AI/ML
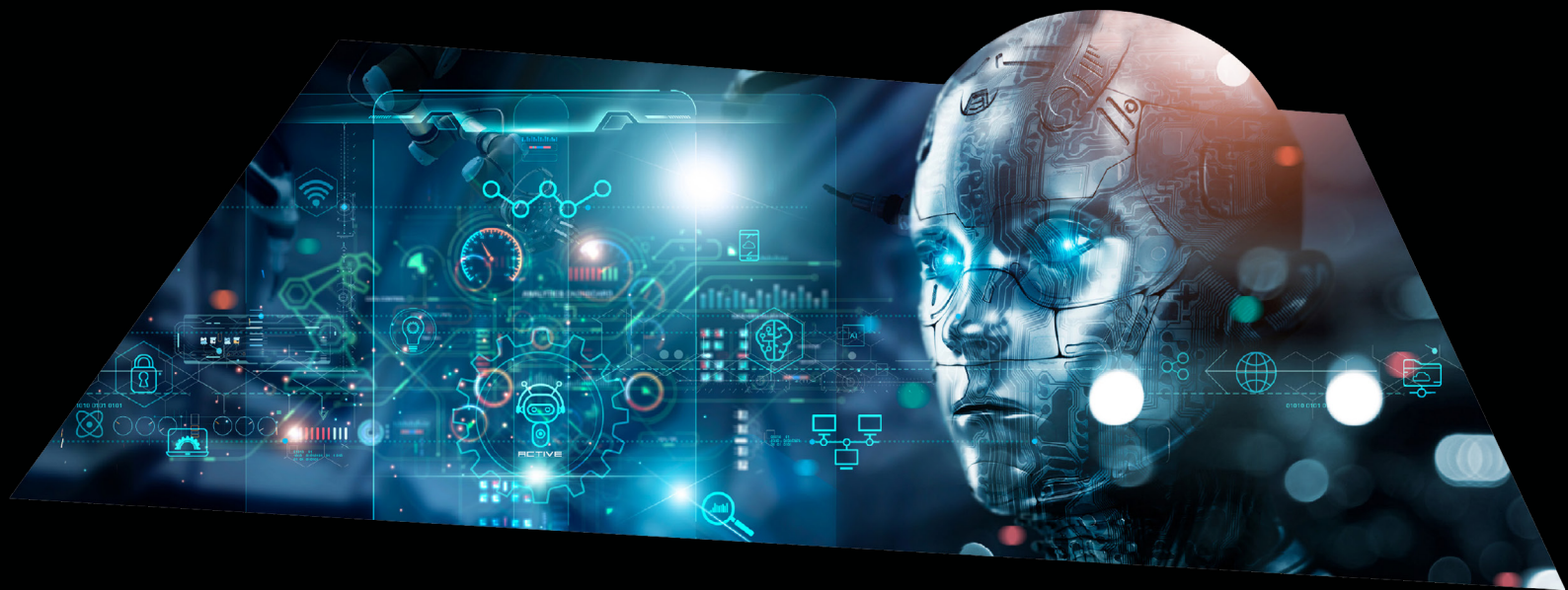# OFF-THE-SHELF
SOLUTIONS

REVOLUTIONIZING WITH AI & ML SOLUTIONS

Unlock the full potential of your projects with expertly curated, high-performance products designed to meet the evolving demands of AI and machine learning applications. From seamless integration to advanced capabilities, these solutions empower engineers to build the intelligent systems of tomorrow, today.

At RS Group, we are committed to delivering cutting edge, off-the-shelf AI and ML solutions designed to accelerate innovation in embedded systems, robotics, industrial IoT, and beyond. With an ever growing demand for advanced AI capabilities at the edge, our range of products ensures that engineers and developers have access to high-performance hardware that not only meets today's requirements but also prepares them for future challenges. Whether you're designing autonomous robots, working on real-time data processing, or implementing complex machine learning models, our products offer the power, flexibility, and scalability needed to push the boundaries of what's possible in AI and ML development.

Our selection of AI and ML development kits, embedded systems, and accelerators are built with the latest industry-leading technologies, enabling fast prototyping, deployment, and scaling. From powerful GPUs and CPUs to integrated AI-specific accelerators, our offerings provide the processing power necessary for demanding applications in robotics, computer vision, natural language processing, predictive maintenance, and more.

Designed with professional engineers and embedded solutions developers in mind, each product comes with robust software support, extensive connectivity options, and efficient power management to ensure seamless integration into existing workflows. Whether you're just starting with AI or are ready to deploy complex, multi-layered models at the edge, our products are designed to simplify the process and deliver exceptional performance at scale.

