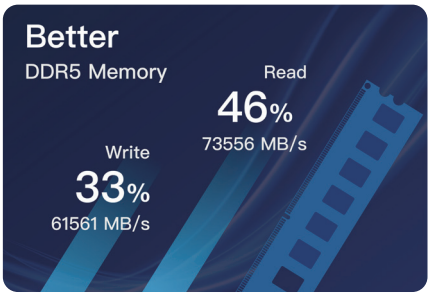
Low power consumption High performance

Equipped with Intel 12th Gen. Core i3/i5-UE series bring you high performance with lower power consumption.



Better & Faster & Clearer

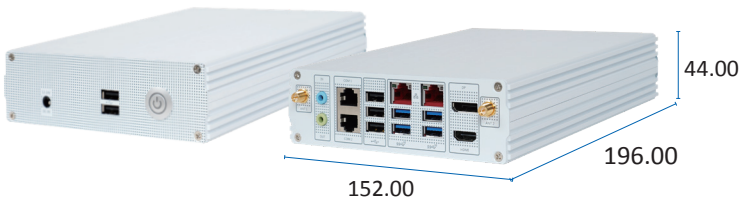




Compact size. Novel design

1U height with stylish outlook. An ideal platform with rich I/O (4x USB 3.2 , 5x USB 2.0 and 2x RJ45 COM ports) becomes a perfect solution to control medical equipment.

- Communicate with medical equipment
- Connect to hospital information system
- Combine with medical monitor with higher resolution

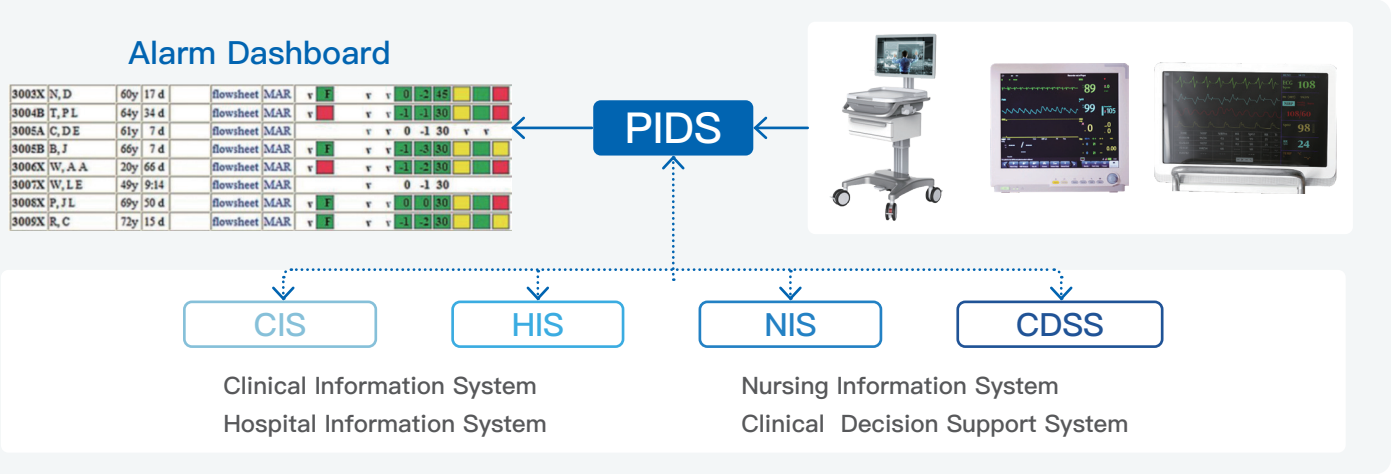


Patient Integrated Data Service (PIDS)

A system collects and integrates patient and technical data generated by the bedside equipment, then transmits these data to the Nursing Information System (NIS) for nursing staff or other systems such as a dashboard for management.

MEDWEL PIDS Solution

Thanks to the PIDS, the data of bedside monitors is automatically parsed and uploaded to the HIS based on the API provided by the hospital. The comprehensive data is also stored in the local database, which include vital sign, alarm, and waveform, can be used as a source for early warning system or AI systems in clinical research.



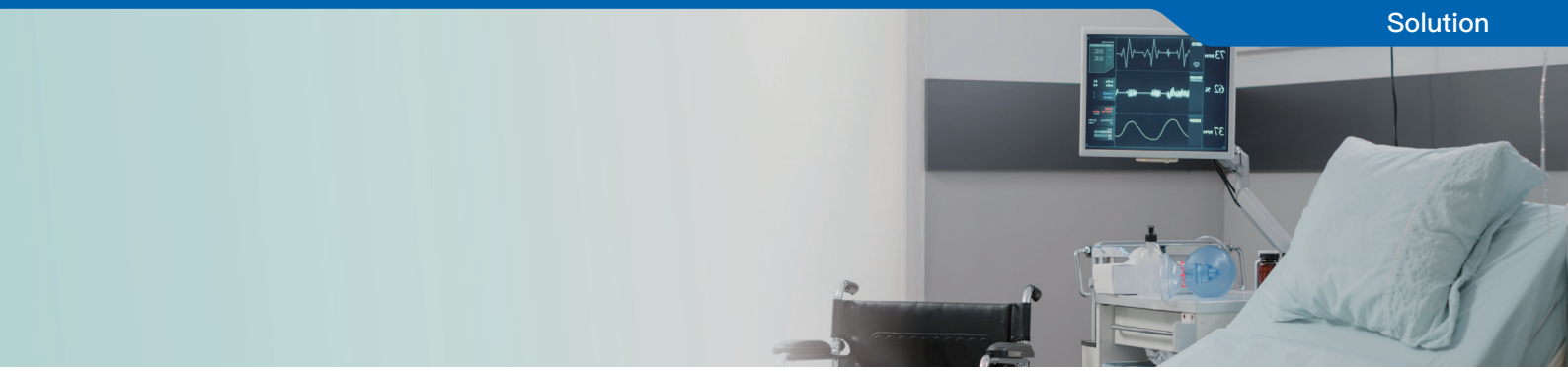
System functions

Through the APIs provided by hospitals, the system can connect to receiving port of the hospital then parse and upload the data of patients continuously and automatically.

The system stores integrated data of patients, and it can be a data source to provide the hospital systems such as HIS, NIS, CIS and CDSS applications.

Technical alarms from monitors provide information to engineering staff of hospital to watch the status of the equipment remotely followed by a quick respond for maintenance needs. Besides, the alarms statistics is used for management purpose.

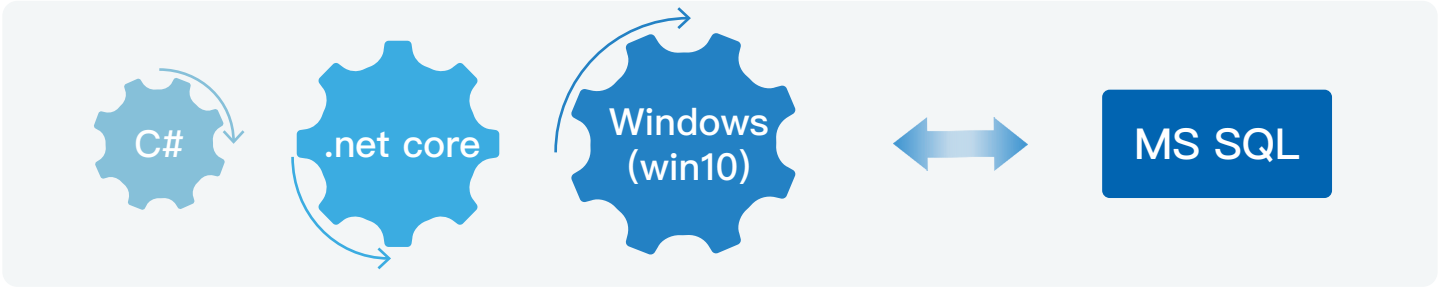
The structured data stored in the database including time series of waveforms such as ECG, SPO2, and are easy to query and export, and it can be used for further clinical research.



Patient Integrated Data Service (PIDS)

Features

PIDS is developed on the Microsoft .NET Core and C#. The system can be installed on a virtual machine (VM) or a physical device. The system runs on the windows system and supports Windows 10. Modularized design means one program having a configuration file with a different profile for each different hospital. The system interfaces with hospital systems through APIs, which are HIS, NIS, CIS, CDSS and other hospital systems, to provide not only patients' physiological parameters (vital signs) and technical parameters (monitor parameters), but also waveforms, such as ECG, pulse and respiratory etc. The system can also provide waveform drawings and its data export as csv format. Currently, the system supports a series of monitors manufactured by Mindray and Spacelabs.



Success stories

Since 2017, we have installed the PIDS system in over 10 hospitals and several research institutions, where it has been operating successfully and continuously.

MEDWEL
Your Health, Cares!

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合作聯盟
JEN-AI MEDICAL FOUNDATION｜CHANG GUNG MEDICAL FOUNDATION
COOPERATION ALLIANCE

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中山醫學大學附設醫院
Chung Shan Medical University Hospital

臺北醫學大學
TAIPEI MEDICAL UNIVERSITY

馬偕紀念醫院
MacKay Memorial Hospital

Medical AI Accelerator

AI accelerator is a class of specialized hardware accelerator or computer system designed to accelerate artificial intelligence and machine learning applications, including artificial neural networks and machine vision. MEDWEL AI box can support different types of accelerator, customers can choose suitable products for AI accelerated computing according to their needs.

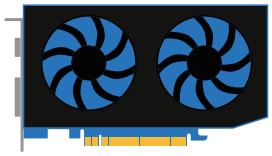
MEDWEL AI Box Accelerator Solution

Entry level

M.2 type accelerator

DTEC-C012

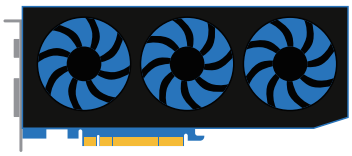
Intermediate level



Half size PCIe accelerator

MEDS-7060

Advanced level



Full size PCIe accelerator

MEDS-7061

The Advantage of AI Accelerator

Given that processing speed and scalability are two key demands from AI applications, AI accelerators play a critical role in delivering the near-instantaneous results that make these applications valuable.

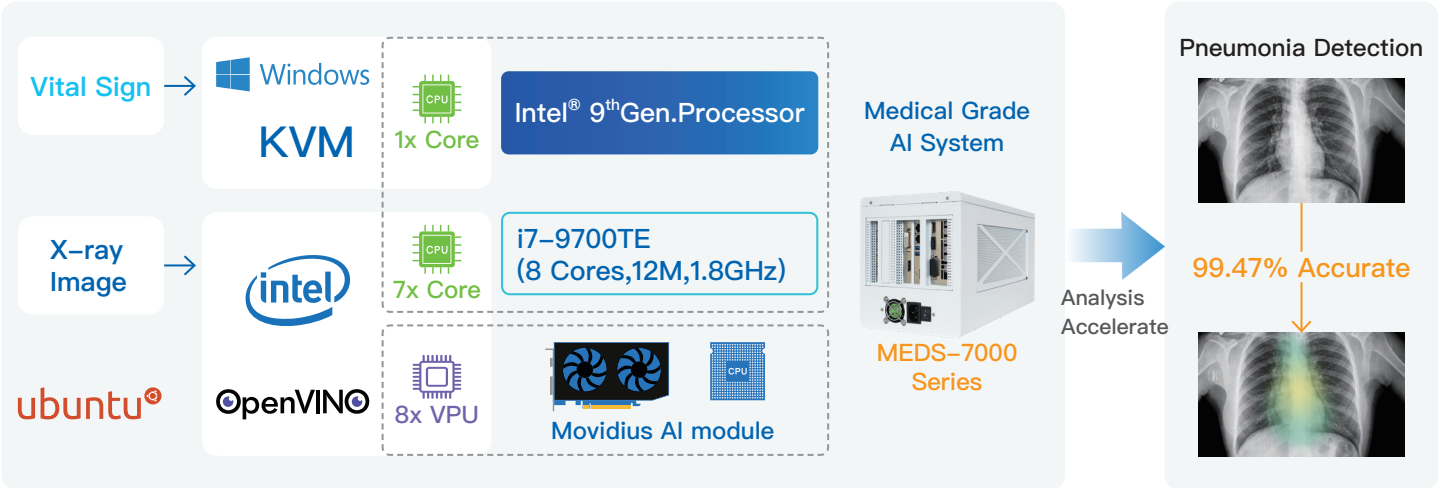
Faster
Respond quickly and reduce delays

