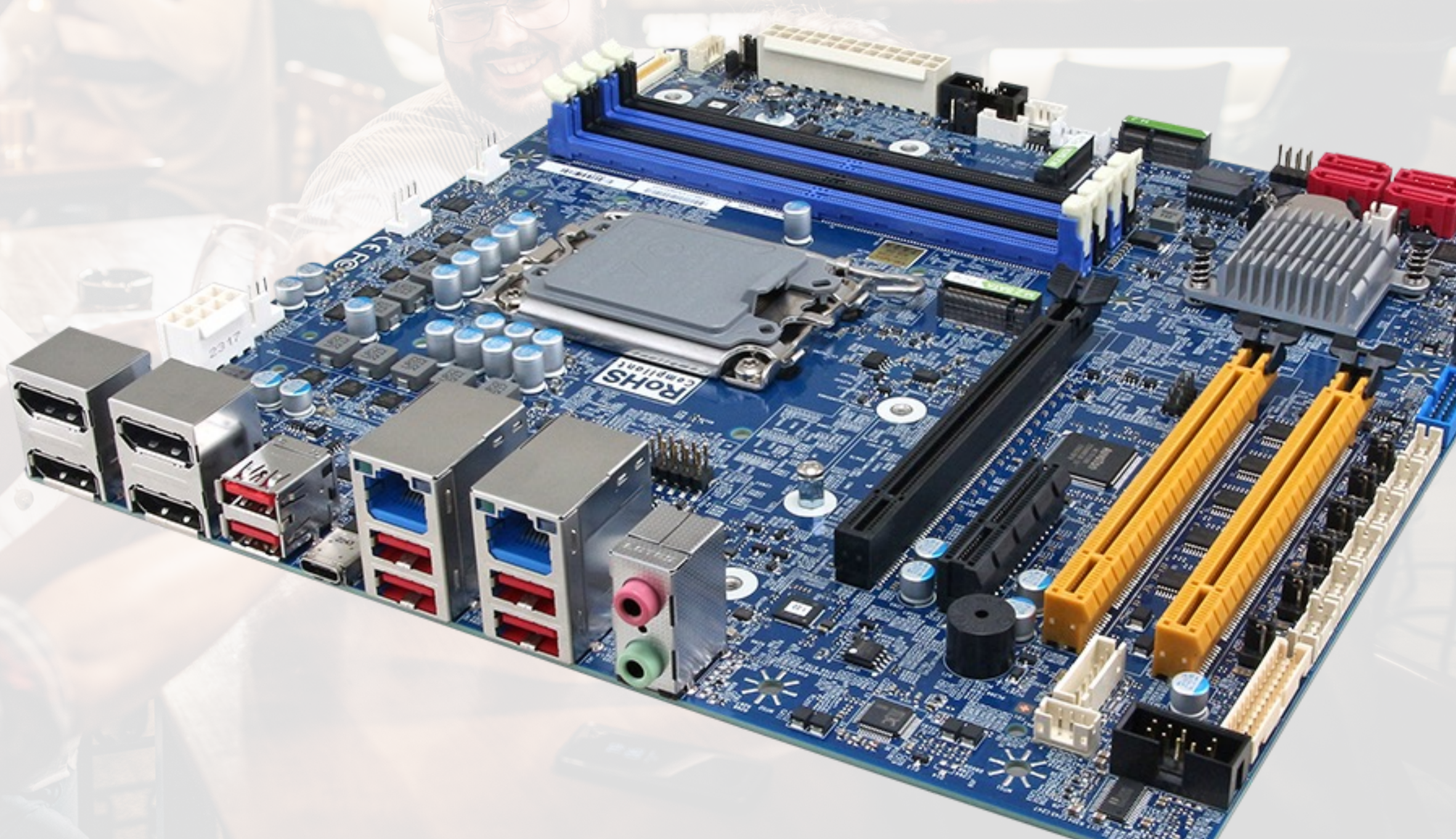


**Intelligent Computing
at the Edge:
SBC and
Box PC
Innovations**



BOX COMPUTING SYSTEMS

The compact and integrated platform offers fast time-to-market solutions with reliable and rugged designs. Providing certified, robust, industrial-grade computing solutions for mission-critical applications.