WHY CHOOSE RS GROUP?

At RS Group, we offer a comprehensive and world-class portfolio of AI and ML solutions that are crafted to meet the needs of every stage of your project. From initial concept and research to full-scale deployment and optimisation, we understand the demands of today's fast-paced, data-driven landscape. Our solutions are designed to empower you, whether you are exploring the potential of edge AI, enhancing your models with advanced machine learning algorithms, or scaling complex cloud-based systems.

WORLD-CLASS PORTFOLIO:

RS Group's AI and ML solutions are carefully curated to deliver top-tier performance across a wide range of applications. We provide products that span all levels of AI and ML implementation, ensuring that no matter where you are in your project, you have access to the right tools. From microcontrollers, processors, and single board computers to the latest machine learning frameworks and data science platforms, our portfolio is a one-stop shop for all your AI/ML needs.

EXPERT SUPPORT:

Choosing the right AI/ML solutions can be a complex and time-consuming process. That's why RS Group's expert support team is here to guide you every step of the way. With years of experience in development and customer applications, our specialists are equipped to offer tailored advice on product selection, integration, and optimisation. Whether you're embarking on a new AI project or seeking to enhance an existing model, our team is ready to help you overcome challenges and unlock the full potential of your technology.

INNOVATION AT SCALE:

AI and ML are not one-size-fits-all solutions, and at RS Group, we understand the importance of scalability and flexibility. Whether you are working on resource-constrained edge devices or building expansive cloud-based systems, our advanced solutions are designed to evolve with your needs. With RS Group, you can accelerate innovation, improve efficiencies, and seamlessly scale your projects from prototype to full production.

FUTURE-READY SOLUTIONS:

Our products are not only designed for today's needs but are also built to adapt to the technologies of tomorrow. We provide future-proof solutions that ensure your projects remain relevant as new trends and technologies emerge. Whether it's the latest advancements in artificial neural networks, the rise of machine learning, or the growing importance of data privacy and security, RS Group's AI/ML solutions are built to evolve with the industry's trajectory.

PROVEN TRACK RECORD:

RS Group's solutions are trusted by some of the most innovative companies in the world. From automotive and healthcare to manufacturing and retail, our AI and ML products have helped businesses across diverse industries transform their operations and achieve new levels of performance. Our long-standing relationships with leading technology providers ensure that we can offer the most advanced and reliable products available, backed by the expertise and support necessary to make your projects a success.

REAL-WORLD AI/ML SOLUTIONS

Artificial Intelligence (AI) and Machine Learning (ML) are driving the transformation of industries worldwide, enabling businesses to innovate, optimise operations, and deliver smarter solutions. From enhancing product design and automating processes to driving predictive analytics and delivering personalised experiences, AI/ML applications are limitless. This section highlights six prominent use cases where AI/ML is revolutionising industries and showcases where you can find the right products to bring these solutions to life.

AUTONOMOUS VEHICLES: REDEFINING TRANSPORTATION

AI and ML play a pivotal role in the development of autonomous vehicles. By combining computer vision, sensor fusion, and deep learning, self-driving cars are able to interpret and understand their environment, make decisions in real-time, and improve safety. AI/ML systems process vast amounts of data from cameras, LIDAR, radar, and GPS to help vehicles navigate complex environments without human intervention. Products like high-performance AI processors, edge AI boards, and deep learning modules are key enablers in this field, ensuring that vehicles can learn, adapt, and drive safely.

HEALTHCARE: REVOLUTIONISING DIAGNOSTICS

AI and ML are transforming healthcare by enabling more accurate diagnostics, personalised treatment plans, and predictive healthcare. Machine learning algorithms can process vast amounts of patient data, including medical imaging, genetic information, and patient records, to detect early signs of disease, recommend treatment plans, and monitor ongoing health status. With the use of AI-powered diagnostic tools, healthcare professionals can make faster, more informed decisions, improving patient outcomes and reducing costs.

MANUFACTURING: ENHANCING EFFICIENCY WITH PREDICTIVE MAINTENANCE

In manufacturing, AI/ML is being used to optimise production processes, monitor equipment health, and prevent costly downtime through predictive maintenance. Machine learning algorithms analyse sensor data from factory equipment to predict potential failures before they occur. This enables manufacturers to schedule maintenance at optimal times, reducing downtime, increasing productivity, and lowering maintenance costs.

TRANSPORT TRACKING: OPTIMISING LOGISTICS AND SUPPLY CHAINS

AI/ML is transforming logistics and transport tracking by improving the efficiency of supply chains and providing real-time visibility into operations. Machine learning algorithms can analyse data from various sources, such as GPS, RFID, and IoT devices, to optimise routes, predict delays, and track shipments. These insights allow businesses to make proactive decisions, reducing costs, improving delivery times, and increasing customer satisfaction. AI-powered predictive analytics also enable better demand forecasting, ensuring that goods are delivered when and where they are needed most.