Better
Run Multiple AI Models in same time

Lower Power
Lower power consumption than GPU

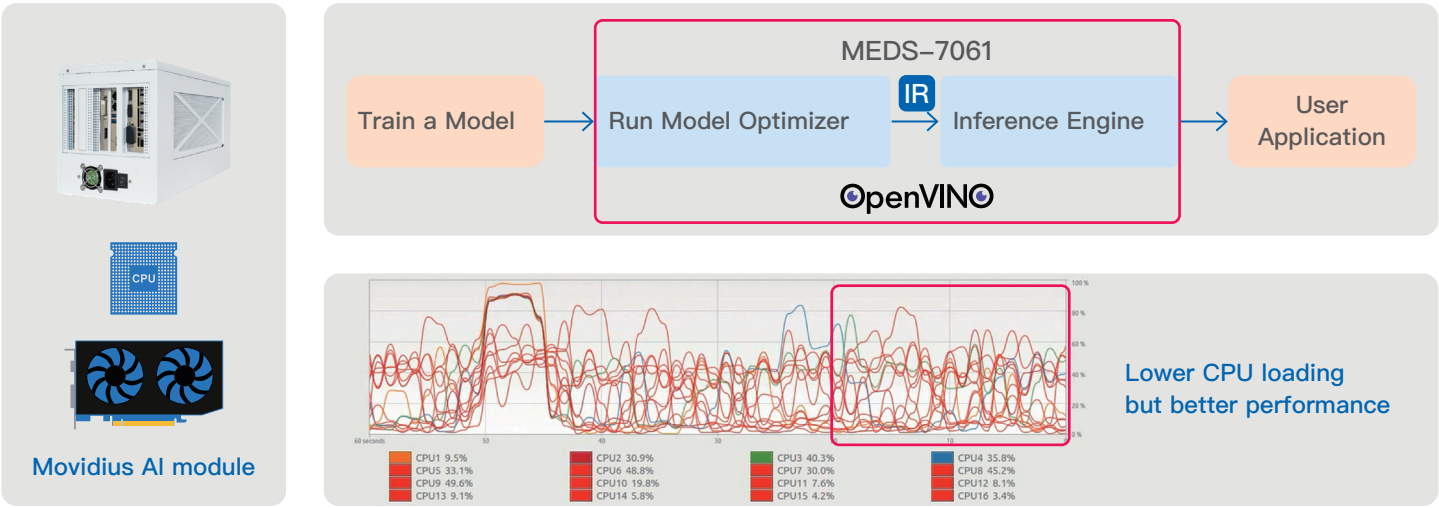
AI Accelerator Medical Application

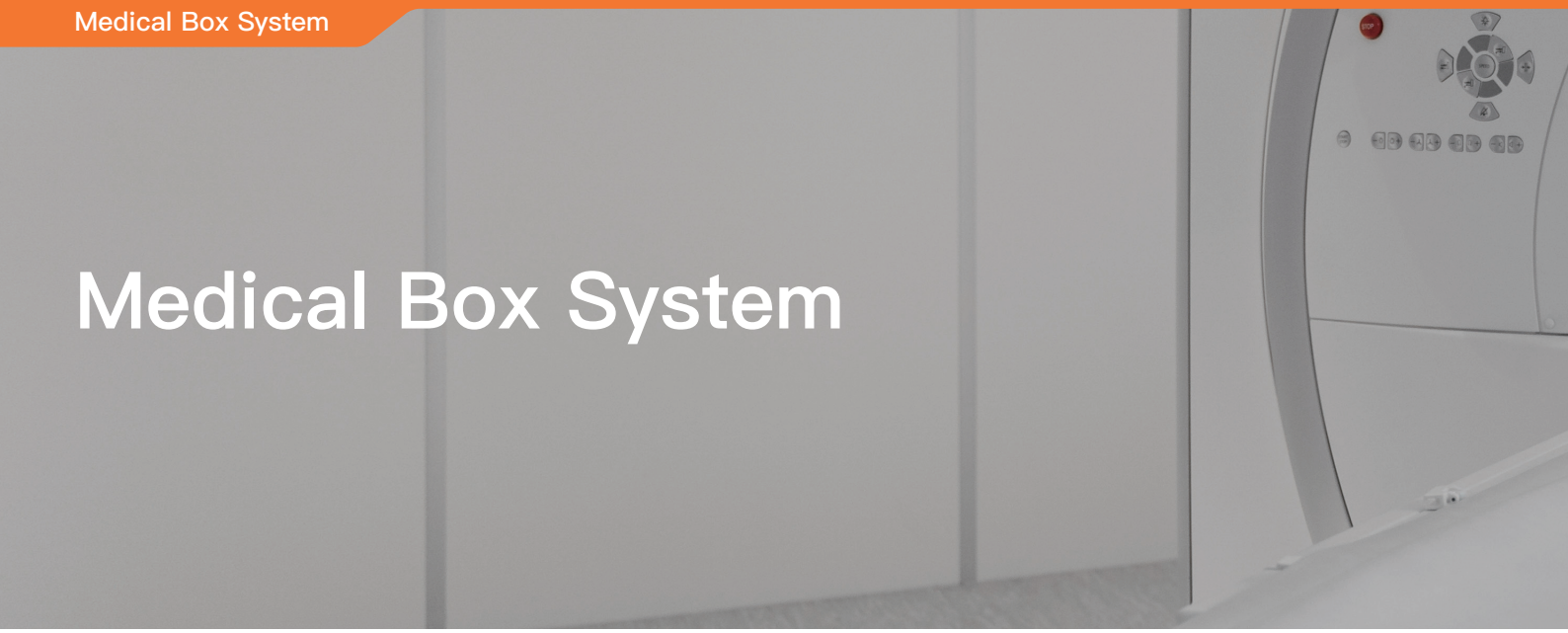
In our use case, patient's vital sign can be constantly received by MEDWEL's Patient Integrated Data System. After the X-ray images and vital sign uploaded to Hospital Information system. They can be transmit to MEDWEL's "Medical grade AI system". "AI aided Pneumonia diagnosis system", will calculate the probability value about the patient having Pneumonia.



Medical AI Accelerator Success Story

Taking "AI aided Pneumonia diagnosis system" as example, the running time of" i7-9700TE+ AI accelerating module" is better than only using CPU. The inference time is one quarter of before. Users can flexibly choose different level CPU and AI accelerating module for their application. It will greatly help the computing and development of AI.





Medical Box System

The Best Embedded System Solution in Medical Field

The manpower shortage caused by aging severely affects the whole healthcare system. It increases the demand for the WITMED (Wise Information Technology of med), like automated control systems and medical image processing systems. The data generated by these smart medical systems would be transmitted, exchanged, stored, classified, and analyzed. However, general computers cannot afford high computing performance and long working time. To perfectly realize WITMED functions, MEDWEL launched various medical embedded systems with excellent computing power and flexibility.

Nuc system

fanless &
cableless system

high performance
1U system

add-on card system

Complied electricity safety standard

Certified by EN 60601-1 & EN60601-1-2 and Industrial-grade stability for product testing and verification.

10 year Longevity support

Our product have 10-year product longevity to assure the long term supply of medical products.

Stability, low power and elegant outlook

MEDWEL systems not only function but also outlooks are better than similar competing products on the market.

MEDS-2000

Medical Fan Free NUC System

MEDS-2003

High Computing Medical Grade NUC System

DTEC-6012

Low Power Consumption
and Fan Free Medical System

DTEC-C012

Medical Slim System with High Performance and
Fan Free Design

MEDS-5000

Medical IoT Gateway Solution

MEDS-5002

Outstanding Database Protection Solution

MEDS-7060

Half Size PICMG Add-on card Box System

MEDS-7061

Full Size PICMG Add-on card Box System

MEDS-2000

Medical Fan Free NUC System

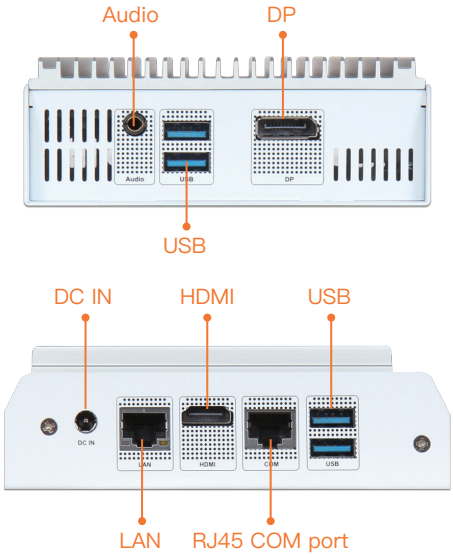
Entry level CPU | Fan less | 1U Size | AC DC Adapter | CE | FC

MEDS-2000 builds on Intel® Atom® Apollo Lake SOC supports Dual/Quad Core (up to 10W) that can support dual channel DDR3L memory. Support one Gigabit Ethernet port and one M.2 socket.

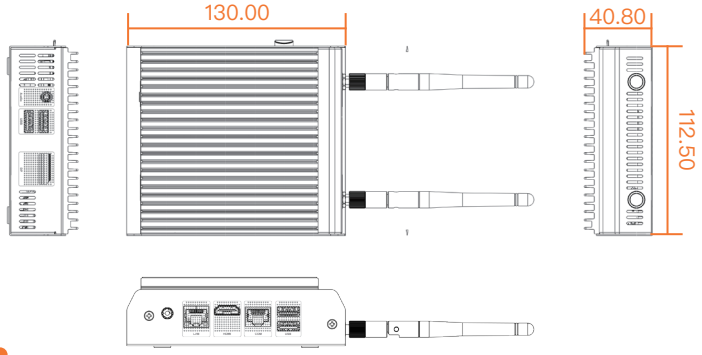
Product Features

- NUC size 1U height compact chassis
- Equipped entry level CPU with fan free design
- Unique thermal solution
- Rich I/O with dual display and support Wifi + Bluetooth module

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Atom® Apollo Lake SOC, (N3350/N4200) supports Dual/Quad Core, 10W
Memory	2x SO-DIMM DDR3L 1866/1600 Non-ECC up to 8GB
Storage	1x SATA III port 1x Micro-SD 3.0 socket 1x onboard eMMC 5.0 (32G)
OS Support	Win7/ Win10/ Linux
Expansion Interface (Optional)	1x M.2 2230 socket (E+A key) support WiFi/ BT module
I/O Interface	
Serial Port	1x RJ45 connector
USB	4x USB 3.0 (Type-A)
Audio	1x Line-in/Line-out
Ethernet	1x RJ45 connector LAN
Display	1x DP up to 4096×2160 1x HDMI up to 3840×2160
Power Supply Unit	
Power Input	DC 12V input
Power Limit	60W(12V/ 5A)
Power Supply	AC to DC adapter
Mechanical & Environmental	
Operation Temperature	0° C ~ 40° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	112.5(W) x 40.8(H) x 130(D) mm
Weight	0.98 kg
Fan Free	Yes

MEDS-2003

High Computing Medical Grade NUC System

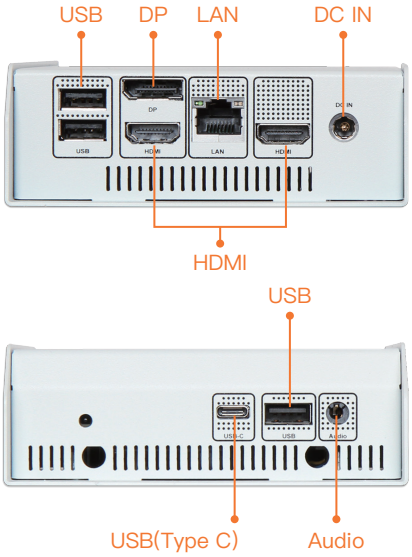
Core i CPU | VESA mount | 1U Size | AC DC Adapter | EN 60601-1 | CE | FC

MEDS-2003 builds on Intel® 7th Gen (Kabylake-U) Core ™ i3/ i5 SOC that can support dual channel DDR4 memory. Support dual display and storage SSD up to 128GB.

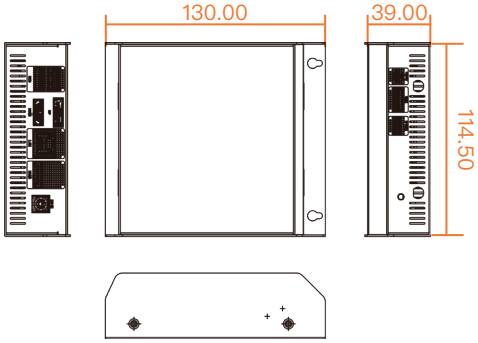
Product Features

- NUC size 1U height compact chassis
- Equipped core-i level CPU high performance
- Unique thermal solution with low dB fan
- Rich I/O with dual display and support Wifi + Bluetooth module

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Core ™ i3-7100U,QC, 2.30 GHz, 15 W Intel® Core ™ i5-7300U, QC, 2.40 GHz, 15 W
Memory	2x SO-DIMM DDR4 2133 MHz up to 32GB
Storage	1x SATA III port 1x M.2 SSD 2260
OS Support	Win7/ Win10/ Linux
Expansion Interface (Optional)	1x M.2 Key E 2230 socket support WiFi/ BT module 1x M.2 Key M 2260 socket support storage
I/O Interface	
Serial Port	N/A
USB	3x USB 3.0 (Type-A) 1x USB 3.1 (Type-C)
Audio	1x Line-in/Line-out
Ethernet	1x RJ45 connector LAN
Display	1x DP up to 4096×2160 2x HDMI up to 3840×2160
Power Supply Unit	
Power Input	DC 12V ~19V input
Power Limit	60W(12V/ 5A)
Power Supply	AC to DC adapter
Mechanical & Environmental	
Operation Temperature	0° C ~ 35° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	114.5(W) x 40(H) x 130(D) mm
Weight	0.98 kg
Fan Free	No

DTEC-6012

Low Power Consumption and Fan Free Medical System

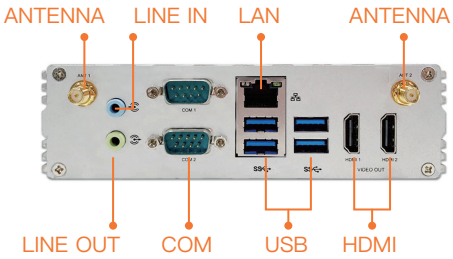
Core i CPU | Fan less | 1U Size | AC DC Adapter | EN 60601-1 | CE | FC

DTEC-6012 is an ideal platform with rich I/O and high resolution for telemedicine and comply with IEC60601-1-2 makes it a perfect solution to control medical equipment.

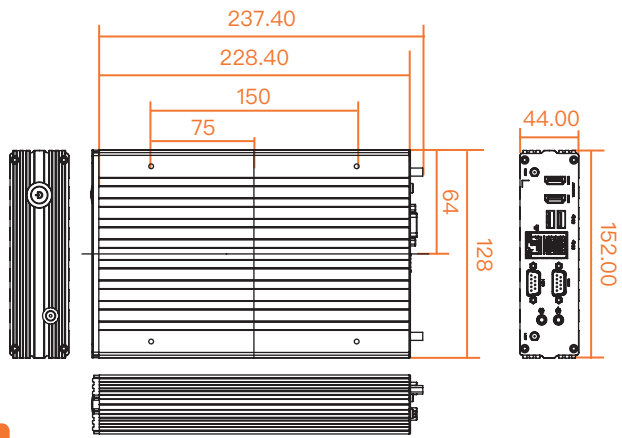
Product Features

- Fan free & cable free design
- Low power processor
- Slim size 1U height
- Rich I/O with dual display and support Wifi + Bluetooth module

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Kabylake-U Core ™ i3-7100U or i5-7300U Processor
Memory	1x SO-DIMM DDR4 Non-ECC up to 16GB
Storage	1x 2.5" SSD SATA connector
OS Support	Win7/ Win10/ Linux/ Ubuntu 16.04
Expansion Interface (Optional)	1x M.2 2230 socket (E+A key) support WiFi/ BT module

I/O Interface	
Serial Port	1x RS232 DB9 connector
USB	4x USB 3.0 (Type-A)
Audio	1x Line-in/Line-out
Ethernet	1x RJ45 connector LAN
Display	2x HDMI up to 3840×2160

Power Supply Unit	
Power Input	DC 12V input
Power Limit	60W(12V/ 5A)
Power Supply	AC to DC adapter

Mechanical & Environmental	
Operation Temperature	0° C ~ 40° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	152(W) x 44(H) x 238(D) mm
Weight	1.45 kg
Fan Free	Yes

DTEC-C012

Medical Slim System with High Performance and Fan Free Design

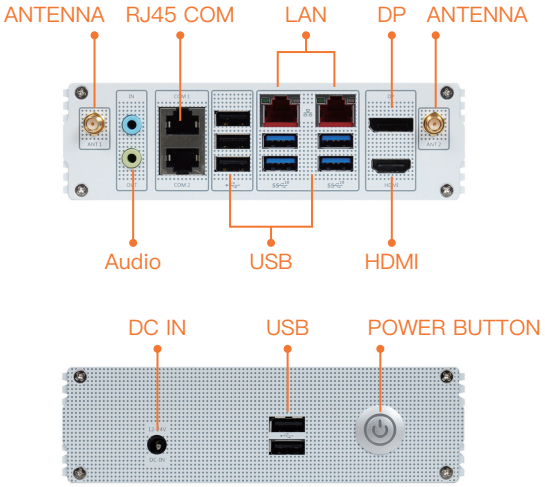
Core i CPU | Fan less | Wide voltage | 1U Size | NVMe SSD | AC DC Adapter | EN 60601-1 | CE | FC

DTEC-C012 builds on 12th Core ™ i3/ i5 low power processor that support DDR5 memory. Dual display HDMI + DP up to 8K output and rich I/O, one M.2 2230 socket for WiFi module and one M.2 2280 for NVMe SSD.