Compact Computing

Rugged, fully integrated and ultra-thin platform. With easy to set up, the highly expandable I/O interfaces, and high-speed connectivity designs, it is ideal for IoT applications.



Modular Computing

Avalue's Intelligent Expansion Technology module makes I/O customization faster and more flexible. Choose the IET module that best fits your application, making for an easy quick-turn prototype



Rackmount

The Avalue industrial rackmount PC's are available in 1U~4U rackmount sizes and are exceptionally robust and versatile capable to meet the most demanding specifications with maximum performance



ARM-based

ARM based System series is a strong performance in a low power that specification for industrial applications.



Expandable Computing

The expandable slot PC allows users to add 3rd party I/O to support PCI or PCIe expansion. Provides high performance computing capability in machine vision, motion control, and industrial automation applications



Barebones

With a highly integrated industrial chassis and the latest Intel platform mini-ITX boards, the barebone system offers excellent expandability, product longevity, and full customization services



Transportation

Designed for vehicle, public transportation, and marine. Provide a highly efficient solution with low power consumption and is able to transmit massive data at high speed with low latency. Industrial-grade platform boosts security and stability for real-time transportation management



Edge AI

With high performance and end-to-end connectivity, Avalue Edge AI System makes customers' solutions intelligent and efficiently connect the market.

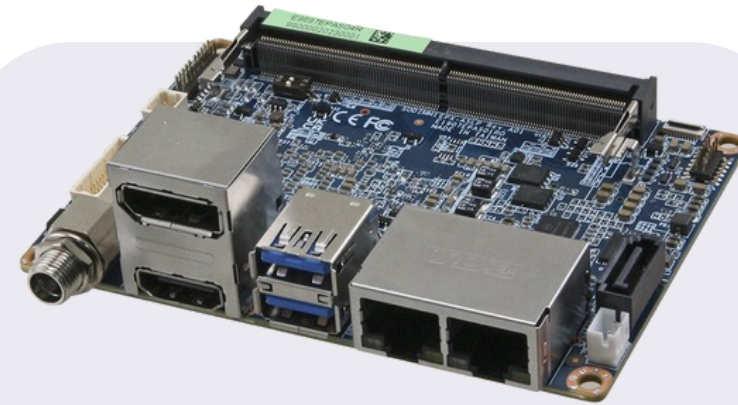
INDUSTRIAL AND EMBEDDED MOTHERBOARDS

Avalue's Industrial & Embedded Motherboard series offers a wide range of popular form factors. This includes 3.5" single board computers, Pico-ITX, Thin Mini-ITX, Mini-ITX, Micro ATX, ATX, and ARM-based embedded boards, designed to meet diverse industrial and embedded computing needs.



1.8" SBC

1.8" SBC embedded motherboard is designed for various applications with wide temperature range and low power consumption, effectively meeting customers' requirements.



