SHENZHEN ZRT TECHNOLOGY CO., LTD

Empowering Tomorrow’s AI Computing

www.zrt-tech.com

2024.

Company Profile

ZRT 智锐通

Shenzhen ZRT Technology Co., Ltd., founded in 2014, is a nationally recognized high-tech enterprise specializing in research, development, production, and sales.

ZRT remains dedicated on AI healthcare field. The products are centered around AI acceleration and industrial display technologies, with a commitment to research, development, and manufacturing in AI edge integration, medical informationization, components for medical diagnostic equipment, and medical displays. Meantime, ZRT offers full solution for AI scenarios, medical image and video processing, and medical information systems for clients.

Office Location: Shenzhen Bao'an

Annual Value of Production	Production Base	Registered Capital	Cooperative Partners
2.4亿	6000m²	3000万	300+

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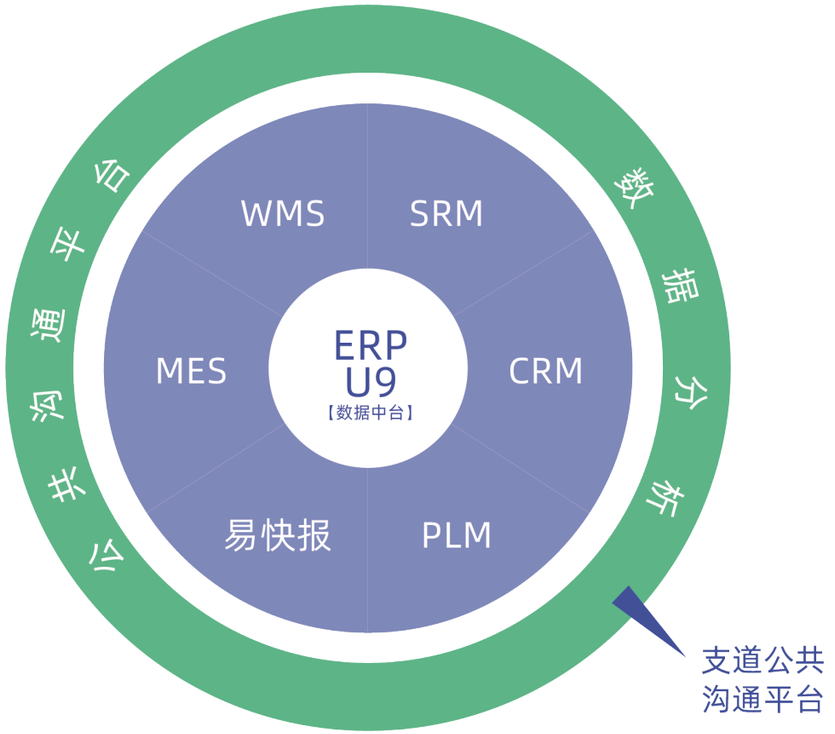
China High-Tech Enterprise



ZRT Management System

Milestones

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2014
- Company established

2015
- Launched server series
- AMD Graphics Card AIB Alliance Member

2016
- Production base established

2017
- Intel IoT Solutions Member

2018
- National High-Tech Enterprise Certification,
- ISO9001, ISO14000 Certification

2019
- Beijing branch
- IoT solution branch

2020
- Taipei and Nanjing branch
- Obtained 50+ core patents
- ISO13485 Certification

2021
- Chengdu branch
- Member of the Shenzhen AI Industry Association
- Member of the Shenzhen High-Tech Industrialization Promotion Association
- Mindray Global Outstanding Partners

2022
- Loongson Ecosystem Partner
- Cambricon Ecosystem Partner
- “Technological Advancement Enterprise”prize by SZ government
- “Best Growth Award of the Year” from Intel IoT

2023
- Brand upgraded
- Selected into “Specialized and Special New” enterprise list.
- 2023 China Intelligent Transportation Technology Innovation Award
- Company moved to self-owned office of 1300㎡.