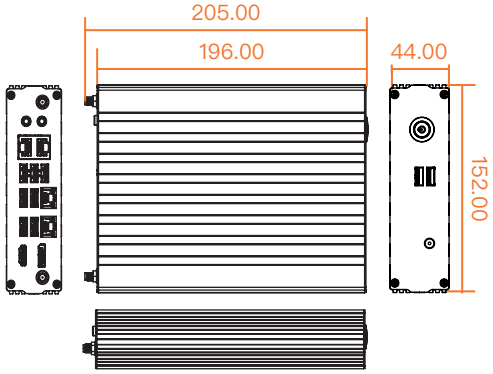
Product Features

- Fan free & cable free design
- Low power & high performance processor
- Slim size 1U height with rich I/O & dual display
- Support Wifi + Bluetooth module and NVMe high speed SSD

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Alderlake Core ™ i3-1215UE PL1 15W/PL2 25W
Memory	2x SO-DIMM DDR5 4800 MHz up to 64GB
Storage	1x M.2 NVME with PCIe x4 for SSD 1x 2.5" SSD SATA connector
OS Support	Win10/ Win11/Linux/Ubuntu 16.04
Expansion Interface (Optional)	1x M.2 Key E 2230 socket support WiFi/ BT module 1x M.2 Key M 2280 socket support NVMe storage
I/O Interface	
Serial Port	2x RJ45 COM port
USB	4x USB 3.2 (Type-A) 5x USB 2.0 (Type-A)
Audio	1x Line-in/Line-out
Ethernet	2x RJ45 connector LAN
Display	1x HDMI up to 3840×2160 1x DP up to 8K resolution
Power Supply Unit	
Power Input	DC 12V ~24V input
Power Limit	120W (12V/10A)
Power Supply	AC to DC adapter
Mechanical & Environmental	
Operation Temperature	(-)5° C ~ 40° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	152(W) x 44(H) x 196(D) mm
Weight	1.1 kg
Fan Free	Yes

MEDS-5000

Medical IoT Gateway Solution

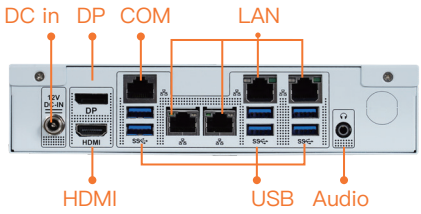
Core i CPU | VESA mount | 1U Size | AC DC Adapter | EN 60601-1 | CE | FC

Medical grade compact system with Intel Comet Lake-S high performance platform. Support 35W CPU with low dB fan, flexible design and rich I/O for communication with other medical equipment.

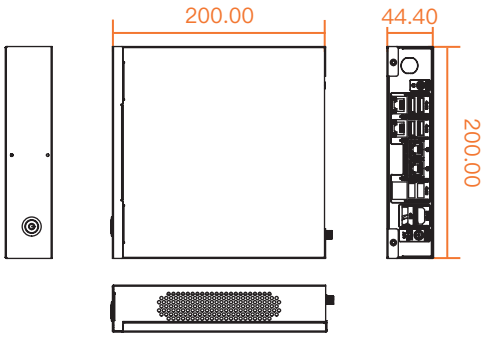
Product Features

- High performance and thermal efficient system
- Support 4x GbE LAN and 6x USB
- 1U compact slim size
- Optional Wifi & Bluetooth module

Rear I/O



Mechanical Drawing



System	
Processor	Socket LGA1151 for Intel 10th Comet Lake Core ™ i7/i5/i3® up to 35W
Memory	2x DDR4 SO-DIMM 2400/ 2666 memory up to 64GB
Storage	1x M.2 2280 SSD
OS Support	Windows 10, Linux
Expansion Interface (Optional)	1x M.2 2230 socket (E+A key) support WiFi/ BT module
I/O Interface	
Serial port	1x RJ45 COM port
USB	6x USB 3.0 (Type-A)
Audio	1x Line-in or Line-out combo jack
Ethernet	4x RJ45 connector LAN
Display	1x DP up to 4096×2160 1x HDMI up to 3840×2160
Power Supply Unit	
Power Input	DC 12V input
Power Limit	120W(12V/ 10A)
Power Supply	AC to DC adapter
Mechanical & Environmental	
Operation Temperature	0° C ~ 35° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	200(W) x 44(H) x 200(D) mm
Weight	1.6 kg
Fan Free	NO

MEDS-5002

Outstanding Database Protection Solution

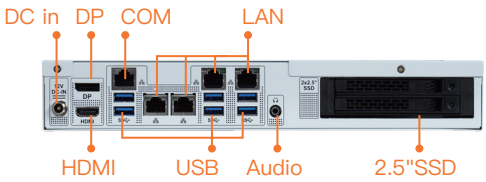
Core i CPU | 1U Size | AC DC Adapter | EN 60601-1 | CE | FC

Intel Comet lake-S platform with 2.5" SSD rack. High Performance box PC for information central station, hospital data center.Support RAID 0 & RAID 1 applications and rich I/O.

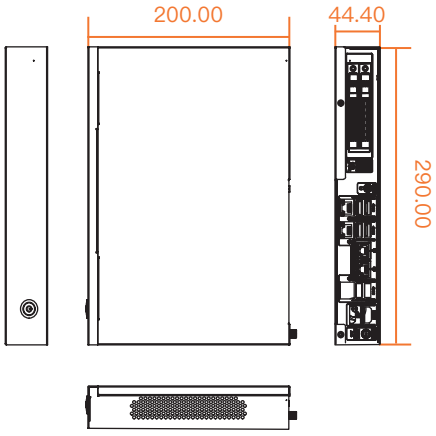
Product Features

- High performance Intel Comet lake CPU
- Support 4x GbE LAN and 6x USB
- Slim size 1U height chassis
- Swappable SSD with RAID application

Rear I/O



Mechanical Drawing



System	
Processor	Socket LGA1151 for Intel 10th Comet Lake Core ™ i7/i5/i3® up to 35W
Memory	2x DDR4 SO-DIMM 2400/ 2666 memory up to 64GB
Storage	1x M.2 2280 SSD 2x 2.5" SSD swappable connector
OS Support	Windows 10, Linux
Expansion Interface (Optional)	1x M.2 2230 socket (E+A key) support WiFi/ BT module
I/O Interface	
Serial Port	1x RJ45 COM port
USB	6x USB 3.0 (Type-A)
Audio	1x Line-in or Line-out combo jack
Ethernet	4x RJ45 connector LAN
Display	1x DP up to 4096x2160 1x HDMI up to 3840x2160
Power Supply Unit	
Power Input	DC 12V input
Power Limit	120W(12V/ 10A)
Power Supply	AC to DC adapter
Mechanical & Environmental	
Operation Temperature	0° C ~ 35° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	290(W) x 44(H) x 200(D) mm
Weight	2.5 kg
Fan Free	NO

MEDS-7060

Half Size PICMG Add-on card Box System

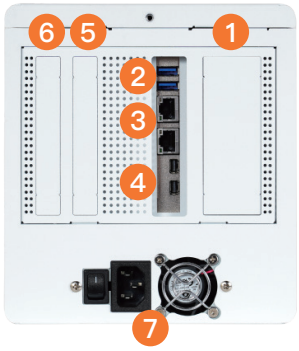
Core i CPU | PCIe expansion | Power supply | PICMG | EN 60601-1 | CE | FC

MEDS-7060 is designed for medical AI application with PICMG1.3 SBC and PCIe x16/ x4/x1 slots. PCIe x16 supports double width GPU or any other I/O card that customer needs.

Product Features

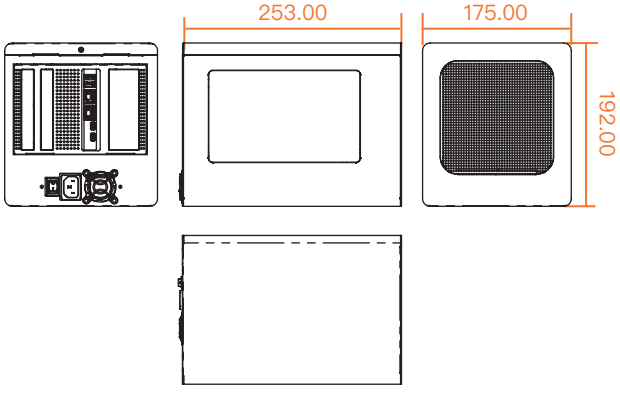
- Half-size SBC supports high performance CPU up to 65W
- Add-on card solution with modular system design
- Simple chassis assembly design and unique thermal solution
- Equipped 350 or 500W medical grade power supply

Rear I/O



1. PCIe x16 slot
2. USB 3.2 Type A x2
3. RJ45 LAN x2
4. Mini DP x2
5. PCIe x4 slot
6. PCIe x1 slot
7. Power supply

Mechanical Drawing



System	
Processor	Intel Coffee lake or Comet lake Corei7/i5/i3®, up to 65W(Depends on SBC board)
Memory	2x DDR4 SO-DIMM 2400/ 2666 memory up to 64GB
Storage	1x mSATA (half size)
OS Support	Windows 10, Linux
Expansion Interface (Optional)	1x M.2 2230 socket (E+A key) support WiFi/ BT module 1x PCIe x16 slot (x16 signal) 1x PCIe x4 slot (x4 or x1 signal selectable) 1x PCIe x1 slot (x1 signal)
I/O Interface(Depends on SBC board)	
USB	2x USB 3.2 (Type-A)
Ethernet	2x RJ45 connector LAN
Display	2x mini DP up to 4096×2304
Power Supply Unit	
Power Input	Power cord AC plug
Power Limit	350W or 500W
Power Supply	Flex ATX PSU
Mechanical & Environmental	
Operation Temperature	0° C ~ 35° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	175(W) x 192(H) x 253(D) mm
Weight	5.6 kg
Fan	1x 6000RPM CPU cooler 1x 2200RPM system fan(120 x120 mm)

MEDS-7061

Full Size PICMG Add-on card Box System

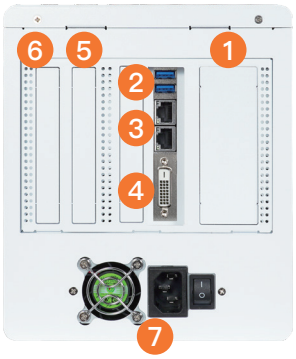
Core i CPU | PCIe expansion | Power supply | PICMG | EN 60601-1 | CE | FC

MEDS-7061 is designed for medical AI add-on card application with PICMG1.3 SBC and PCIe x16/ x4/x1 slots. PCIe x16 supports double width AI accelerator or any other I/O card that customer needs.

Product Features

- Full-size SBC supports high performance CPU up to 80W
- Add-on card solution with modular system design
- Simple chassis assembly design and unique thermal solution
- Equipped 500W medical grade power supply

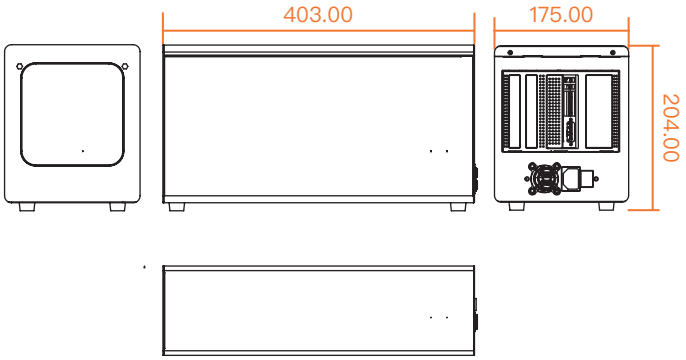
Rear I/O



1. PCIe x16 slot
2. USB x3
3. RJ45 LAN x2
4. Display x3
5. PCIe x4 slot
6. PCIe x1 slot
7. Power supply

System	
Processor	Intel Comet lake or Alder lake Core ™ i7/i5/i3®, up to 80W(Depends on SBC board)
Memory	2x DDR4 SO-DIMM 2400/ 2666 memory up to 64GB
Storage	1x mSATA (half size) 2x 2.5" SSD connector
OS Support	Windows 10, Linux
Expansion Interface (Optional)	1x M.2 2230 socket (E+A key) support WiFi/ BT module 1x PCIe x16 slot (x16 signal) 1x PCIe x4 slot (x4 or x1 signal selectable) 1x PCIe x1 slot (x1 signal)
I/O Interface (Depends on SBC board)	
USB	2x USB 3.2 (Type-A) 1x USB 3.1 (Type-C)
Ethernet	2x RJ45 connector LAN
Display	1x DVI up to 4096x2304
Power Supply Unit	
Power Input	Power cord AC plug
Power Limit	500W
Power Supply	Flex ATX PSU
Mechanical & Environmental	
Operation Temperature	0° C ~ 35° C
Storage Temperature	(-)40° C ~ 70° C
Dimension	175(W) x 204(H) x 403(D) mm
Weight	7.2 kg
Fan	1x 6000RPM CPU cooler 1x 2200RPM system fan(120 x120 mm)

Mechanical Drawing



Medical Panel PC & Display

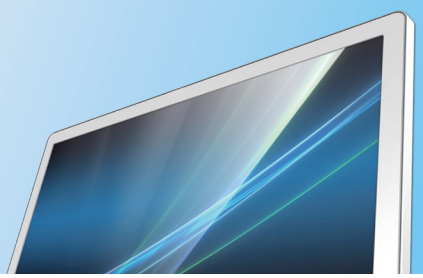
Medical Grade
All-in-one Computer and Display Solution

In clinical environment, human machine interface (HMI) can improve the communication between medical staff and equipment so that medical staff can operate equipment more efficiently and easily. MEDWEL launched various standard sizes of 10.1”/ 15.6”/18.5”/21.5” /23.6” for customized projects. Our panel PC can support multiple medical applications and match with different medical equipment.