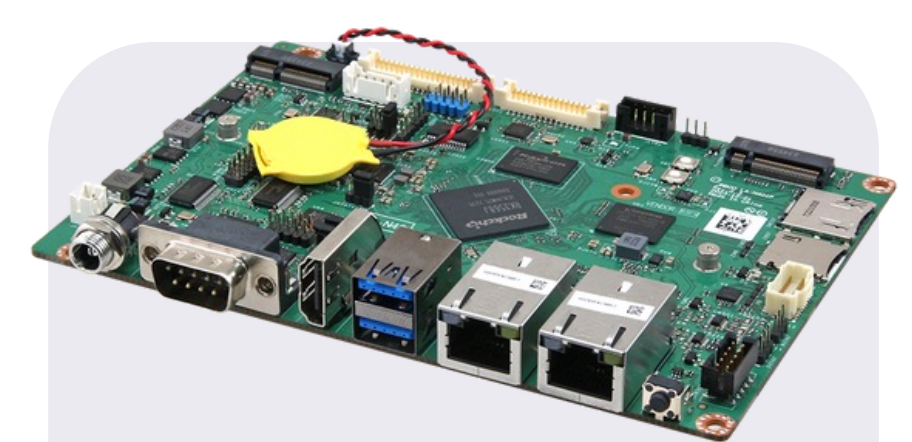
2.5" SBC Pico-ITX

Pico-ITX, a small embedded Single Board Computer (SBC) at 100x72 mm, supports low power consumption and fanless operation, seamlessly integrated for compact embedded applications.



3.5" SBC

3.5" SBC embedded motherboards offer wide temperature and voltage ranges, low power consumption, and features to meet the needs of diverse applications.



ARM-based SBC

Based on embedded ARM processor, ARM-based SBCs meet the needs for power and performance optimization, including single board computers, panel PCs, box computers, and RISC design support services.



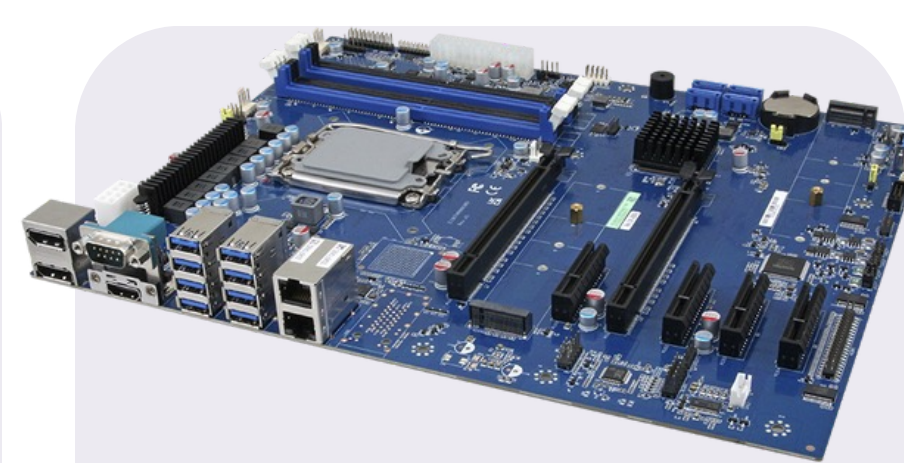
Mini-ITX

Ideal for various embedded solutions, Mini-ITX industrial motherboards are well suited for low-power, versatile applications.



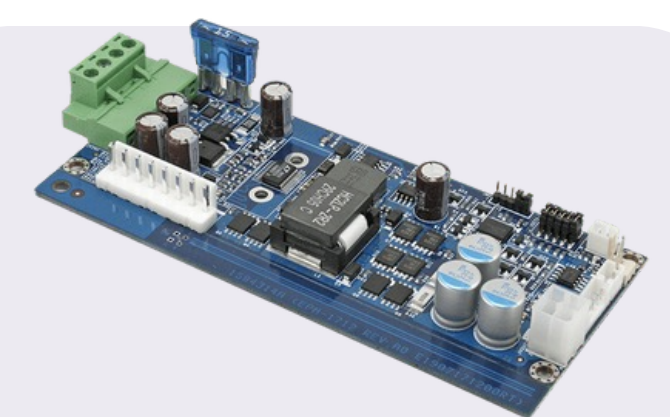
Micro-ITX

Micro ATX are compatible-sized embedded computer boards, ideal for cost-sensitive applications, providing customers with fast, convenient, and simplified solutions.



ATX

ATX industrial motherboard offers high computing capability and rich I/O integration, providing an optimal embedded platform for various applications.



