Embedded solutions

Welcome to N-and Group, a pioneering force in the realm of embedded systems where technology seamlessly integrates into the fabric of our lives, driving efficiency, connectivity, and innovation across diverse industries and with a history of over 30 years' experience.



Our expertise places us at the forefront of this technological revolution, specialising in delivering cutting-edge embedded solutions tailored to meet the evolving needs of our clients. With a profound understanding of the embedded market landscape, we harness the latest advancements in hardware and software, crafting bespoke solutions that empower businesses to thrive in today's fiercely competitive environment.

Our commitment to excellence goes beyond conventional product development. At N-and Group, we take pride in our holistic approach, providing end-to-end services that encompass consultation, design, prototyping, and deployment. By fostering close collaboration with our clients, we ensure our solutions not only meet but surpass expectations, driving tangible results and nurturing enduring partnerships.

Dedicated to pushing the boundaries of what's possible, our innovative solutions extend to optimising industrial processes, enhancing consumer electronics, and revolutionising healthcare technologies. At N-and Group, we remain steadfast in shaping the future of embedded systems, driving progress and unlocking new possibilities for businesses worldwide.



SOM

Introducing our cutting-edge System-on-Module (SOM) products - the heart of your embedded processing system. Engineered for efficiency and versatility. our SOMs encapsulate the essential components, from powerful processor cores to seamless communication interfaces and integrated memory blocks, all on a single. production-ready printed circuit board (PCB).

SINGLE BOARD COMPUTER

Embark on a journey of technological excellence with our cutting-edge Single Board Computers (SBCs). Engineered to redefine possibilities, our SBCs seamlessly integrate advanced computing capabilities into compact. all-in-one solutions.

CARRIER BOARD

Discover the pinnacle of embedded system design with our advanced Carrier Boards. Engineered for exceptional performance and reliability, these boards serve as the cornerstone for seamless integration within your embedded applications.

SOLUTIONS

Experience seamless integration with our end-toend solution, spanning from chip to cloud-based services. Our comprehensive approach ensures smooth connectivity and optimal performance at every stage of your project.

ACCESSORIES

Welcome to a realm of cutting-edge connectivity solutions, encapsulating future-ready technology. Our accessories redefine the way you connect and display, ensuring innovation meets versatility.

ABOUT US

With a focus on embedding intelligence into every facet of our offerings, we believe in the power of innovation beneath the surface, where cutting-edge technology and data-driven insights converge seamlessly.

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SOM

Designed to streamline and elevate your development process, our SOMs empower you to harness the full potential of embedded systems without the complexity. Unleash the power of a cohesive and integrated solution, where every intricate detail has been meticulously crafted for optimal performance and reliability.

Whether you are embarking on a new project or seeking to enhance existing systems, our SOMs pave the way for innovation by providing a solid foundation for your embedded processing needs. Experience a seamless integration that saves time, reduces development costs, and ensures a robust platform for your applications.

Discover the future of embedded processing with our System-on-Module solutions – where efficiency meets excellence, and possibilities are limitless. Elevate your projects with the sophistication and reliability that our SOM products can deliver.

SMARC MODULE 2.1 N100 4GB 32 GB Part Number: 030116200 eMMC

The versatile Smarc module, featuring the Intel processor Elkhart Lake, is designed for seamless integration into diverse applications. Its compact form factor and robust processing capabilities make it ideal for embedded systems, IoT devices, and industrial automation. The Intel Elkhart Lake processor ensures high performance and energy efficiency, making it suitable for demanding computing tasks. Procurement teams benefit from standardized form factors. streamlining supplier selection and procurement processes. With extensive connectivity options, including USB, PCIe, SATA, and LVDS interfaces, the Smarc module offers flexibility for integration with various peripherals. Whether used in digital signage, medical devices, or industrial control systems, it provides a reliable solution for businesses seeking high-performance embedded computing.



SINGLE BOARD COMPUTER

Compact Form Factor

Experience powerful computing in a compact design, maximising space efficiency for your applications.

Versatile Connectivity

Our SBCs offer a range of connectivity options, ensuring seamless integration with various peripherals and external devices.

Robust Performance

Enjoy high-performance computing with processors tailored to meet the demands of diverse applications, from industrial automation to IoT solutions.

<u>Scalability</u>

Adaptable to evolving needs, our SBCs provide a scalable platform for future enhancements and expansions.

<u>Reliability</u>

Built with precision and reliability in mind, our SBCs deliver consistent performance in mission-critical environments.

<u>Applications</u>

- Industrial Automation · Edge Computing
- Robotics
- Digital Signage
- \cdot IoT Prototyping

Whether you are a developer, engineer, or tech enthusiast, our Single Board Computers offer the ideal solution for a wide range of applications. Elevate your projects, streamline development, and embrace the future of computing with N-and Embedded.

NVIPI 3568RK EDGE BOARD 2GB 8GBB 24VDC WIFI 485 MULTI DISPLAY Part Number: 030103200

The nViPi 3568RK Motherboard is a high-performance solution that seamlessly combines robust performance, extensive connectivity, and advanced features. It caters to diverse user needs with versatile connectivity options and compatibility with various expansion peripherals. With its ability to seamlessly integrate into different network environments, including a gigabit RJ45 port, 2.4G/5G WiFi, and 4G wireless support, it delivers reliable and high-speed connectivity for enhanced productivity and online experiences. Ideal for enthusiasts, developers, and businesses, the nViPi 3568RK is a powerful and future-proof computing solution.