R&D Capability

ZRT智锐通

17 M RMB
R&D investment

50+
R&D Stuff

20 Million RMB
Electronic Signal and EMC Testing Center

200+
R&D Equipment

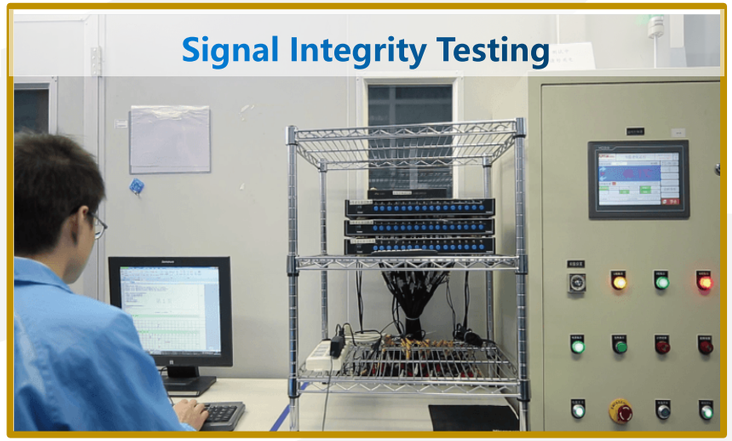
ZRT has consistently prioritized design, research and development, technological innovation, and quality as the core competencies of its brand.

81	19	59	12
Software copyright	Design Patent	Utility Model	Invention Patent

R&D Capability

Over the years, ZRT has gradually improved a set of R&D process management system called the **"PLM system"**. Through the PLM system, project requirements, task assignments, personnel scheduling, resource allocation, design and coding management, testing control, document management, quality management, and product lifecycle management are unified and controlled. This ensures smooth project progress and high-quality delivery.

Every ZRT product must undergo rigorous testing by professional DQE quality engineers before being launched into the market. The company closely monitors the quality feedback of products launched in the market to ensure that product quality, reliability, and durability reach the highest standards. With a commitment to excellence, ZRT strives to accelerate industrial upgrading in China and promote the new “smart manufacturing” in China.



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计算机软件著作权登记证书
软件名称：定时截图软件 V1.0
著作权人：深圳智锐通科技有限公司
开发完成日期：2017年06月09日
首次发表日期：2017年10月24日
权利取得方式：原始取得
权利范围：全部权利
登记号：2018SR121718
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No. 0239718


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著作权人：深圳智锐通科技有限公司
开发完成日期：2017年06月09日
首次发表日期：2017年08月17日
权利取得方式：原始取得
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登记号：2018SR121799
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No. 0239719


发明专利证书
发明名称：一种基于图像处理的列车前方异物入侵检测方法及系统
发明人：陈小红;李慧
专利号：ZL 2020 1 0461025.7
专利申请日：2020年05月27日
专利权人：深圳智锐通科技有限公司
授权公告日：2021年07月06日
授权公告号：CN 111626207 B
局长 申长雨


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外观设计专利证书
局长 申长雨


实用新型专利证书
局长 申长雨


外观设计专利证书
外观设计名称：GPU服务器机箱（1001）
设计人：张磊;邹波
专利号：ZL 2017 3 0260496.0
专利申请日：2017年06月22日
专利权人：深圳智锐通科技有限公司
授权公告日：2018年03月06日
局长 申长雨


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√ 81 Software Copyright

√ 19 Design Patent

√ 59 Utility Model

√ 12 Invention Patent

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Manufacturing Equipment

1	3 Panasonic NPM-D3 dual track SMT lines
2	Dual-track asynchronous speed-adjustable 12-zone nitrogen reflow oven
3	Dual-track Online SPI and Dual-track Online AOI
4	3D X-Ray testing, X-Ray automatic feeder
5	Automatic First Article Inspection Machine
6	SMT Automatic Measurement and Feeding Machine
7	60m² temperature-controlled aging room
8	Temperature and humidity chamber, thermal shock chamber, vibration table, drop tester...
9	260+ test accessorial tool
10	2 assembly lines + 3 testing lines + 1 final assembly line

ZRT's wholly-owned modern factory is dedicated to providing manufacturing solutions for industrial, medical, and military products, covering an area of 6000m². The core philosophy of the factory is to focus on serving specialized clients, aiming to become a small yet sophisticated intelligent manufacturing center. Our manufacturing center boasts complete production lines from industrial boards to finished products, as well as technologically advanced electronic production workshops, structural assembly workshops, and packaging workshops.

500,000pcs
Annual output

6000㎡
Production base

100+sets
Modern equipment

By employing advanced SRM, ERP, and WMS systems, ZRT have established an efficient, flexible, and reliable supply chain management system, enabling real-time monitoring and management of production plans, material schedules, and production processes. This places ZRT at the forefront of the industry.