Due to advances in Internet technology, medical services can be replaced or assisted by information and communications technology. Through this behavioral model, hospitals and clinics can introduce digital systems to improve processing efficiency. MEDWEL touch display that can be used with a computing host with different performances to become a user control interface between hospital and clinic to provide medical service.

Light and Elegant

Slim, stylish, streamlined is our design language in panel PC and monitor series



Fan-free

Completely silent with fan-free design and passive thermal dissipation.

Reliable

Medical grade protection, whole system cleanable and 10 years longevity.

EN 55032/ EN 55024

EN 60601-1 (v 3.1)

EN 60601-1-2 (v.4.0)

FCC Part 18 class B

MEDS-P1002

10.1" Medical equipmant HMI

MEDS-P2202

21.5 inch Medical Entry Level AIO

MEDS-P1600

15.6-inches Medical Grade HMI system

MEDS-P1900

18.5-inches Medical Grade HMI system

MEDS-P2203

21.5 inch Medical Grade Core i Panel PC

MEDS-P2205

21.5 inch Medical Grade Core i Panel PC

MEDS-M2200

21.5" Touch Monitor with Medical Outlook

MEDS-M2400

23.6" Touch Monitor with Medical Outlook

MEDS-P1002

10.1" Medical equipmant HMI

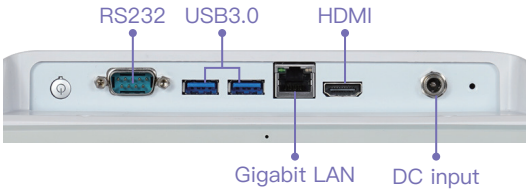
Entry level CPU | AC DC Adapter | Fan less | VESA mount | EN 60601-1 | CE | FC

MEDS-P1002 is 10.1" panel PC with Intel® Atom® x5-E3930 processor mainly for bedside healthcare information terminal in hospital. With latest medical certification EN60601-1 approved, MEDS-P1002 will be ideal medical equipment HMI for medical equipment manufactuer.

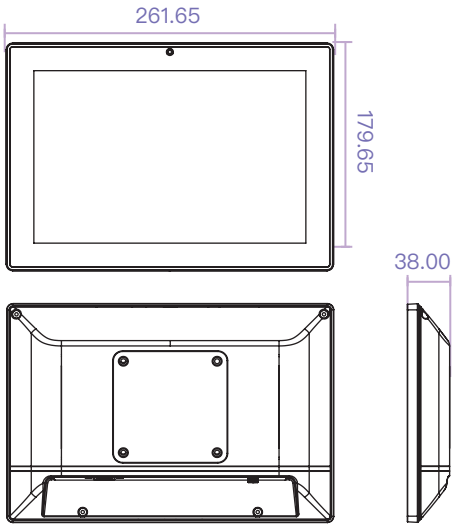
Product Features

- Intel® Atom® E3930 Processor with low power consumption
- EN 60601-1 medical certified
- True flat touch screen with 10 point multi-touch, PCAP touch and glove operation
- Fan-free design with efficient thermal dissipation
- Win 10, Android 6.0, Linux™ multi OS support for various application
- Solid IP65 water & dust proof front bezel Optional Wi-Fi+ BT module

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Atom® Dual-Core x5-E3930 (1.3GHz, up to 1.8GHz)
Memory	1x DDR3L SO-DIMM 1333/1600/ 1866 MHz up to 8 GB
Storage	1x M.2 SSD up to 512G
OS Support	Win 10/ Android 6.0/ Linux ™ Ubuntu 16.10
Display	
Size	10.1 inch
Resolution	WXGA 1280 x 800 (16:10)
Brightness	300 nits
Contrast Ratio	1300 : 1
Backlight	TFT-LCD
Backlight MTBF	30,000 hours
Viewing Angle	170° (H)/170° (V)
Touch Screen	Projected capacitive 10 point multi-touch
I/O Interface	
Series Port	1x RS-232/422/485
USB	2x USB 3.1 Gen 1 (5Gb/s) on rear I/O
Camera	1x 5MP Camera (optional)
Ethernet	1x Gigabit Ethernet
Display	1x HDMI
Power Switch	1x power on/off switch
DC input	1x 12V DC jack
Peripherals and Devices	
WLAN & Bluetooth	WLAN 802.11 ac/a/b/g/n and Bluetooth 4.0 (optional)
Battery	N/A
Audio	1x built-in 2W speaker
Power	
Power Input	12V DC Jack
Power Supply	60W AC-DC Adapter
Mechanical & Environmental	
Water/Dust Resistance	Front panel: IP65
Operating Temperature	0° C ~ 35° C
Dimension	262(W) x 180(H) x 38(D) mm
VESA Mounting	75mm x 75mm
Certifications	CE/ FCC Part 18 Class B EN 60601-1 3rd ed. EN 60601-1-2 4th ed.

MEDS-P2202

21.5 inch Medical Entry Level AIO

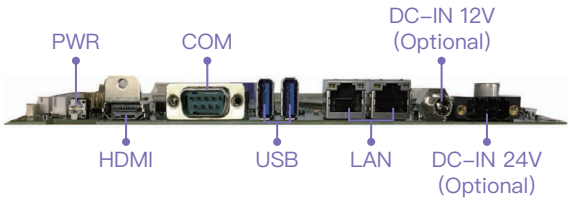
Entry level CPU | AC DC Adapter | Fan less | VESA mount | EN 60601-1 | CE | FC

The new MEDS-P2202 is 21.5" panel PC run with Intel® Atom® E3930 processor mainly for the application of nursing cart and bedside healthcare infotainment terminal in hospital. With streamlined design and cost-effective features, MEDS-P2202 will be a ideal choice for various application in healthcare field.

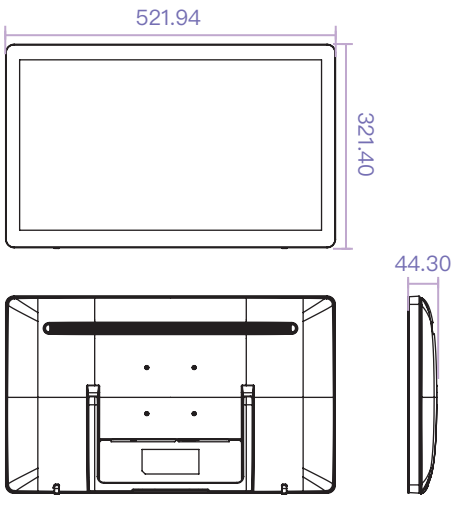
Product Features

- Intel® Atom® x5-E3930 processor
- EN 60601-1 medical certified
- 21.5" Full HD 1080p resolution widescreen display
- Win10, Android 6.0, Linux ™ multi OS support for various application
- True flat touch screen with 10 point multi-touch, PCAP touch and glove operation
- Solid IP65 water & dust proof front bezel
- Optional Wifi+ BT module

Rear I/O



Mechanical Drawing

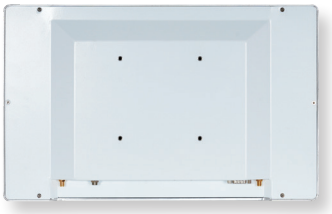


System	
Processor	Intel® Atom® Dual-Core x5-E3930 (1.3GHz, up to 1.8GHz)
Memory	1x DDR3L SO-DIMM 1333/1600/ 1866 MHz up to 8 GB
Storage	1x mSATA SSD up to 512GB
OS Support	Win 10/ Android 6.0/ Linux ™ Ubuntu 16.04
Display	
Size	21.5 inch
Resolution	FHD 1920 x 1080 (16:9)
Brightness	250 nits
Contrast Ratio	1000 : 1
Backlight	LED type
Backlight MTBF	25,000 hours
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected Capacitive Multi-Touch
I/O Interface	
Series Port	1x RS-232/422/485
USB	2x USB 3.0 ports
Audio	N/A
Ethernet	1x Gigabit LAN
Display	1x HDMI
Power Switch	1x power on/off switch
DC input	1x 12V DC jack
Peripherals and Devices	
WLAN & Bluetooth	WLAN 802.11 ac/a/b/g/n and Bluetooth 4.0 (optional)
Battery	N/A
Audio	2x built-in 3W speaker
Power	
Power Supply	12V DC Jack / 24V via 3-pin terminal block connector (optional)
Power Consumption	65W AC-DC Adapter 60W AC-DC medical certificated adapter (optional)
Mechanical & Environmental	
Water/Dust Resistance	Front panel: IP65
Operating Temperature	0° C ~ 44.3° C
Dimension	521.9(W) x 321.4(H) x 44.3(D) mm
VESA Mounting	75mm x 75mm
Certifications	CE/ FCC Part 18 Class B EN 60601-1 3rd ed. EN 60601-1-2 4th ed.

MEDS-P1600

15.6-inches Medical Grade HMI system

Entry level CPU | AC DC Adapter | Fan less | VESA mount | EN 60601-1 | CE | FC

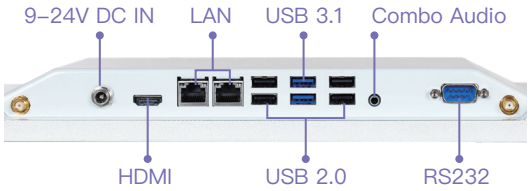


MEDS-P1600 is 15.6"panel PC run with Intel® J6413 processor(formerly Elkhart Lake) as a slim, fanless and high cost-effective medical panel system. With medical grade EMC protection, rich I/O, wide range DC input, MEDS-P1600 will be a ideal choice for medical equipment HMI and various application in healthcare/ medical field.

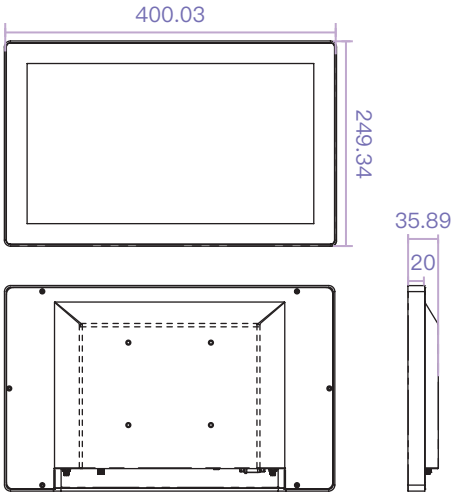
Product Features

- Intel® Celeron® J6413 processor
- 15.6" Full HD 1080p resolution widescreen display
- True flat touch screen with 10 points multi-touch, PCAP touch and glove operation
- Slim and fanless medical system design
- IP65 water/dust proof front bezel
- 9-24V wide range DC input
- 2x 1GbE LAN, 6x USB ports on rear I/O

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Celeron® J6413 1.5M Cache, 1.8GHz (3.0GHz)
Memory	Single Channel DDR4 SODIMM up to 32 GB (default: 8G)
Storage	1x M.2 B key 2280 (SATA) (default: 256GB SSD)
OS Support	Win 10 IoT, Linux ™
Display	
Size	15.6 inch
Resolution	1920 x 1080 (16:9)
Brightness	400 nits
Contrast Ratio	800 : 1
Backlight	LED type
Backlight MTBF	30,000 hours
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected capacitive 10 points multi-touch
I/O Interface	
Series Port	1x RS-232
USB	2x USB 3.1 Gen 1 (5Gb/s) on rear I/O 4x USB 2.0 on board on rear I/O 2x USB 2.0 on board pin header
Audio	1x Combo audio jack
Ethernet	2x 1GbE LAN on rear I/O with Intel i225LM
Display	1x HDMI
Power Switch	N/A
DC input	1x 9V-24V DC jack
Peripherals and Devices	
WLAN & Bluetooth	WLAN 802.11 ac/a/b/g/n and Bluetooth 4.0
Battery	N/A
Audio	2x built-in 3W speaker
Power	
Power Requirement	DC 9-24V input with power adapter
Power Consumption	65W (Max.)
Mechanical & Environmental	
Water/Dust Resistance	Front panel: IP65 Whole system: IPX1
Operating Temperature	0° C ~ 40° C
Dimension	400.0(W) x 249.3(H) x 35.9(D) mm
VESA Mounting	100mm x 100mm
Certifications	CE/ FCC Part 18 Class B EN 60601-1 3rd ed. EN 60601-1-2 4th ed.

MEDS-P1900

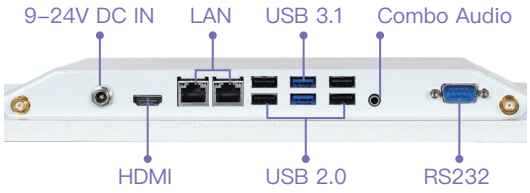
18.5-inches Medical Grade HMI system

MEDS-P1900 is 18.5"panel PC run with Intel® J6413 processor(formerly Elkhart Lake) as a slim, fanless and high cost-effective medical panel system. With medical grade EMC protection, rich I/O, wide range DC input, MEDS-P1900 will be a ideal choice for medical equipment HMI and various application in healthcare/medical field.