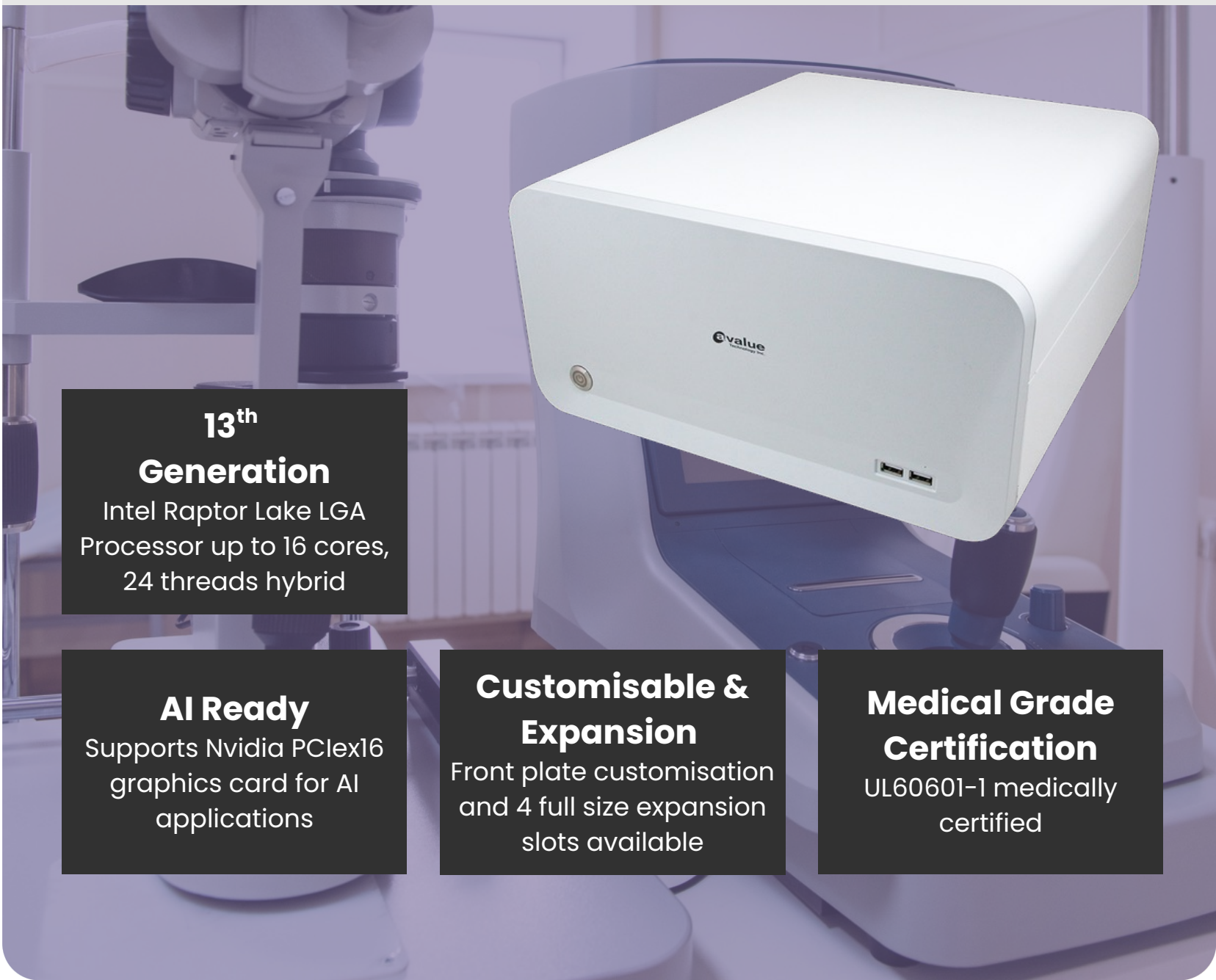
Embedded Peripheral

High-quality embedded peripherals, including power boards, display boards, and I/O communication interfaces, enable customers to build easy-to-use computing systems.