- **CCC** certification,
- **ISO 9001** Quality Management System Certification
- **ISO 14001** Environmental Management System Certification
- **ISO 13485** Medical Device Quality Management System Certification,
- **OHSAS18001** (Occupational Health and Safety Assessment Series 18001)
- **GJB9001C-2017** Quality Management System for Military Industry.
- …

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Company Honors

- National High-Tech Enterprise Certification
- SZ“Specialized and Special New” enterprise
- 2022 Intel IoT “Best Growth Award of the Year”
- 2023 China Intelligent Transportation Technology Innovation Award
- Technological Advancement Enterprise Award
- Contract-abiding and Credit-worthy Enterprise Award
- Mindray Global Excellent Partner Award
- Jusha Medical Core Supplier Certification
- Top 10 Best Industrial Electronics and Intelligent Factory Technology and Solution Providers of 2018

Ecosystem Partner Projects

- Intel® Partner Alliance Titanium Member
- Loongson Eco Partner
- Cambricon Eco Partner
- Phytium Eco Partner

Company honor

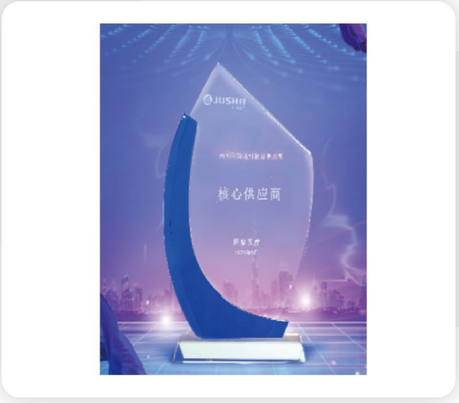
Intel® Partner Alliance Titanium Member

Mindray Global Excellent Partner Award

Shenzhen Technological Advanced Enterprise

2022 Intel IoT Best Growth Award of the Year

Innovative AI Products Award



Jusha Medical Core Supplier

Intel Global Best Potential Award

Best AI Technology Solution Award

Cooperative partners

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AMD
百度阿波罗
大为医疗
登临科技
飞腾
开立
康冠科技
卡本医疗
蓝影
迈瑞
飞依诺
华声
华大智造
寒武纪
巨鲨医疗
迈瑞动物医疗
视源电子科技
声泰特医疗
芯瞳半导体
希孚
巨烽
巨潮
驾考宝典
金山科技
京东方科技
祥生医疗
中旗
中国中车
英特尔
英伟达

PRODUCT INTRODUCTION

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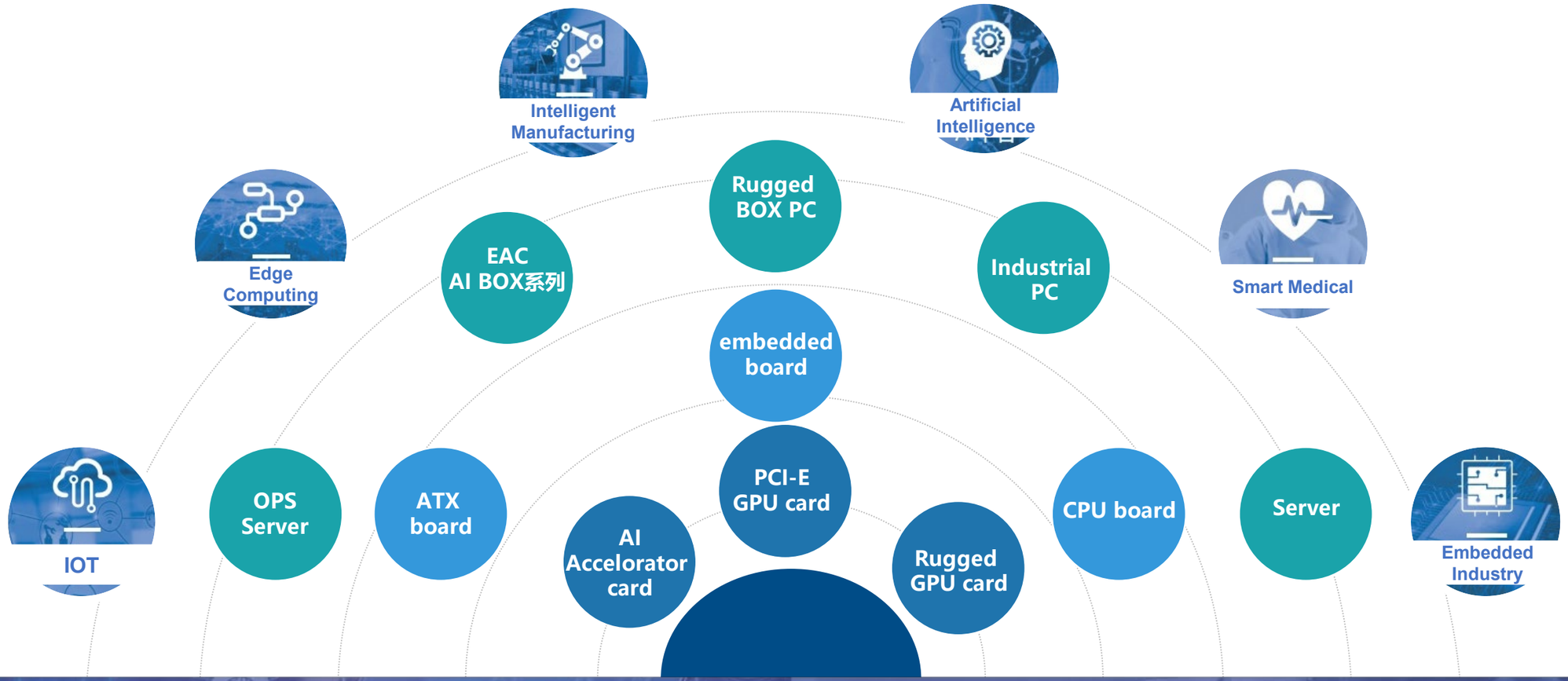
Product Range