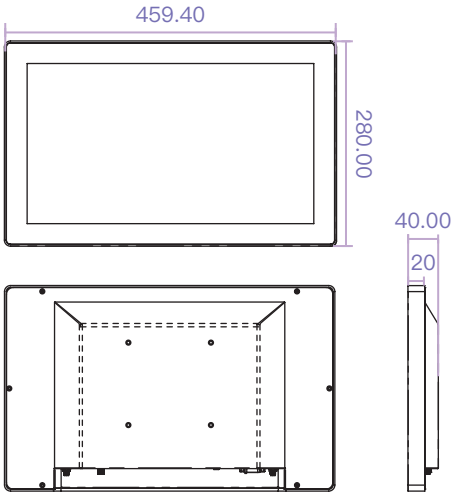
Product Features

- Intel® Celeron® J6413 processor
- 18.5" 1366* 768 resolution widescreen display
- True flat touch screen with 10 points multi-touch, PCAP touch and glove operation
- Slim and fanless medical system design
- IP65 water/dust proof front bezel
- 9-24V wide range DC input
- 2x 1GbE LAN, 6x USB ports on rear I/O

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Celeron® J6413 1.5M Cache, 1.8GHz (3.0GHz)
Memory	Single Channel DDR4 SODIMM up to 32 GB (default: 8G)
Storage	1x M.2 B key 2280 (SATA) (default: 256GB SSD)
OS Support	Win 10 IoT, Linux ™
Display	
Size	18.5 inch
Resolution	1366 x 768 (16:9)
Brightness	450 nits
Contrast Ratio	1000 : 1
Backlight	LED type
Backlight MTBF	50,000 hours
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected capacitive 10 points multi-touch
I/O Interface	
Series Port	1x RS-232
USB	2x USB 3.1 Gen 1 (5Gb/s) on rear I/O 4x USB 2.0 on board on rear I/O 2x USB 2.0 on board pin header
Audio	1x Combo audio jack
Ethernet	2x 1GbE LAN on rear I/O with Intel i225LM
Display	1x HDMI
Power Switch	N/A
DC input	1x 9V-24V DC jack
Peripherals and Devices	
WLAN & Bluetooth	WLAN 802.11 ac/a/b/g/n and Bluetooth 4.0
Battery	N/A
Audio	2x built-in 3W speaker
Power	
Power Requirement	DC 9-24V input with power adapter
Power Consumption	65W (Max.)
Mechanical & Environmental	
Water/Dust Resistance	Front panel: IP65 Whole system: IPX1
Operating Temperature	0° C ~ 40° C
Dimension	459.4(W) x 280.0(H) x 40.0(D) mm
VESA Mounting	100mm x 100mm
Certifications	CE/ FCC Part 18 Class B EN 60601-1 3rd ed. EN 60601-1-2 4th ed.

MEDS-P2203

21.5 inch Medical Grade Core i Panel PC

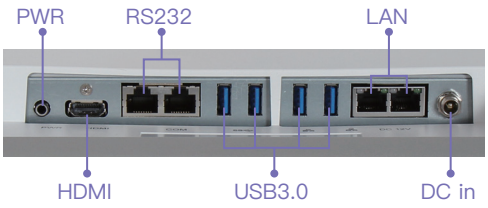
Core i CPU | AC DC Adapter | Fan less | VESA mount | EN 60601-1

MEDS-P2203 is 21.5" panel PC run with Intel® Core™ i series processor mainly for surgical room and medical equipment control platform in hospital. With high computing power and streamlined design features, MEDS-P2403 will be a ideal choice for various application in healthcare/ medical field.

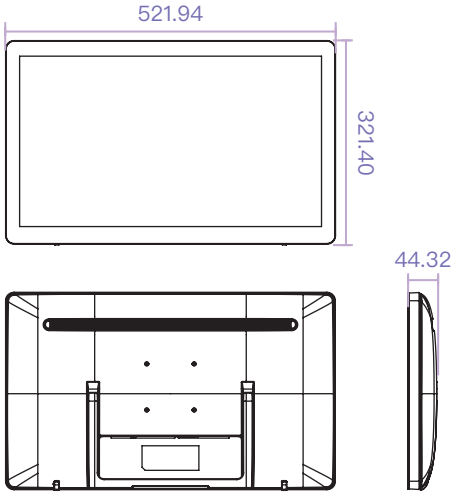
Product Features

- Coffee Lake Core™ i series processor
- EN 60601-1 medical certified
- 21.5" Full HD 1080p resolution widescreen display
- True flat touch screen with 10 points multi-touch, PCAP touch and glove operation
- Fanless and solid IP65 water/dust proof front bezel
- Back-up battery support 30-60 min operating

Rear I/O



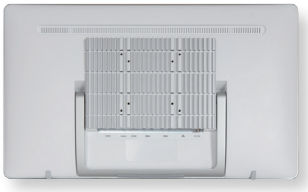
Mechanical Drawing



System	
Processor	Intel® Core™ i3-8100(10W) 3.6 GHz, Cache 6MB Intel® Core™ i5-8500(10W) up to 4.1 GHz, Cache 6MB
Memory	Single Channel DDR4 SODIMM up to 16 GB
Storage	1x mSATA SSD up to 512GB
OS Support	Win 10 IoT, Linux™
Display	
Size	21.5 inch
Resolution	FHD 1920 x 1080 (16:9)
Brightness	250 nits
Contrast Ratio	1000 : 1
Backlight	LED type
Backlight MTBF	25,000 hours
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected Capacitive Multi-Touch
I/O Interface	
Series Port	2x RJ45 for RS232
USB	4x USB 3.0 ports
Audio	1x Combo audio jack
Ethernet	2x Gigabit LAN
Display	1x HDMI (1.4b) port on board connector, up to 3840x2160@30 MHz
OSD function key	Power switch/ Volume/ Brightness
DC input	1x 12V-24V DC jack
Peripherals and Devices	
WLAN & Bluetooth	WLAN 802.11 ac/a/b/g/n and Bluetooth 4.0 (optional)
Battery	Back-up battery support 30-60 min operating
Audio	2x built-in 3W speaker
Power	
Power Requirement	DC 12-24V input with power adapter DC 19-24V input with power adapter(w/ battery)
Power Consumption	65W (Max.)
Mechanical & Environmental	
Water/Dust Resistance	Front panel: IP65 Whole system: IPX1
Operating Temperature	0° C ~ 44.3° C
Dimension	521.9(W) x 321.4(H) x 44.3(D) mm
VESA Mounting	75mm x 75mm
Certifications	CE/ FCC Part 18 Class B EN 60601-1 3rd ed. EN 60601-1-2 4th ed.

MEDS-P2205

21.5 inch Medical Grade Core i Panel PC



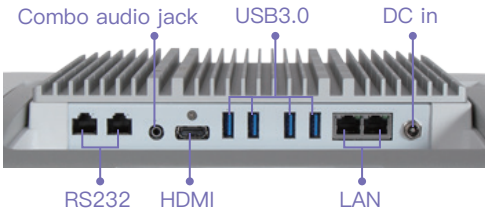
Core i CPU | AC DC Adapter | Fan less | VESA mount | EN 60601-1 | CE | FC

MEDS-P2205 is 21.5"panel PC run with Intel® 11th Gen. Core ™ i series processor(formerly Tiger Lake UP3) mainly for surgical room and medical equipment control platform in hospital. With high computing power and streamlined design features.

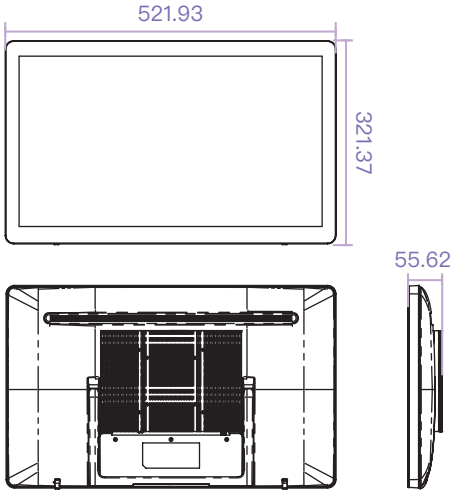
Product Features

- Intel® 11th Gen. Core ™ i series processor
- EN 60601-1 medical certified
- 21.5" Full HD 1080p resolution widescreen display
- True flat touch screen with 10 points multi-touch, PCAP touch and glove operation
- Fanless and solid IP65 water/dust proof front bezel
- Back-up battery support 30-60 min operating

Rear I/O



Mechanical Drawing



System	
Processor	Intel® Core ™ i5-1145G7E 4.1 GHz, Cache 8MB
Memory	Single Channel DDR4 SODIMM up to 32 GB
Storage	1x mSATA SSD up to 512GB
OS Support	Win 10 IoT, Linux ™
Display	
Size	21.5 inch
Resolution	FHD 1920 x 1080 (16:9)
Brightness	250 nits
Contrast Ratio	1000 : 1
Backlight	LED type
Backlight MTBF	25,000 hours
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected Capacitive Multi-Touch
I/O Interface	
Series Port	2x RJ45 for RS232
USB	4x USB 3.0 ports support by stacked connector
Audio	1x Combo audio jack
Ethernet	2x Gigabit LAN
Display	1x HDMI (1.4b) port on board connector, up to 3840x2160@30 MHz
OSD function key	Power switch/ Volume/ Brightness
DC input	1x 9V-36V DC jack
Peripherals and Devices	
WLAN & Bluetooth	WLAN 802.11 ac/a/b/g/n and Bluetooth 4.0
Battery	Back-up battery support 30-60 min operating
Audio	2x built-in 3W speaker
Power	
Power Requirement	DC 9-36V input with power adapter DC 19-24V input with power adapter(w/ battery)
Power Consumption	65W (Max.)
Mechanical & Environmental	
Water/Dust Resistance	Front panel: IP65 Whole system: IPX1
Operating Temperature	0° C ~ 35° C
Dimension	521.9(W) x 321.4(H) x 55.6 (D)
VESA Mounting	75mm x 75mm, 100mm x 100mm
Certifications	CE/ FCC Part 18 Class B EN 60601-1 3rd ed. EN 60601-1-2 4th ed.

MEDS-M2200

21.5" Touch Monitor with Medical Outlook

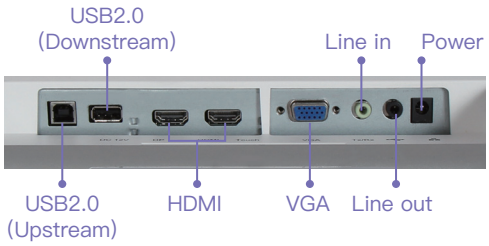
AC DC Adapter | Fan less | VESA mount | EN 60601-1 | CE | FC

MEDS-M2200 is a stylish, slim and P-CAP Touch Monitor with fan free design. Suitable for displaying information in various environment.

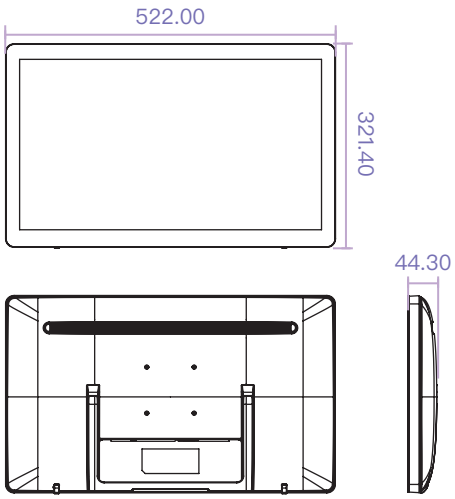
Product Features

- Suitable white meets classic elegant design
- Full HD 1080p resolution & P-CAP touch screen
- Superior image quality with high contrast ratio
- Fast response time without residual image
- Solid IP65 water & dust proof front bezel
- Rich IO connection, HDMI, VGA, USB

Rear I/O



Mechanical Drawing



Display	
Size	21.5 inch
Resolution	FHD 1920x1080
Brightness	250 nits
Contrast Ratio	1000 : 1
Backlight	LED type
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected Capacitive Multi-Touch
I/O Interface	
Display	2x HDMI 1x VGA
USB	1x USB 2.0 (Downstream), 1x USB 2.0 (Upstream)
Audio	2x 2W Speaker 1x Line out 1x Line out
DC input	19V DC Jack
Power	
Power Requirement	DC 19V input with Power Adapter
Power Consumption	45W (Max.)
Mechanical & Environmental	
IP Protection	IP65 (Front)
OP Temperature	0° C ~ 44.3° C
Dimensions	521.9(W) x 321.4(H) x 44.3(D) mm
Color	White/ Black
Net Weight	3.93kg
Mounting	Standalone, VESA 75mm x 75mm
Certifications	CE/ FCC Class B

MEDS-M2400

23.6" Touch Monitor with Medical Outlook

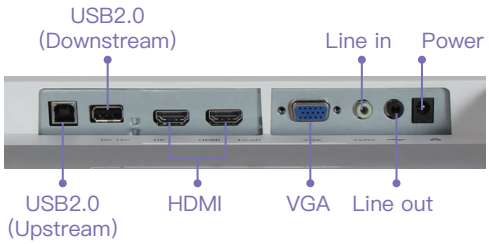
AC DC Adapter | Fan less | VESA mount | EN 60601-1 | CE | FC

MEDS-M2400 is a stylish, slim and P-CAP Touch Monitor with fan free design. Suitable for displaying information in various environment.