CARRIER BOARD

Elevating Embedded Solutions

Our meticulously designed Carrier Boards offer a robust foundation, ensuring compatibility and versatility across a diverse range of applications. Precision-crafted to meet the demands of modern computing, these boards empower your projects with optimal functionality and performance. Experience the efficiency of high-performance computing customised to the unique requirements of various industries. Trust in the reliability and innovation of our Carrier Boards to elevate your embedded solutions with confidence.

SMARC 2.1 CARRIER BOARD Part Number: 030049200

Introducing the SMARC 2.1 Carrier Board, a versatile and cost-effective platform ready for deployment in various applications such as HMI systems, infotainment kiosks, gaming systems, automatic retail, IoT gateways, transportation, and industrial automation. Optimized for low-power x86 Intel processors, its compact design (169x85mm) is ideal for stationary applications. The board includes essential features like audio codec, USB-C, USB-3.0, multiple display connections, and various embedded interfaces, providing scalability with a dedicated slot for SMARC 2.1 computer on modules.

With additional slots for custom expansions, IoT connectivity, and support for extended temperature ranges, it's a powerful solution. Contact our Sales Team at N-and Group to discuss your project and turn your ideas into reality.



SOLUTIONS

From innovative hardware solutions to advanced cloud services, we provide a cohesive package tailored to your needs. Benefit from our expertise across the entire spectrum, from conception to deployment, ensuring a streamlined and efficient solution for your business. Unlock the full potential of your project with our complete and integrated offerings, backed by our commitment to excellence and innovation.

4CR PLATFORM BOARD 220Vac & 24Vdc Part Number: 030061200

Experience the 4CR – a revolutionary predictive maintenance system ensuring peak performance for in-field devices. Driven by advanced algorithms, 4CR shifts maintenance from reactive to proactive, identifying potential failures before they disrupt operations.

Analysing electrical signatures without sensors, 4CR detects disturbances early, enabling timely intervention and preventing downtime and productivity stoppages. Cost-effective and nonintrusive, 4CR's impressive hardware takes a proactive approach, extending machine lifespan for significant cost savings. This transformative technology promises a new era of efficiency, costeffectiveness, and seamless operation for both machine operators and endusers. 4CR stands as a game-changer, ushering in a future where machines operate at their best, ensuring satisfaction and operational

efficiency – a paradigm shift in the machine industry.

In conclusion, 4CR is a transformative force, redefining machine operation and maintenance. With cost savings, reliability improvements, compatibility, and phased integration, 4CR stands as a game-changer, promising a future where machines excel – a true paradigm shift in the industry.



ACCESSORIES

Welcome to a realm of cutting-edge connectivity solutions, encapsulating future-ready technology. Our accessories redefine the way you connect and display, ensuring innovation meets versatility.

Experience a new era of connectivity with our Innovative Connectivity Solutions, designed to keep you at the forefront of technological advancements. From enhancing mobile communication to elevating display capabilities, our accessories offer Versatile Applications, seamlessly adapting to diverse needs.

MINI PCIE WITH SIM TO USB Part Number: 030050200

The Mini PCIe Card with SIM to USB (Header) is a compact and versatile device designed for seamless connectivity. It enables users to easily integrate SIM card functionality into their systems via USB connection, offering convenient access to mobile networks.

With its small form factor and plugand-play design, it's ideal for various applications where space is limited. Whether used in embedded systems, or IoT devices, this card provides reliable and efficient communication solutions. Its compatibility with Mini PCIe slots ensures easy installation, while the USB header offers flexibility for different setups. Experience seamless connectivity with this innovative solution.



Rest easy with our Quality Assurance – rigorously tested accessories ensuring durability, reliability, and seamless integration into your tech ecosystem. Embrace the Future-Ready Technology commitment, providing accessories that surpass the latest technological advancements, preparing you for challenges ahead.

Step into a realm where connectivity is redefined. Our accessory category, featuring the Mini PCIe Card and USB-C to eDP Converter Board, unlocks new possibilities for tech enthusiasts, professionals, and industry experts. Explore our range today, elevate your tech experience, and witness connectivity redefined.

USB-C TO EDP CONVERTER BOARD Part Number: 030064200

The USB-C to eDP Converter Board seamlessly bridges USB-C devices with eDP (Embedded DisplayPort) monitors, ensuring effortless connectivity. Its compact design delivers vibrant visuals with high-definition clarity, enhancing the user's viewing experience. With simple plug-and-play functionality, it effortlessly integrates with a range of USB-C enabled devices, such as laptops, tablets, and smartphones.

The USB-C interface ensures universal compatibility and rapid data transfer, while the eDP interface guarantees smooth video playback on compatible displays. Whether for home entertainment, office productivity, or multimedia creation, this converter board offers reliable performance and streamlined connectivity for an array of applications.



At N-and Group, we don't just offer products – we provide bespoke solutions tailored to each client's unique needs. With a focus on embedding intelligence into every facet of our offerings, we believe in the power of innovation beneath the surface, where cutting-edge technology and data-driven insights converge seamlessly.

Our expertise extends beyond hardware to PaaS for IoT, empowering businesses with resolute business intelligence and analytics capabilities. N-and Embedded stands as a beacon of innovation, crafting seamless and data-driven ecosystems, ensuring data-driven triumphs in the present and the future.

N-and's communication modules, sensors, and actuators for embedded systems offer comprehensive solutions for seamless connectivity and control. From concept to completion, our team support businesses every step of the way, collaborating throughout the product lifecycle and providing consultancy expertise across various industries.

Choose N-and Embedded to reduce design complexity, cut costs, create distinctive products, and benefit from an international presence optimising your supply chain. Our commitment goes beyond delivering products; we empower businesses to thrive in the digital era with cutting-edge, customised solutions.







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