Focusing on AI acceleration and industrial display technologies, developing a complete product portfolio of ZRT

Product Introduction

---Medical All In One PC

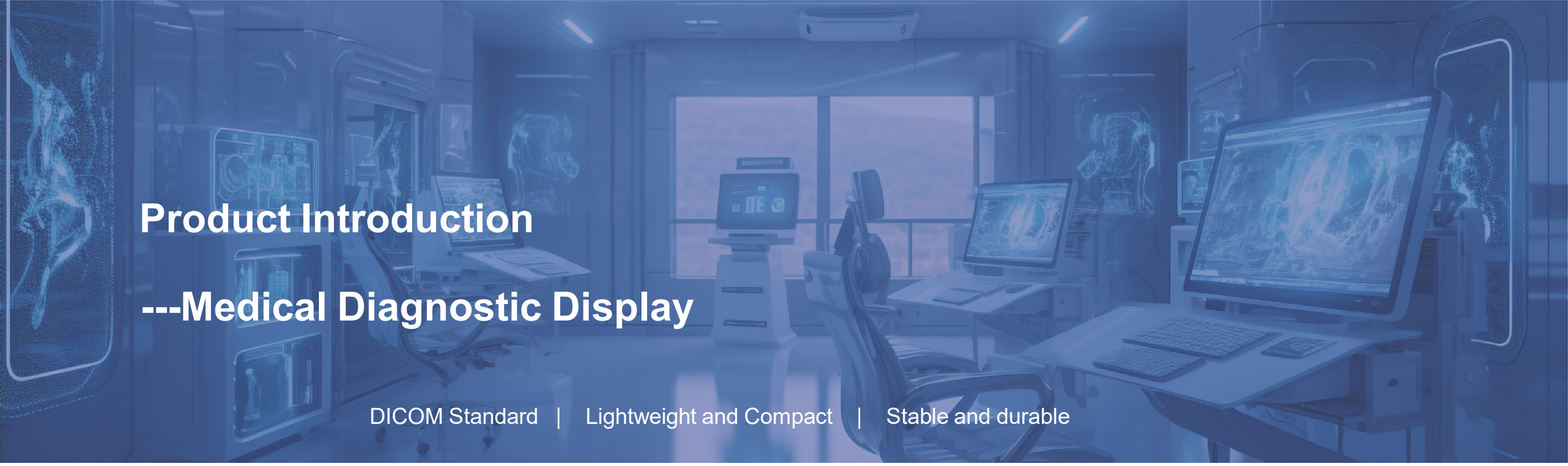
high computing power | lightweight and compact | stable and durable

Medical Client: MSC-2201

- Intel Gen.11 Core Tiger Lake- Platform, support Core i5/i7/i9, support up to 64GB DDR4 SO-DIMM,
- Support dual hard disk, M.2 NVME system disk and 2.5”HDD,
- Dust and water resistance up to IPX2, with IP65 panel rating; alcohol wipe disinfection compatible
- 23.8 inch FHD 1920 x 1080 display with 400 nits high contrast
- Capacitive multi-touch screen design for ease of use by medical personnel
- Support 4G/5G IoT module design
- DICOM one-key calibration/office mode switching supported
- Built-in wireless module, Bluetooth module, 800W pixel camera; optional infrared scanner head