MEDICAL SOLUTIONS

Our Intel® Processor Medical Panel PCs deliver reliable, high-performance computing for healthcare. With front IP65-rated displays and AI-enabled design, they support telehealth, diagnostics, and real-time decisions. Powered by 12th/13th Gen Intel® Core™ processors, they offer mobility, connectivity, and hygiene—ideal for bedside care, mobile workstations, and patient-centred medical environments.

Medical Grade BOX PC ~ MAB series



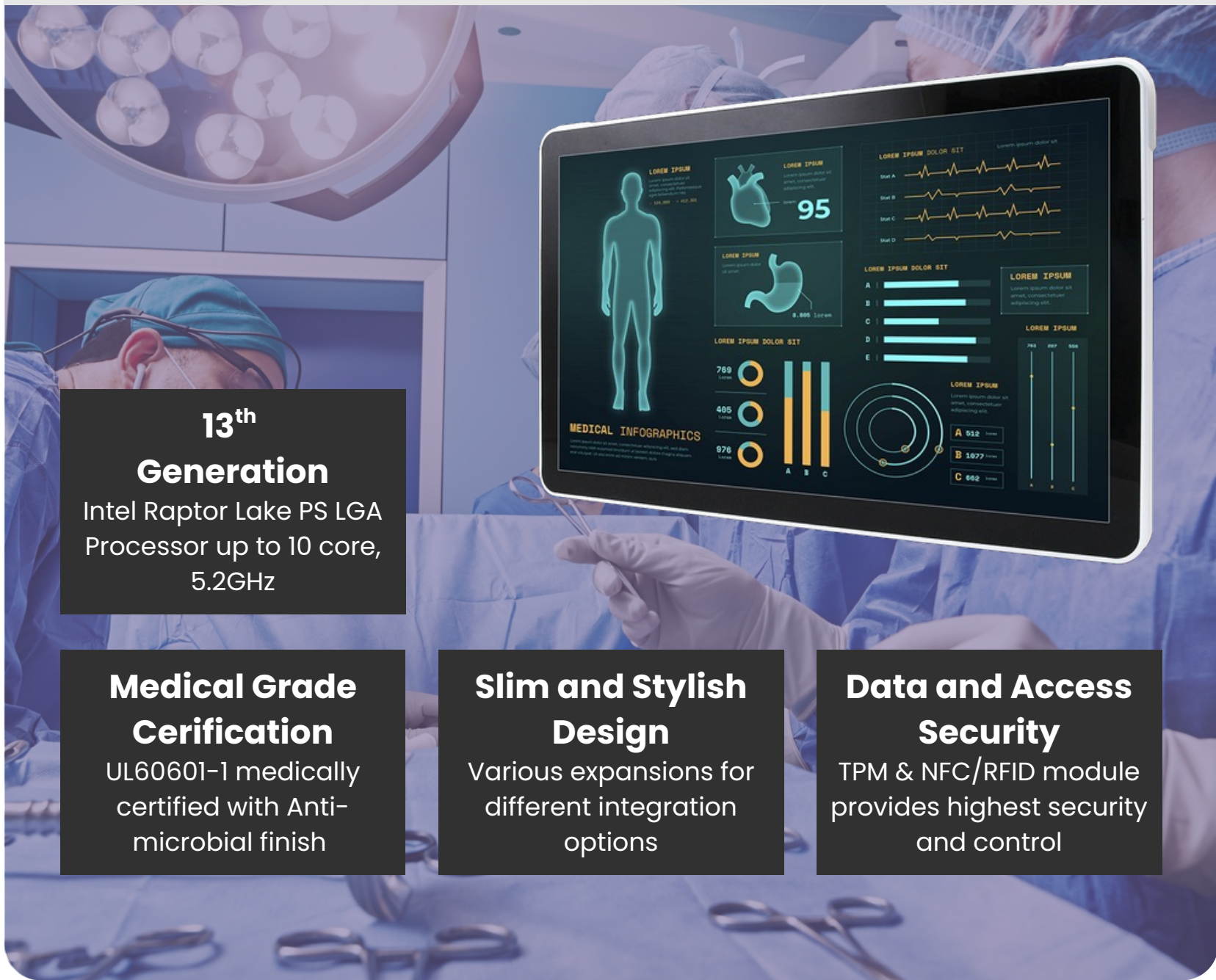
13th Generation
Intel Raptor Lake LGA Processor up to 16 cores, 24 threads hybrid