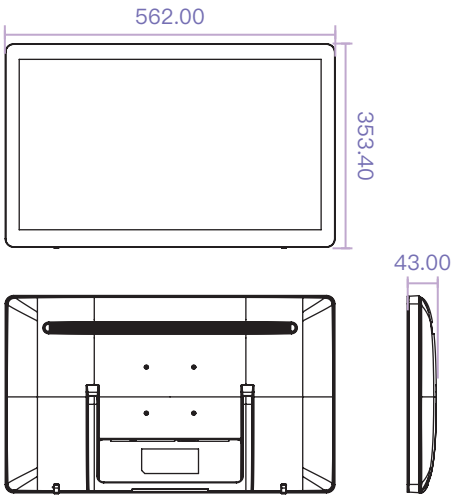
Product Features

- Suitable white meets classic elegant design
- Full HD 1080p resolution & P-CAP touch screen
- Superior image quality with high contrast ratio
- Fast response time without residual image
- Solid IP65 water & dust proof front bezel
- Rich IO connection, HDMI, VGA, USB

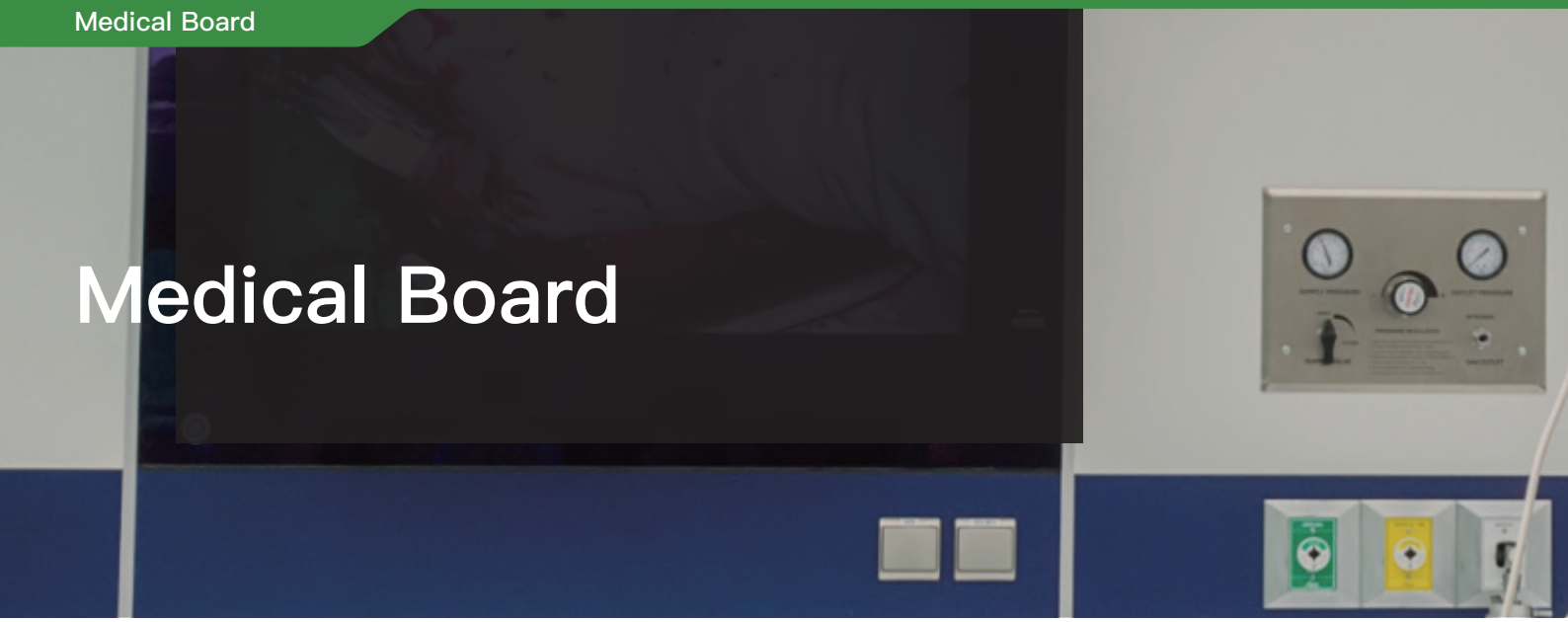
Rear I/O



Mechanical Drawing



Display	
Size	23.6 inch
Resolution	FHD 1920x1080
Brightness	250 nits
Contrast Ratio	1000 : 1
Backlight	LED type
Viewing Angle	170° (H)/160° (V)
Touch Screen	Projected Capacitive Multi-Touch
I/O Interface	
Display	2x HDMI 1x VGA
USB	1x USB 2.0 (Downstream), 1x USB 2.0 (Upstream)
Audio	2x 2W Speaker 1x Line out 1x Line out
DC input	19V DC Jack
Power	
Power Requirement	DC 19V input with Power Adapter
Power Consumption	45W (Max.)
Mechanical & Environmental	
IP Protection	IP65 (Front)
OP Temperature	0° C ~ 40° C
Dimensions	561.9(W) x 353.4(H) x 42.9(D) mm
Color	White/ Black
Net Weight	4.6kg
Mounting	Standalone, VESA 75mm x 75mm
Certifications	CE/ FCC Class B



Medical Board

More than Industrial Board, MEDICAL

MEDWEL provides mainboard, COM-e and PCIe interface Isolation module to meet customer needs in different medicalapplications. Medical equipment and peripheral connections must comply with the IEC60601 standard andbe subject to strict supervision. We have special isolated circuit design that can ensure to pass the medicalgrade requirement.

Isolated design

ESD can pass contact 8KV and air 15KV, EMI can pass ClassB level.

PCIe
Mini-iTX
COM-e type VI

Standard form factor

Standard Mini-iTX and high-speed transmission interface with PCIe or COM-e type VI.

Medical grade

Means of operator/ patient protection and also comply with the IEC60601 standard.

10 year

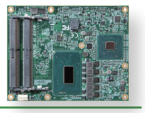
Longevity support

Our product have 10-year product longevity to assure the long term supply of medical products.

MEDM-B638

High performance and low power
Core ™ –i Type VI COMe module

MEDM-6180



Intel® 8th Gen.
Core ™ –i COMe module with high computing

MEDM-61C0

COM Express Type 6 basic size module based on 12th/13th Gen Intel® Core ™ processors

MEDB-51A0-Q470E-MGS

Intel® 10th Gen.
Core ™ i Mini-ITX Medical board

MEDB-51A0-H420E-MPC

Intel® 10th Gen. Core ™ i Mini-ITX Medical board

MEDB-51A0-H420E-MIB

Intel® 10th Gen. Core ™ i Mini-ITX Medical board

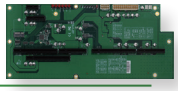
MEDB-51B0

Intel® Elkhart Lake Mini-ITX Medical board

MEDN-51040

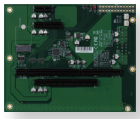
Medical Grade Isolation LAN Card

MBPE-1011



PICMG 1.3 Full Size Backplane

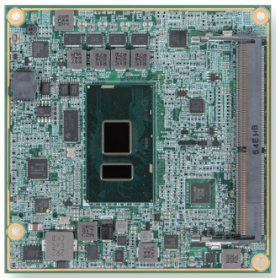
MBPS-1011



PICMG 1.3 Half Size Backplane

MEDM-B638

High performance and low power Core ™ –i Type VI COMe module

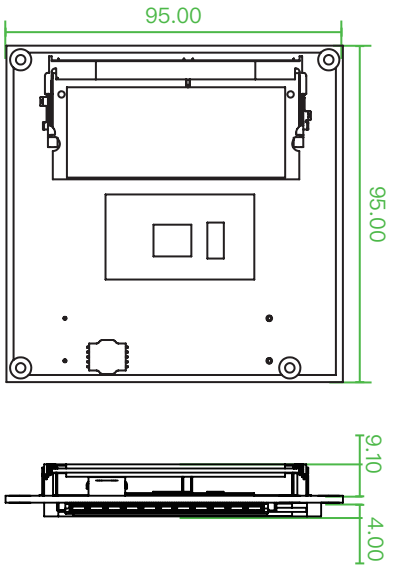


Intel® Kabylake-U/Skylake-U Core™ i7/i5/i3 processor based on Type VI Compact-COM Express 2.0 module.

Product Features

- Up to Kabylake-U 7th Generation Intel® Core ™ Processor with 14nm and brand new architecture provide more performance
- Seek for low profile solution but with high performance and low power
- Support faster I/O interfaces on Five PCI Express Gen3 lanes (four x 1 can be configured to one x4 lane)
- 95* 95 Type VI Compact-COM Express 2.0
- DDR4 SDRAM on SO-DIMM support

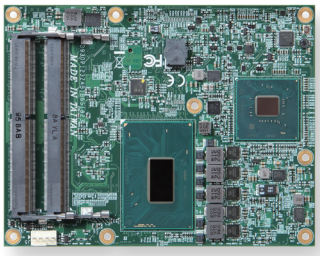
Mechanical Drawing

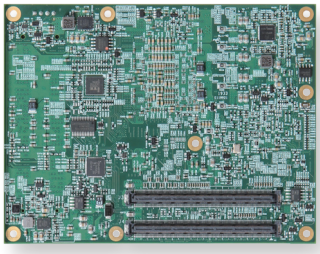


System	
Processor	7th generation Intel® Core ™ processor family (formerly Skylake/Kaby Lake)
Chipset	SoC
BIOS	AMI UEFI BIOS
Memoy	DDR4 32GB DDR4 on two 204-pin SO-DIMM sockets, non ECC
Storage	2x SATA III (6Gbit/s)
Slot Interface	Type VI
I/O Interface	
Serial Port	GPIO: 8 bit GPIO (default 4 input/4 output) UART: TX/RX signal only
USB	3x USB3.0 7x USB 2.0
Audio	Intel® HD Audio
Ethernet	1x Gigabit Ethernet Intel® I219LM
Display	2x DDI (HDMI/DP) Dual channel 24bit LVDS (1920x1200)
PCI Express Gen3	5x PCIe x1 Gen3 (four x 1 can be configured to on x4 lane), 1x PCIe x4 Gen3
Power Supply Unit	
Power Input	12V DC input or ATX Power input
Mechanical & Environmental	
Operation Temperature	0˚ C ~ 60˚ C
Storage Temperature	-20˚ C ~ 80˚ C
Dimension	95 x 95mm

MEDM-6180

Intel® 8th Gen. Core ™ –i COMe module with high computing



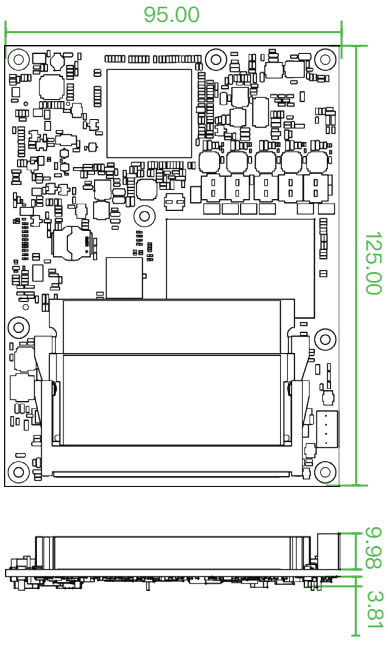


Intel® Core ™ Coffee Lake–H Processor based on Type VI COM Express module with QM370 chipset.

Product Features

- Coffee Lake–H is the 8th Generation Intel® Core ™ Processor with 14nm and brand new architecture provide best performance
- Seek for mobile solution but with high performance and medium TDP
- Support faster I/O interface on 24 PCIe Gen3 lans
- 125* 95 Type VI Compact–COM Express 2.0
- DDR4 SDRAM on SO–DIMM support

Mechanical Drawing



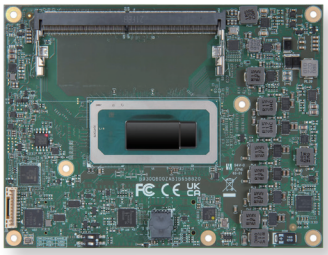
System	
Processor	Coffee Lake–H the 8th Generation Intel® Core ™ Processor
Chipset	QM370
BIOS	AMI UEFI BIOS
Memoy	DDR4 SODIMM x 2, max. 32GB, DDR4 non–ECC
Storage	2x SATA III (6Gbit/s)
Slot Interface	Type VI
I/O Interface	
Serial Port	GPIO: 8 bit GPIO (default 4 input/4 output) UART: TX/RX signal only
USB	4x USB3.0 8x USB 2.0
Audio	Intel® High Definition Audio
Ethernet	Intel® I210–AT
Display	2x DDI (HDMI/DP) Dual channel 24bit LVDS (1920x1200)
PCI Express Gen3	1x PCIex16 (PEG), 1x PCIex4, 4x PCIe x1 Gen3
Power Supply Unit	
Power Input	12V DC input or ATX Power input
Mechanical & Environmental	
Operation Temperature	0° C ~ 60° C
Storage Temperature	–20° C ~ 80° C
Dimension	125 x 95mm

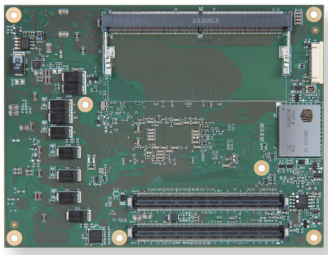
MEDM-61C0

COM Express Type 6 basic size module based on 12th/13th Gen Intel® Core ™ processors

Core i CPU

COM-e



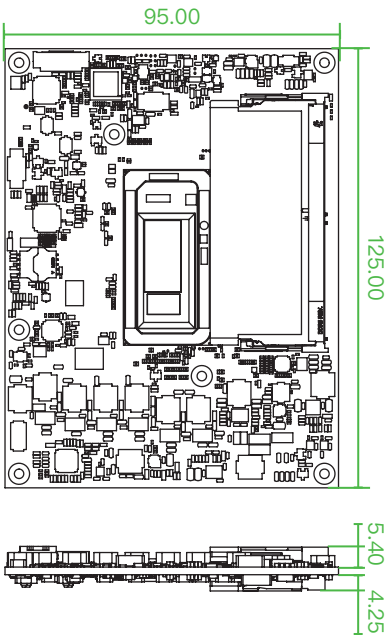


MEDM-61C0 is based on the COMe Module Base Specification Rev 3.1. The core computing platform adopts Intel® 7 lithography process and supports AI acceleration with Intel® Deep Learning Boost.

Product Features

- 13th/12th Gen Intel® Core ™ processors series (formerly Raptor Lake-P/Alder Lake-P)
- 2x DDR5-4800 non-ECC SO-DIMMs up to 2x 32GB, 1x PCIe Gen 4 x8 (H series), 2x Gen 4 x4, and 7x PCIe Gen 3 x1
- 4x USB 3.2 Gen 2,8x USB 2.0 and optional 2x USB4
- 2x SATAIII, 3x DDI, VGA, eDP/LVDS
- Ethernet chip Intel® I225/I226 series

Mechanical Drawing

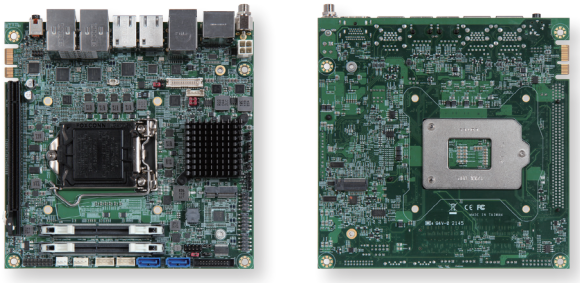


System	
Processor	12th/13th Gen Intel® Core ™ i7/i5/i3 processors, up to 14 cores/20 threads
Chipset	SoC
BIOS	AMI UEFI BIOS
Memoy	DDR5 SO-DIMM up to 64GB 4800MT/s
Storage	2x SATA III share with PCIe lane
Slot Interface	Type VI
I/O Interface	
Serial Port	GPIO: 8 bit GPIO (default 4 input/4 output) I2C: Baud Rate: 400KHz SMBus: Baud Rate: 100KHz UART: TX/RX signal only
USB	2x USB4 (option) 4x USB 3.2 Gen2 8x USB 2.0
Audio	Intel® HD Audio
Ethernet	Intel® I225/I226 series
Display	2x DDI (HDMI/DP), resolution up to 8K 1x LVDS (or eDP), resolution up to 8K
PCI Express Gen3	7x Gen 3.0 x1 (2 lanes share with SATA)
PCI Express Gen4	1x Gen4 x8 (selected SKU), 2x Gen4 x4
Power Supply Unit	
Power Input	12V DC input or ATX Power input
Mechanical & Environmental	
Operation Temperature	0° C ~ 60° C
Storage Temperature	-40° C ~ 85° C
Dimension	125 x 95mm