Medical Client: MSC-2202

- Intel Gen.11 Core Tiger Lake- Platform, support Core i5/i7/i9, support up to 64GB DDR4 SO-DIMM,
- Support dual hard disk, M.2 NVME system disk and 2.5”HDD,
- Dust and water resistance up to IPX2, with IP65 panel rating; alcohol wipe disinfection compatible
- 21.5-inch FHD 1920 x 1080 display with 400 nits high contrast
- Capacitive multi-touch screen design for ease of use by medical personnel
- Support 4G/5G IoT module design
- DICOM one-key calibration/office mode switching supported
- Built-in wireless module, Bluetooth module, 800W pixel camera; optional infrared scanner head



Product Introduction

---Medical Diagnostic Display

DICOM Standard | Lightweight and Compact | Stable and durable

■ Backlight Stability System

Integrated backlight sensor continuously monitors backlight brightness, enabling quick brightness attainment upon startup

■ Continuous Quality Assurance System

Front-integrated sensors monitor and calibrate grayscale and color on the screen, ensuring continuous automatic assurance of medical image display accuracy and centralized management of platform systems

■ Environmental Brightness Adaptive

Front-integrated brightness sensor continuously monitors environmental brightness, automatically adjusting screen brightness

■ Compliant with DICOM International Standards

■ Split-Screen Independent GAMMA

Split-screen independent GAMMA adjusts brightness separately for different display objects

■ Main Screen Brightness Adaptation

Automatically reduces the brightness of surrounding devices when doctors observe the main screen

■ Low Blue Light Technology

■ Brightness Uniformity Technology

helps balance brightness and color temperature fluctuations in different areas of the screen

Product Introduction

---AI Edge Embedded PC

Modular design | Ultra mini size & Excellent heat dissipation | Stable and extendable

AI Edge Box PC：MIN-EC09A

- Designed for medical digital imaging scenarios
- Supports Intel Coffee Lake S series platforms
- Dual channel DDR4 up to 64GB
- Supports MXM graphics card
- Supports 2 Ethernet, 6 USB2.0, 6 USB3.0, and 6 serial ports
- 1*4-PIN phoenix terminal input (19/24V), 1*2-PIN 12V power output (12V-24V)
- Dimensions: 282*208*80mm

AI Edge Box PC：MIN-EC10

- Designed for medical digital imaging scenarios
- Supports Intel Tiger Lake-H series platforms
- Supports LVDS + DP/HDMI dual display, eDP integrated display output
- Dual channel DDR4 up to 64GB
- Supports dual M.2 SSD
- Supports 4G/5G IOT module
- Supports MXM independent graphics card for easy replacement
- Onboard 2 ethernet ports, 1 PCIE x 4 slot
- Dimension: 260*210*90mm

Product introduction

AI Edge Box PC: EAC-CC02-C00

- Based on Intel Q170 platform
- Support Intel Core 6/7/8/9th Gen i3/i5/i7 CPU
- 2*SO – DIMM slot, support up to 64G RAM
- Support integrated display HDMI + DP
- Support independent display 3*DP + 1*HDMI, support up to 4 display
- 6*USB3.0 + 2*USB2.0
- Support MXM3.1 (type A/B)
- Support 9~48V wide voltage input
- Working temperature -10~50℃

AI Edge Box PC: EAC-Z01-A

- Support Intel Coffee Lake-H series CPU
- One-key restore and one-key screen-off button
- Support MXM graphics card, DP + HDMI dual independent display
- Support 1080P/60fpS, dual HDMI IN video capture, support HDMI 1080P/60fpS loop output
- Suitable for image acquisition devices for medical equipment such as endoscopes, angiography machines, and ultrasound

AI Edge Box PC: MIN-EC07

- High-performance video image recognition small edge box pc,
- Based on NVIDIA Jetson Xavier NX core module
- Powerful processing capabilities
- Rugged design, meeting safety certifications
- Modular design, configurable based on actual requirements
- Suitable for portable and smart medical scenarios.

AI Edge Box PC: MIN-EC11

- Designed for multiple industrial pc scenarios,
- Support Intel Tiger Lake-H CPU
- Onboard LVDS + DP/HDMI dual display, eDP integrated display
- Dual channel DDR4 RAM up to 64GB
- Support dual M.2 SSD
- Support 4G/5G IOT module
- Support MXM graphics card
- Onboard dual ethernet, 1*PCIE x 4 slot
- Dimensions: 260*210*90mm

Product Introduction

---AI Modular Core Board

Modular design | Ultra mini size | Stable and extendable | Long life support

Modular Core Board: ECM-6401

- COM Express Type 7 core board
- Intel Xeon D-1500 series, D1508 for default
- Support 2*DDR4 SO-DIMM, up to 128G/3200Mhz
- Support 2*SATA3.0
- Support 2*10G Base-KR port
- Support 4*USB3.0, 4*USB2.0
- Support 1 PCIe4.0 x 16, 1 PCIe3.0 x 8, 7 PCIe3.0 x 1
- Dimension: 125*95mm