AI Ready
Supports Nvidia PCIe16 graphics card for AI applications

Customisable & Expansion
Front plate customisation and 4 full size expansion slots available

Medical Grade Certification
UL60601-1 medically certified

Medical Grade Panel PC ~ HID series



13th Generation
Intel Raptor Lake PS LGA Processor up to 10 core, 5.2GHz

Medical Grade Certification
UL60601-1 medically certified with Anti-microbial finish

Slim and Stylish Design
Various expansions for different integration options

Data and Access Security
TPM & NFC/RFID module provides highest security and control

HIREL SOLUTIONS

Industrial Rugged Panel Solutions



13th

Generation

Intel Raptor Lake PS LGA Processor up to 10 core, 5.2GHz

Modular Cableless Expansion

Various of IET module for I/O expansion without cable

Durable Rugged Design

Shock at 20Grams and Vibration up to 3Grams

Seamless Network Communication

Various options incl. 2.5G LAN and WIFI6, Bluetooth, 5G integration

The CDS ARC Series monitors, sized 10.1"–21.5", offer IP65 protection, robust design, and flexible mounting. With dual speakers, OSD controls, and optional screen coatings, they're ideal for manufacturing, kiosks, and EV stations in demanding environments.

Extreme Waterproof Panel Solution



M12

Connectors

Waterproof IP67 connectors for all I/O

Auto Balance Internal Pressure

Preventing ingress of dust and water, achieving pressure equalisation

IP65/66/69K Sealing

Full 6 faces IP65/66/69K rating for the whole display system

Easy to Clean Surface Finish

Smooth and glossy surface which is anti-adhesion

The SPC-Series IP65-rated, fanless, stainless-steel chassis touchpanel PC has Intel Atom D525 dual-core 1.8 GHz CPU with ICH8-M chipset. It supports a 12–28 V range and has over-current protection. Five-wire, resistive touchpanels are 15, 17 or 22 in., and ErP-compliant.

CDS Philosophy ~ focus on customers

At **Crystal Display Systems (CDS)**, we specialize in delivering high-quality industrial display solutions.

As a trusted **designer, distributor, value-added reseller**, and **developer of custom monitors**, we provide reliable and innovative flat panel display technologies tailored to diverse industry needs.