MEDB-51A0-Q470E-MGS

Intel® 10th Gen. Core ™ i Mini-ITX Medical board

Core i CPU | PCIe expansion | CE | FC

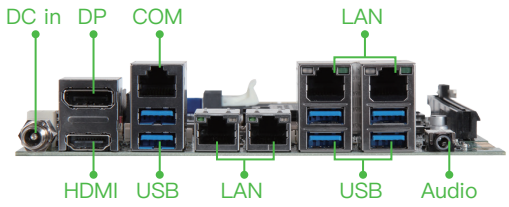


10th Gen. Intel® Core ™ Processors Mini-ITX with DP, HDMI, LVDS, 4x GbE LAN, 6x USB 3.1 Gen1, 2x SATA III,PCIe x16, M.2 E key, M.2 M key, PCIe x1 Gold finger

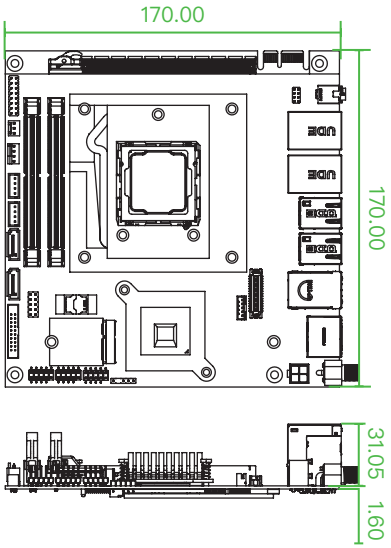
Product Features

- Intel® 10th Gen. Core ™ Processors
- Supports DDR4 2400/2666/2933MT/s Non-ECC SDRAM on two SODIMM socket up to 128GB
- Supports 4x Gigabit Ethernet LAN, 6x USB 3.1 Gen1 on rear I/O, 3x USB 2.0 on board
- Supports PCIe x16 expansion slot(Gen3), M.2 E key(2230) , M.2 M key(2280) for NVMe, SATA SSD, PCIe x1 gold finger and 2x SATA III
- Supports triple display of HDMI/DP/LVDS

Rear I/O



Mechanical Drawing

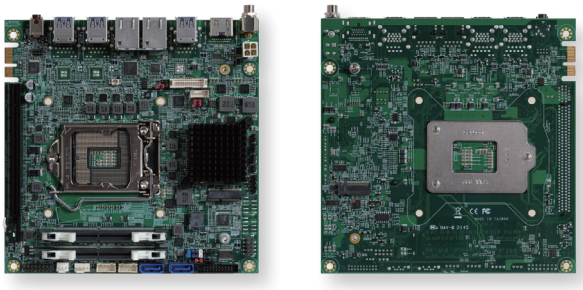


System	
Processor	Intel® 10th Gen Core ™ Processors CPU in LGA1200 package,up to 65W
Chipset	Intel® Q470E
BIOS	AMI UEFI BIOS
Memoy	2x 260-pin DDR4 SODIMM sockets supported Data transfer rates up to 2400/2666/2933 MT/s 128GB
Storage	Support 2x 7-pin SATA III port 1x M.2 M key 2280 (PCIe x4,SATA)
H/W Status Monitor	Temperature (CPU & System) Voltage (VCC, VSB, VBAT) CPU Fan Speed
Expansion Interface	1 x PCIe x16 Gen3 slot 1 x M.2 E key 2230 (PCIe x1, USB) 1 x M.2 M key 2280 (PCIe x4, SATA) 1 x PCIe x1 Gold Finger (include 2x PCIe x1 signal, co-lay with M.2 M Key PCIe x4)
I/O Interface	
Serial Port	1x RS-232/422/485 (RJ45 type) on rear I/O
USB	6x USB 3.1 Gen 1 (5Gb/s) on rear I/O 3x USB 2.0 on board pin header
Audio	Realtek® ALC897 HD codec Combo audio jack
Ethernet	3x RJ45 connectors on rear I/O with Intel i225LM 1x RJ45 connectors on rear I/O with Intel i219LM
Display	LVDS: Dual channel 24bit LVDS on board, resolution up to 1920 x1200 DP port on rear I/O, resolution up to 4096×2160 HDMI port on rear I/O, resolution up to 4096×2160
Power Supply Unit	
Power Input	12V DC input or ATX Power input
Mechanical & Environmental	
Operation Temperature	0° C ~ 50° C
Storage Temperature	-20° C ~ 80° C
Dimension	170mm(L) x 170mm(W)

MEDB-51A0-H420E-MPC

Intel® 10th Gen. Core ™ i Mini-ITX Medical board

Core i CPU | PCIe expansion | CE | FC

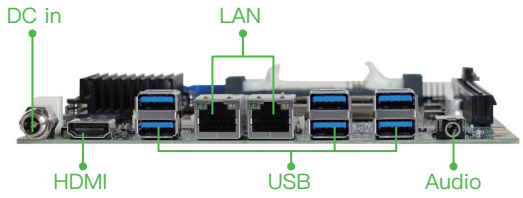


10th Gen. Intel® Core ™ Processors Mini-ITX with HDMI, LVDS, 2x GbE LAN, 6x USB 3.1 Gen1, 2x SATA III,PCIe x16, M.2 E key, M.2 M key, PCIe x1 Gold finger

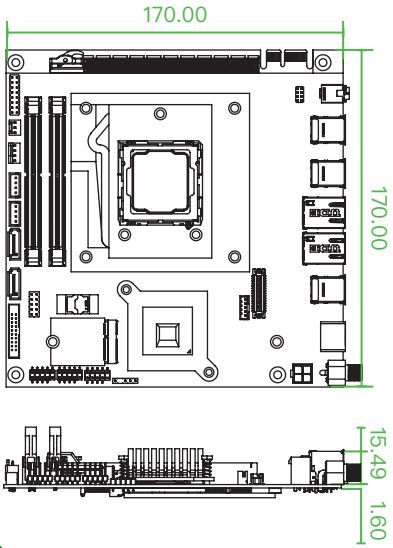
Product Features

- Intel® 10th Gen. Core ™ Processors
- Supports DDR4 2400/2666/2933MT/s Non-ECC SDRAM on two SODIMM socket up to 128GB
- Supports 2x Gigabit Ethernet LAN, 6x USB 3.1 Gen1 on rear I/O, 1x USB 2.0 on board
- Supports PCIe x16 expansion slot(Gen3), M.2 E key(2230) , M.2 M key(2280) for NVMe, SATA SSD,PCIe x1 gold finger and 2x SATA III
- Supports triple display of HDMI/LVDS

Rear I/O



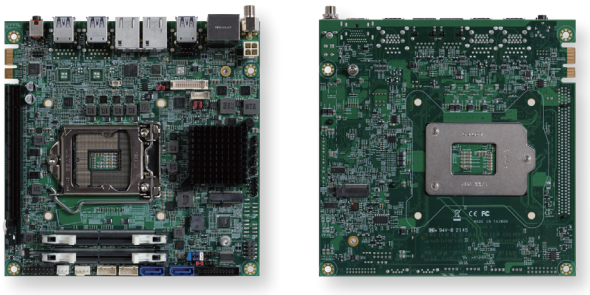
Mechanical Drawing



System	
Processor	Intel® 10th Gen Core ™ Processors CPU in LGA1200 package,up to 65W
Chipset	Intel® H420E
BIOS	AMI UEFI BIOS
Memoy	2x 260-pin DDR4 SODIMM sockets supported Data transfer rates up to 2400/2666/2933 MT/s 128GB
Storage	Support 2x 7-pin SATA III port 1x M.2 M key 2280 (PCIe x4,SATA)
H/W Status Monitor	Temperature (CPU & System) Voltage (VCC, VSB, VBAT) CPU Fan Speed
Expansion Interface	1 x PCIe x16 Gen3 slot 1 x M.2 E key 2230 (PCIe x1, USB) 1 x M.2 M key 2280 (PCIe x4, SATA) 1 x PCIe x1 Gold Finger (include 2x PCIe x1 signal, co-lay with M.2 M Key PCIe x4)
I/O Interface	
Serial Port	N/A
USB	6x USB 3.1 Gen 1 (5Gb/s) on rear I/O 1x USB 2.0 on board pin header
Audio	Realtek® ALC897 HD codec Combo audio jack
Ethernet	1x RJ45 connectors on rear I/O with Intel i225LM 1x RJ45 connectors on rear I/O with Intel i219LM
Display	LVDS: Dual channel 24bit LVDS on board, resolution up to 1920 x1200 HDMI port on rear I/O, resolution up to 4096×2160
Power Supply Unit	
Power Input	12V DC input or ATX Power input
Mechanical & Environmental	
Operation Temperature	0° C ~ 50° C
Storage Temperature	-20° C ~ 80° C
Dimension	170mm(L) x 170mm(W)

MEDB-51A0-H420E-MIB

Intel® 10th Gen. Core ™ i Mini-ITX Medical board

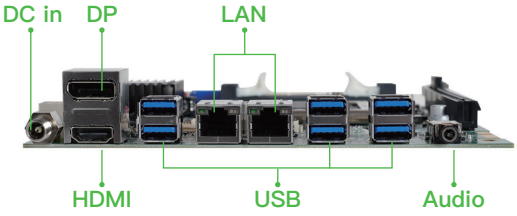


10th Gen. Intel® Core ™ Processors Mini-ITX with DP, HDMI, LVDS, 2x GbE LAN, 6x USB 3.1 Gen1, 2x SATA III,PCIe x16, M.2 E key, M.2 M key, PCIe x1 Gold finger

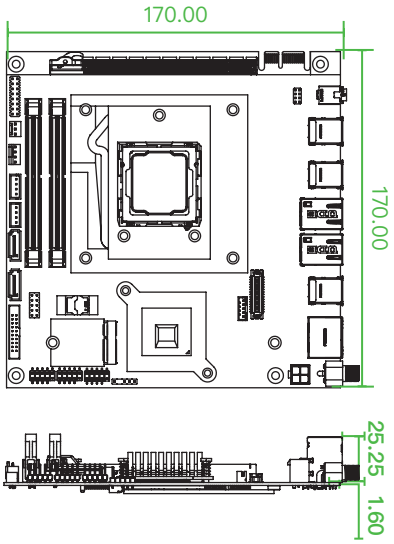
Product Features

- Intel® 10th Gen. Core ™ Processors
- Supports DDR4 2400/2666/2933MT/s Non-ECC SDRAM on two SODIMM socket up to 128GB
- Supports 2x Gigabit Ethernet LAN, 6x USB 3.1 Gen1 on rear I/O, 1x USB 2.0 on board
- Supports PCIe x16 expansion slot(Gen3), M.2 E key(2230) , M.2 M key(2280) for NVMe, SATA SSD, PCIe x1 gold finger and 2x SATA III
- Supports triple display of HDMI/DP/LVDS

Rear I/O



Mechanical Drawing

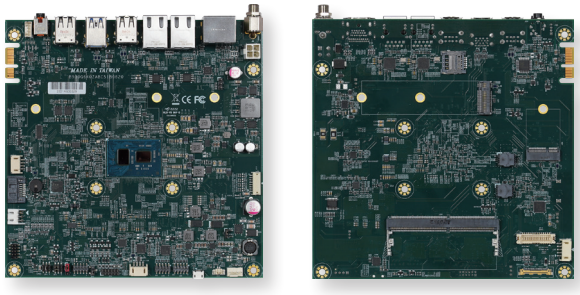


System	
Processor	Intel® 10th Gen Core ™ Processors CPU in LGA1200 package,up to 65W
Chipset	Intel® H420E
BIOS	AMI UEFI BIOS
Memoy	2x 260-pin DDR4 SODIMM sockets supported Data transfer rates up to 2400/2666/2933 MT/s 128GB
Storage	Support 2x 7-pin SATA III port 1x M.2 M key 2280 (PCIe x4,SATA)
H/W Status Monitor	Temperature (CPU & System) Voltage (VCC, VSB, VBAT) CPU Fan Speed
Expansion Interface	1 x PCIe x16 Gen3 slot 1 x M.2 E key 2230 (PCIe x1, USB) 1 x M.2 M key 2280 (PCIe x4, SATA) 1 x PCIe x1 Gold Finger (include 2x PCIe x1 signal, co-lay with M.2 M Key PCIe x4)
I/O Interface	
Serial Port	1x RS-232/422/485 (RJ45 type) on rear I/O
USB	6x USB 3.1 Gen 1 (5Gb/s) on rear I/O 1x USB 2.0 on board pin header
Audio	Realtek® ALC897 HD codec Combo audio jack
Ethernet	1x RJ45 connectors on rear I/O with Intel i225LM 1x RJ45 connectors on rear I/O with Intel i219LM
Display	LVDS: Dual channel 24bit LVDS on board, resolution up to 1920 x1200 DP port on rear I/O, resolution up to 4096×2160 HDMI port on rear I/O, resolution up to 4096×2160
Power Supply Unit	
Power Input	12V DC input or ATX Power input
Mechanical & Environmental	
Operation Temperature	0° C ~ 50° C
Storage Temperature	-20° C ~ 80° C
Dimension	170mm(L) x 170mm(W)

MEDB-51B0

Intel® Elkhart Lake Mini-ITX Medical board

Entry level CPU | PCIe expansion | CE | FC

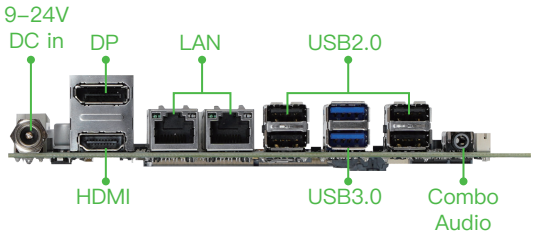


Mini-ITX medical board with Elkhart Lake J6413 processor, HDMI, LVDS, 2x GbE LAN, 6x USB 3.1 Gen1, 2x SATA III, PCIe x16, M.2 E key, M.2 M key, PCIe x1 Gold finger, TPM 2.0