Modular Core Board: ECM-6103

- COM Express Type 6 core board
- Intel Tiger Lake-H series CPU, i7-11850H for default
- Support 2*DDR4 SO-DIMM, up to 64G
- Support4 SATA3.0
- Support 5 display ports, 3 x DDI can be configured to HDMI/DP，
- 1 x DDI for VGA, 1 x EDP to LVDS can be configured to EDP
- Support 4*USB3.2, 8*USB2.0
- 1 PCIe4.0 x 16, can be configured to 1 x 16 , 2 x 8 , 1 x 8 + 2 x 4 ，
- 8 PCIe3.0 x 1, can be configured to x 4 or x 2
- Dimension: 125*95mm

Product introduction

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Modular Core Board：ECM-H301

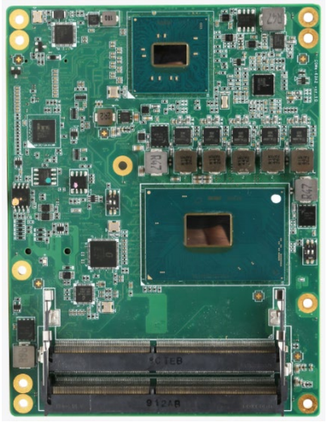
- COM-HPC protocol core board (Client Type)
- Intel Alder Lake-S platform CPU
- Up to 16 cores, 24 thread, TDP 65W
- Dual channel DDR5 SO-DIMM up to 128GB
- 1 PCIe Gen5 x 16， 1 PCIe Gen4 x 4, 10 PCIe Gen3 x 1
- Working temperature -20~70℃

Modular Core Board：ECM-TGL6U2

- COM Express Type 6 core board
- Intel Tiger Lake-U CPU
- Support 2*DDR4 SO-DIMM, up to 64G
- Low power consumption up to 28W
- 2 x PCIe 4x， 1 x PCIe 1x,
- Working temperature -20~70℃

SMARC Core Board：EZT-E3950A

- Low power consumption Intel Atom x7 E3950 CPU
- Dual channel onboard LPDDR4 up to 8G
- 3 display, supporting 4K/2K HD display
- Onbaord 64GB EMMC, support 1 SATA3.0
- Internal dual Ethernet port, 6 * USB
- PCIE2.0 x 4, USB3.0 x 2, USB2.0 x 4



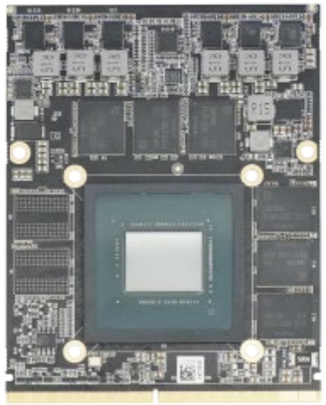
Modular Core Board ： ECM-SKY6H1

- COM Express Type 6 core board
- Intel Skylake Lake-H CPU
- Dual channel onboard LPDDR4 up to 8G
- 4 x SATA 3.0
- 3 display, supporting 4K/2K HD display
- USB3.0 x 4, USB2.0 x 8
- 1 x PCIe 16x, 8 x PCIe 8x

Product Introduction

---Industrial Graphics Card

High computational power | Embedded design | High Scalability | Long life support



MXM GPU Card： MMR3500B6-12G

- NVIDIA Quadro RTX3500 Mobility
- 12G 192bit GDDR6
- Single-Precision 23235 GFLOPS
- Power consumption 110W
- MXM3 .1 / up to PCI Express 4.0
- Type B (105 x 82mm)

MXM GPU Card：MMA4500A6-16G

- NVIDIA Quadro A4500 Mobility
- 16G 256bit GDDR6
- Single-Precision 19352 GFLOPS
- Power consumption 130W
- MXM3 .1 / up to PCI Express 4.0
- Type B (105 x 82mm)

Product introduction

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MXM GPU Card：MM3080TIB6-16G

- NVIDIA GeForce RTX3080Ti Mobility
- 16G 256bit GDDR6
- Single-precision 19954 GFLOPS
- Power consumption 160W
- MXM3 .1 / up to PCI Express 4.0
- Type B (105 x 82mm)

PCIE GPU Card ： RTX3080 10GD6 3DH

- NVIDIA GeForce RTX 3080
- 10G 320bit GDDR6
- Single-precision 13589 GFLOPS
- Power consumption 320W
- PCI-Express 4.0 16x
- ATX/2 Slot (285*112*37mm)