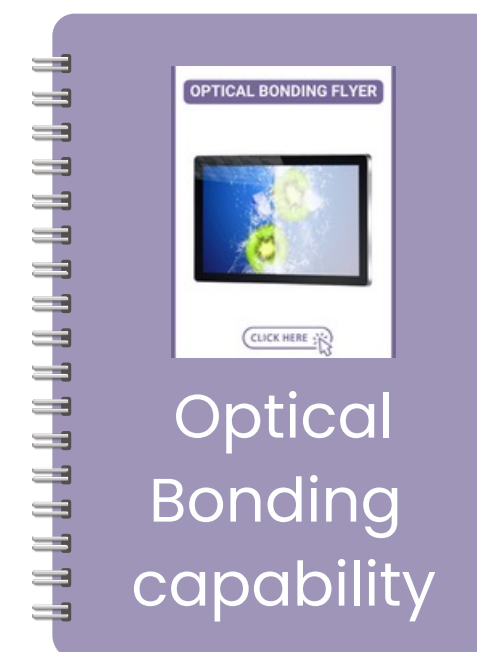
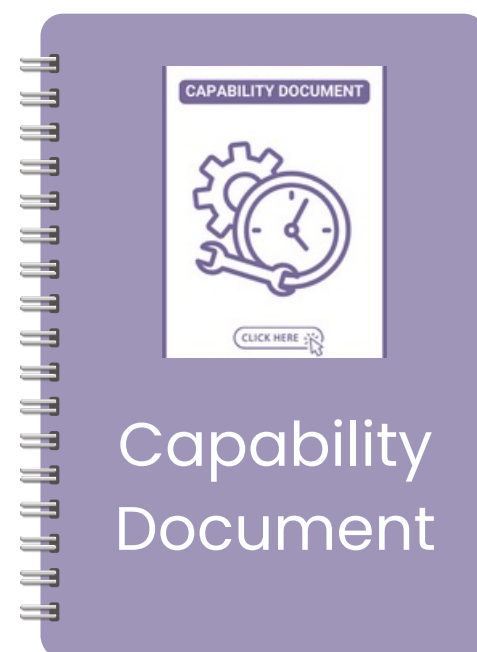
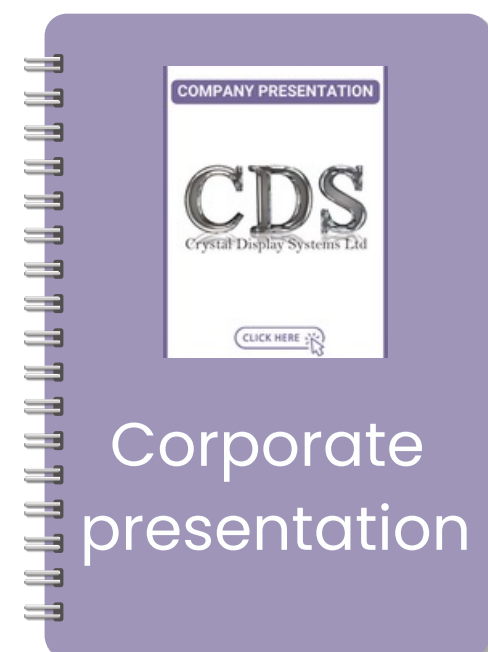
With over 15+ years of experience, our expertise allows us to offer the most effective and efficient solutions to our clients and partners

Our product range includes:

- [Industrial TFT LCDs](#)
- [Transparent Displays](#)
- [Embedded All-in-One \(AIO\) Systems](#)
- [Touchscreen Solutions](#)
- [Digital Signage Displays](#)

Whether you need standard products or fully customized systems, CDS delivers dependable service, technical support, and flexible solutions designed for long-term performance.

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MORE DOWNLOADS





Crystal Display Sytems

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crystal-display.com



"Most of our video demonstrations are filmed in-house by our team. We don't use editing companies to enhance their appearance—they showcase real products, made for real customers, by real people."

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For you



CDS Display Corner – High Quality Custom Marine Monitors from CDS

CDS's new IP65 waterproof marine monitors deliver bright, high-performance displays for nautical environments. Ideal for yachts, submarines, boats, and maritime structures, they support ECDIS, radar, and bridge systems with proven reliability for system builds, upgrades, and maintenance—ensuring quality from dock to engine room.



Check Out Our New Range of CrystalVUE Industrial monitors

CDS designs and manufactures open frame industrial and touch monitors for diverse markets. They also offer custom monitors and touchscreen solutions, ensuring an optimal fit for specific applications with tailor-made designs to meet unique requirements.



High Quality Embedded Panel PC From CDS

We offer a wide range of reliable, high-performance embedded industrial solutions for demanding applications. Our standard products cover various sizes and specifications, while custom solutions are also available, designed and built to meet your exact requirements with precision and quality.

Need any additional information?

Our team is always available to help you with pricing details, technical support, or any additional information you may need. Please don't hesitate to reach out.



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DISPLAY, TOUCH AND DIGITAL SIGNAGE SOLUTIONS

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