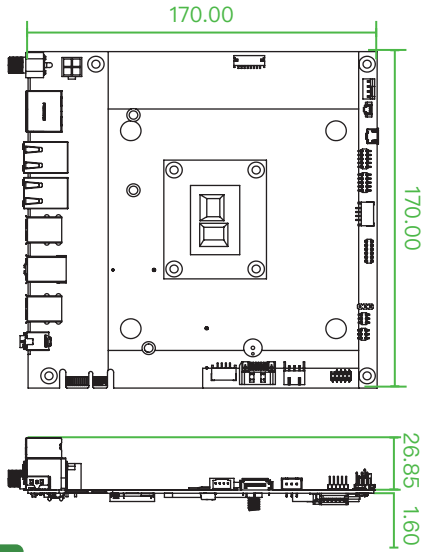
Product Features

- Intel® Celeron® J6413 1.5M Cache, 1.8GHz (3.0GHz)
- Single Channel DDR4 SODIMM up to 32 GB
- 2x Gigabit LAN, 2x USB 3.1 Gen1, 4x USB 2.0, 1x combo audio jack on rear I/O
- 1x M.2 B key 2280, 1x M.2 Key E 2230, PCIe x1 gold finger and 1x SATA III
- Triple display of HDMI/ DP/ LVDS or eDP
- Onboard TPM 2.0

Rear I/O



Mechanical Drawing



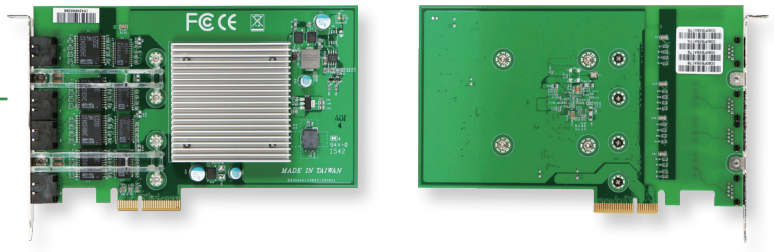
System	
Processor	Intel® Celeron® J6413 1.5M Cache, 1.8GHz (3.0GHz)
BIOS	AMI UEFI BIOS
Memoy	Single Channel DDR4 SODIMM up to 32 GB
Storage	1x M.2 B key 2280 (SATA)
H/W Status Monitor	Temperature (CPU & System) Voltage (VCC, VSB, VBAT) Fan Speed
Expansion Interface	1 x M.2 E key 2230 (PCIex1, USB) 1 x M.2 B key 2280 SATA) 1 x PCIe x1 Gold Finger (2x PCIe x1 signal)
I/O Interface	
Embedded Controller	IT5121
Serial Port	2x RS-232/422/485 on board pin header
USB	2x USB 3.2 Gen 1 (5Gb/s) on rear I/O 4x USB 2.0 on board on rear I/O 2x USB 2.0 on board pin header
Audio	Realtek® ALC897 HD codec Combo audio jack
Ethernet	2x RJ45 connectors on rear I/O with Intel i225LM
Display	LVDS: Dual channel 24bit LVDS on board, resolution up to 1920 x1200 (colay with eDP) eDP:resolution up to 1920 x 1080@60Hz (colay with LVDS) DP port on rear I/O, resolution up to 4096x2160 HDMI port on rear I/O, resolution up to 4096x2160
Power Supply Unit	
Power Input	
Mechanical & Environmental	
Operation Temperature	0° C ~ 50° C
Storage Temperature	-20° C ~ 80° C
Dimension	170mm(L) x 170mm(W)

MEDN-51040

Medical Grade Isolation LAN Card

PCIe expansion

EN 60601-1



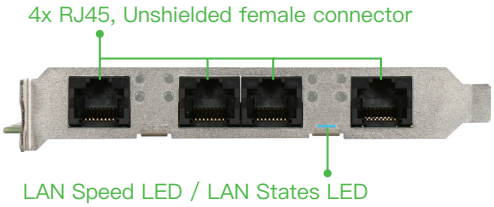
Based on the Intel i350 ethernet controller, MEDWEL medical LAN Card offers full gigabit performance while offering reinforced isolation to meet the needed certification for X-ray application.

Product Features

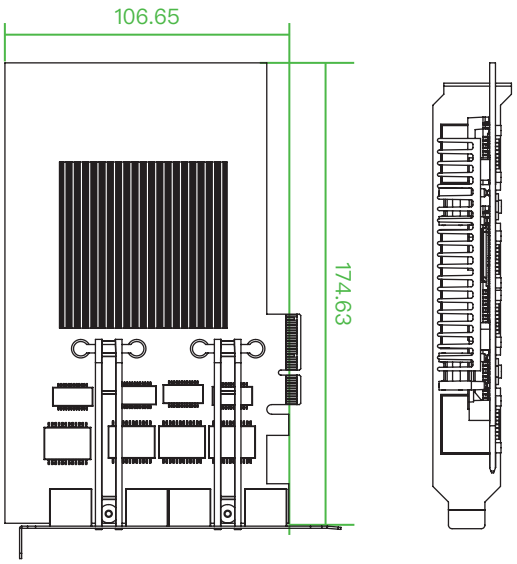
- Medical grade IEC60601-1
- 4 TX and RX queues(per port)
- 1 Gb/s Ethernet IEEE 802.3, 802.3u, 802.3ab PHY specifications compliant
- Network isolator : RJ45 in/out dielectric strength
- Jumbo Frames Support for packets up to 9.5 KB

LAN Card	
OS Support	Windows
LAN Controller	Intel Gigabit Ethernet Controller
Ethernet of Ports	Quad 1GbE Ethernet ports
I/O Interface	
Interconnect	4x RJ45, Unshielded female connecto
Bus Type	x4 lane, operable in x4, x8, x16 slots 2.5 Gbps uni-directional, 5Gbps bi-directional
Mechanical & Environmental	
Operation Temperature	0° C ~ 45° C
Storage Temperature	-20° C ~ 70° C
Dimension	174.625mm(W) X 106.68mm(D)
Miscellaneous	Standard height short card w/ full height bracket
Certification	FCC, CE, IEC/EN 60601-1

Rear I/O



Mechanical Drawing

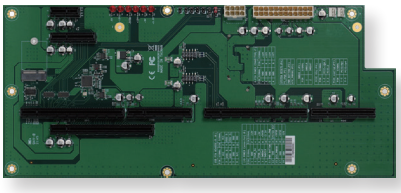


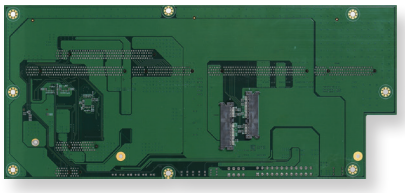
MBPE-1011

PICMG 1.3 Full Size Backplane

PCIe expansion

PICMG





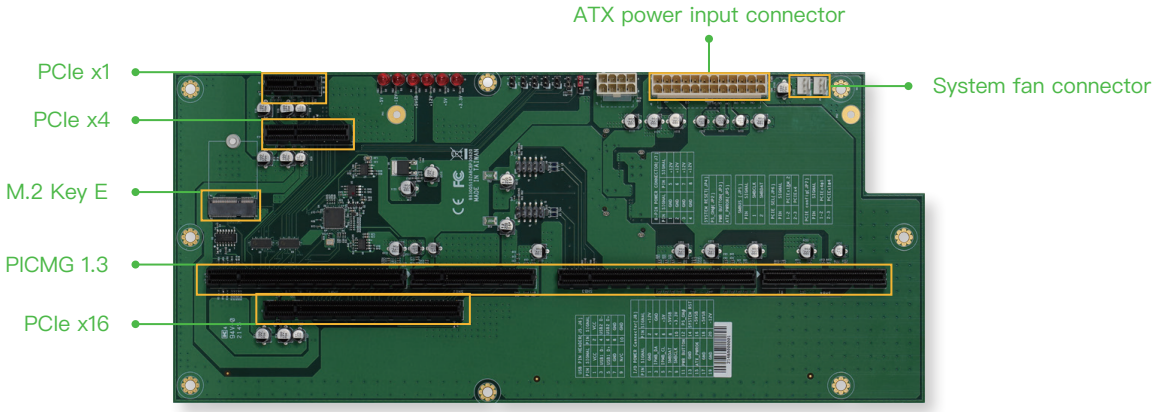
MBPE-1011 is design for full size SBC. It has PCIe x16 supports double width add-on card. PCIe x4 and PCIe x1 can support any other I/O card that customer needs. It also supports 1 x M.2 Key E for wifi module and 2x 2.5”SATA connectors.

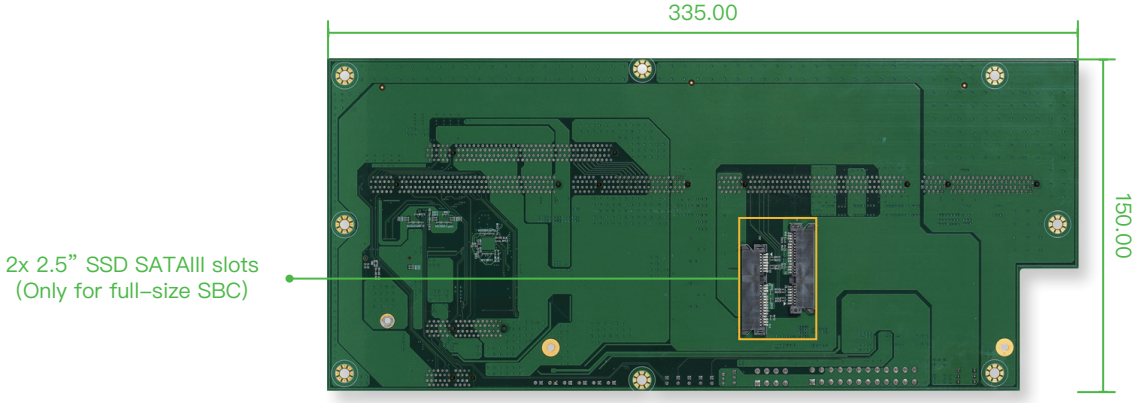
Backplane	
PICMG	PICMG 1.3 for full-size SBC board
PCIe	1x PCIe Gen3 x16 1x PCIe Gen2 x4 1x PCIe Gen1 x1
M.2	M.2 Key E 2230
Fan connector	2x 3 pin Fan connector
Power input	24 pin ATX power input
Storage Temperature	(-) 40˚ C ~ 70˚ C
Dimension	150(W) x 335(L)

Product Features

- Support PICMG1.3 full size board
- PCIe x16 slot support double width add-on card
- Support PCIe x4 full signal or PCIe x4 with x1 signal + PCIe x1 + M.2 Key E
- Support 2x SATAIII connector for 2.5" SSD

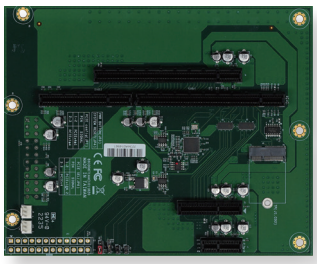
Rear I/O

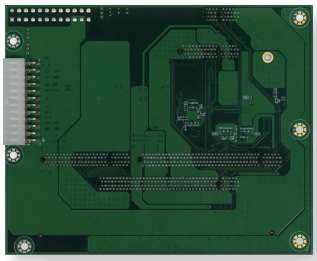




MBPS-1011

PICMG 1.3 Half Size Backplane





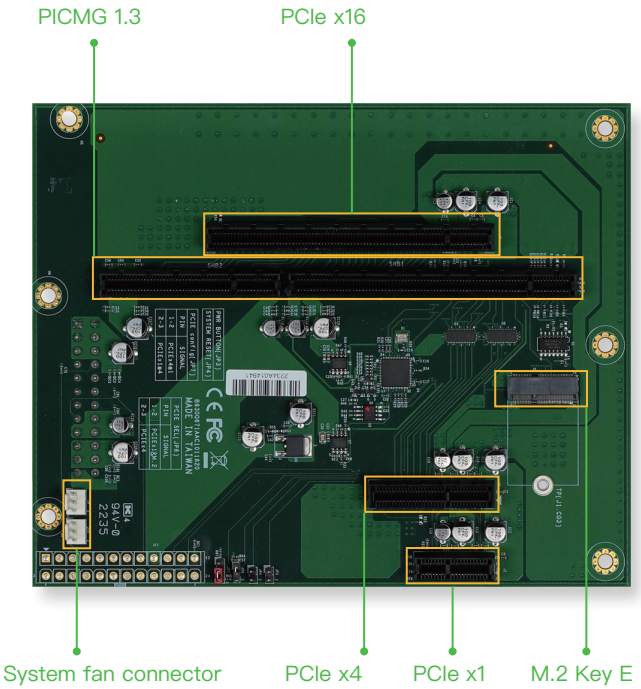
MBPS-1011 is design for half size SBC. It has PCIe x16 supports double width add-on card. PCIe x4 and PCIe x1 can support any other I/O card that customer needs.

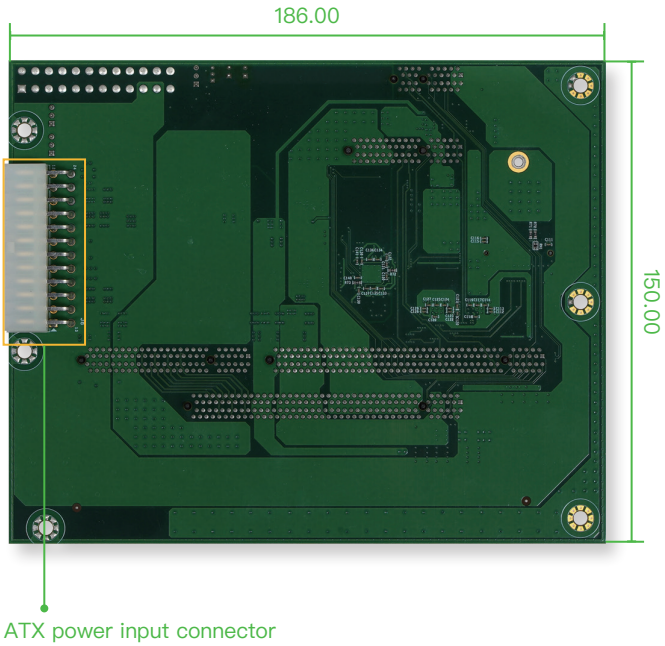
Backplane	
PICMG	PICMG 1.3 for half-size SBC board
PCIe	1x PCIe Gen3 x16 1x PCIe Gen2 x4 1x PCIe Gen1 x1
M.2	M.2 Key E 2230
Fan connector	2x 3 pin Fan connector
Power input	24 pin ATX power input
Storage Temperature	(-) 40˚C ~ 70˚C
Dimension	150(W) x 185(L)

Product Features

- Support PICMG1.3 full size board
- PCIe x16 slot support double width add-on card
- Support PCIe x4 full signal or PCIe x4 with x1 signal + PCIe x1 + M.2 Key E

Rear I/O





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