MXM GPU Card：MM3080B6-16G

- NVIDIA GeForce RTX3080 Mobility
- 16G 256bit GDDR6
- Single-precision 17525 GFLOPS
- Power consumption 135W
- MXM3 .1 / up to PCI Express 4.0
- Type B (105 x 82mm)

PCIE GPU Card：A380 6GD6 4H

- Intel Arc A380
- 6G 96bit GDDR6
- Single-precision 3966 GFLOPS
- 显卡功耗 45W
- PCI-Express 4.0 16 x (by 8x)
- SFF/2 Slot (169*70*37mm)

Product Introduction

---Industrial Motherboard

Compact design | | High Scalability | Long life support

Motherboard with MXM Socket: EMA-7103

- Intel Tiger Lake-H series high performance CPU
- Support LVDS + DP/HDMI independent display, eDP integrated display
- Dual channel DDR4 up to 64GB
- Dual M.2 SSD
- Support 4G/5G IoT module
- Support MXM GPU module
- Onboard 2 Ethernet, 1 PCIE x 4 slot
- 170*170mm

Motherboard with MXM Socket: EMA-7303

- Intel Alder Lake S series CPU
- Dual channel DDR5 SO-DIMM up to 128G
- Support 4G/5G IoT module
- Support up to 7 display output
- Support MXM independent GPU card
- Working Temp. -10~60℃

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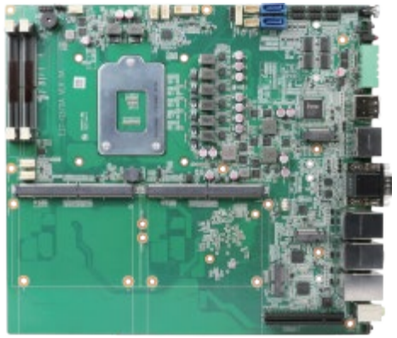
Motherboard with MXM Slot: EMA-7102

- Intel Coffee Lake-H series CPU
- Support LVDS + DP/HDMI independent display, EDP integrated display
- Dual channel DDR4 up to 64GB
- Support dual M.2 SSD
- Onboard dual Ethernet, support 4G/5G IoT module
- Support MXM independent graphics card
- Support reset button, screen-off button
- 170*170mm

Motherboard with 2 MXM Slots: EZT-Q370A



- Support Gen. 8th/9th Intel Coffee lake S CPU
- Dual channel DDR4 up to 64GB
- Onboard 2 MXM slots, each supporting PCIe 8x
- Support 3 x 10/100/1000Mbps self-adapting ethernet
- Support 6 x USB3.0, 3 x DP, 1 x HDMI
- DC 24V input

带MXM主板：ITX-71101

- 基于 Intel Skylake 平台
- 标配 I7-6700HQ 低功耗系列处理器
- 双通道 DDR4 内存设计，最大支持 32GB
- 支持 3 显输出，带 EDP 输出端口，带侧扩 PCIE * 4 插槽
- MXM 标准接口，支持 Type A/B 板型显卡
- 工作温度支持 -20 - 50℃

带MXM主板：MBC-11001

- 基于 Intel Skylake/Kabylake
- 支持 Intel Core 6/7/8/9th Gen i3/i5/i7 CPU
- 双通道 DDR4 内存设计，最大支持 64GB
- 集显最大同时支持 3 显，独显最大同时支持 4 显
- MXM3.0 标准接口，支持 Type A/B 板型显卡
- 支持 9~48V 宽压输入，支持车载应用、ACC 和 ITPS

Application Cases

www.zrt-tech.com

ZRT 智锐通

- **Portable Ultrasound Equipment**

SMARC Core Module

- E3950 4 Core 1.6GHZ CPU
- SMARC protocol with compact size
- Low power consumption supporting wide voltage input
- Onboard 4G RAM and 64G/32G storage
- Size: 82x50mm

ZRT 智锐通

- **Ultrasound Equipment**

COMe Core Module + MXM GPU Module

+

- CPU + GPU dual modular design
- COM Express Type 6 board
- Multiple display output
- High speed USB3.1, SATAIII PEG/PCIe Gen.3 scalable I/Os.
- Excellent computational and graphics performance

ZRT 智锐通

- **Endoscope Equipment**

AI Box PC with MXM GPU Module

+

+

- CPU + GPU dual modular design
- SDI high definition gathering module
- Multiple display output,
  video resolution ≥1920×1080
- High speed USB3.1, SATAIII PEG/PCIe Gen.3 scalable I/Os.
- Excellent computational and graphics performance

ZRT 智锐通

- **Medical Monitor Equipment**

AI Box PC with SMARC Core Module or COMe Core Module

- SMARC2.0 & SMARC2.1 compatible module
- Triple display, resolution up to 4K2K (DP++, HDMI, LVDS/eDP)
- Dual channel LPDDR4 up to 8G, support IBECC
- Multiple I/O: PCIe（gen2）, USB3.2（Gen2）, USB2.0, SATA
- Onboard EMMC up to 64GB

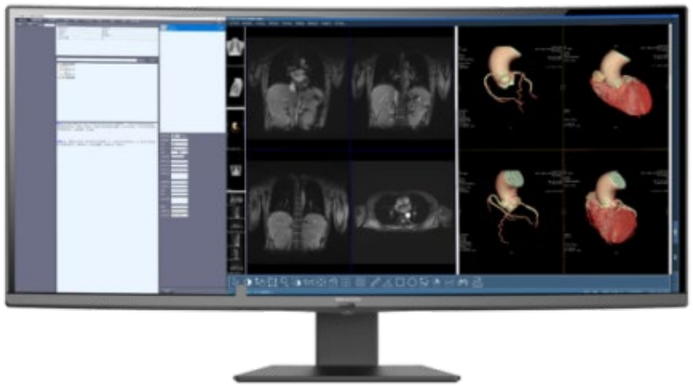
- COMe Express Type 10 Core Board

- 3.5 inch Motherboard

- AI Medical Box

ZRT 智锐通

- **Medical Display Application**



AI Box PC with COMe Core Module and MXM GPU Module

- Ultra slim designed motherboard
- Intel® 11 Gen. Tiger Lake-H platform CPU, Intel QM580 chipset
- 1*DP supporting 4096*2160@60hz, 1* HDMI supporting 3840*2160@30Hz
- Dual channel DDR4 RAM up to 64GB
- Working Temp. -20~70℃
- mini ITX form factor size at 170x170 mm

- MXM GPU Module

- AI Box PC

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- **CT & DR Equipment**

Medical Panel PC, 4U Rackmount PC, Wall Mounting PC, AI Box

- Medical Panel PC

- 4U Rackmount PC

- Wall Mounting PC

- AI Box PC

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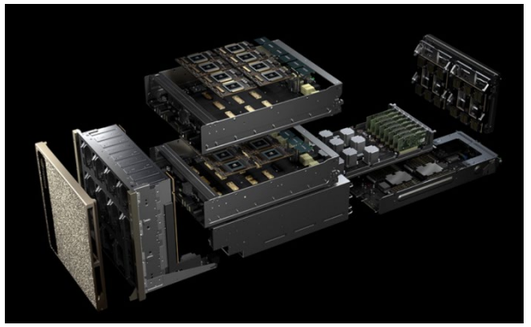
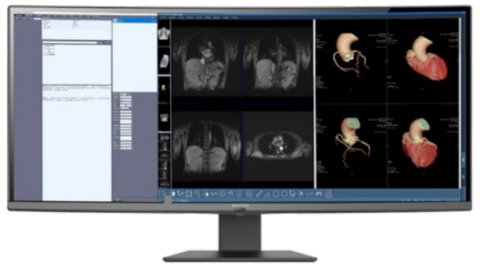
- **Proton and Heavy Ion Radiation Therapy Equipment**

PXIe and AI Server

- PXIe



- AI Server



- Medical Display

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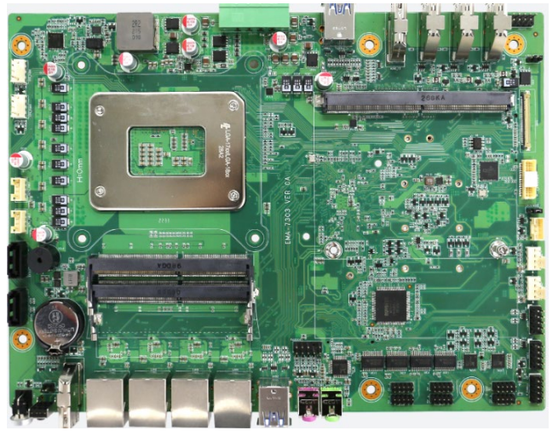
- **Surgical Robot**

Embedded M0otherboard



- CPU+GPU modular design
- SDI HD gathering module
- Multiple display port
- Multiple high speed I/Os and USB 3.1, SATAIII and PEG/PCIe gen3
- Excellent computational and graphics performance

THANKS

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