ROBOTICS: ENHANCING AUTOMATION AND PRECISION IN OPERATIONS

AI and ML are at the heart of the robotics revolution, driving advancements in automation and enhancing the precision of robotic systems. From industrial robots that perform tasks with high accuracy to collaborative robots (cobots) that work alongside human operators, AI is improving the efficiency, safety, and capabilities of robotic systems. Machine learning allows robots to learn from their environment, adapt to new tasks, and optimise their operations. Robots powered by AI/ ML are helping to streamline processes, reduce human error, and increase productivity.

AGRICULTURE: BOOSTING CROP YIELDS AND SUSTAINABILITY

AI/ML is transforming agriculture by enabling more efficient and sustainable farming practices. Machine learning models analyse data from sensors, drones, and satellite imagery to monitor crop health, predict weather patterns, optimise irrigation, and detect pests or diseases. These insights allow farmers to make decisions that improve crop yields, reduce water usage, and minimise the use of pesticides, leading to more sustainable and cost-effective farming operations.

JETSON AGX THOR™

Overview

The NVIDIA® Jetson AGX Thor™ Developer Kit is the ultimate platform for humanoid robotics, giving you unmatched performance and scalability. It's powered by the NVIDIA Blackwell GPU and 128 GB of memory, delivering up to 2070 FP4 TFLOPS of AI compute to effortlessly run the latest generative AI models-all within a 130 W power envelope. Compared to NVIDIA Jetson AGX Orin™, it provides up to 7.5x higher AI compute and 3.5x better energy efficiency.

Jetson Thor helps you accelerate low-latency, real-time applications with the new Blackwell Multi-Instance GPU (MIG) technology and a robust 14-core Arm® Neoverse®-V3AE CPU. It also includes a suite of accelerators, including a third-generation Programmable Vision Accelerator (PVA), dual encoders and decoders, an optical flow accelerator, and more. For high-speed sensor fusion, the developer kit offers extensive I/O options, including a QSFP slot with 4x25GbE, a wired Multi-GbE RJ45 connector, multiple USB ports, and additional connectivity interfaces. It's also designed for seamless integration with existing humanoid robot platforms, allowing for easy tethering to jumpstart prototyping.

Jetson Thor belongs to a new class of robotic computers, architected from the ground up to power next-generation humanoid robots. It supports a wide range of generative AI models, from vision language action (VLA) models like NVIDIA Issac™ GROOT N to all popular LLMs and VLMs. To deliver a seamless cloud-to-edge experience, Jetson Thor runs the NVIDIA AI software stack for physical AI applications, including NVIDIA Issac for robotics, NVIDIA Metropolis for visual agentic AI, and NVIDIA Holoscan for sensor processing. You can build AI agents at the edge using NVIDIA agentic AI workflows like video search and summarization (VSS).
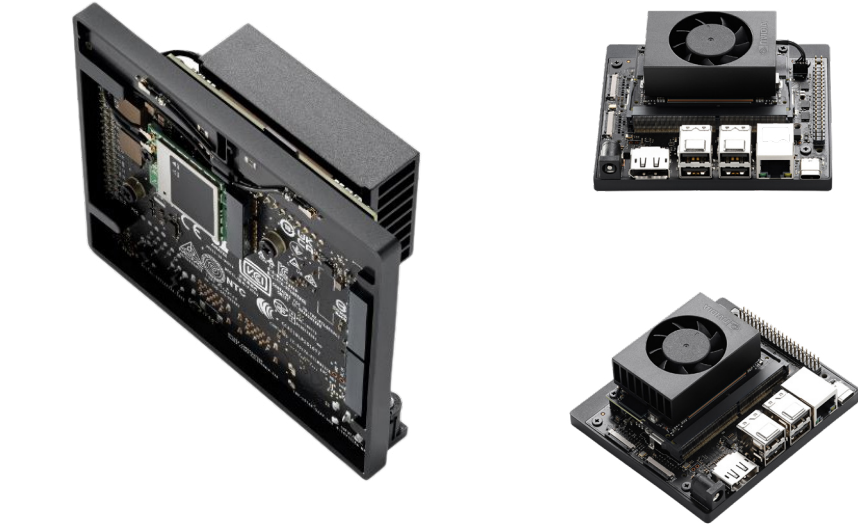
Key Features

Developer Kit Content
- NVIDIA Jetson™ T5000 module with heat sink and reference carrier board
- DC power 140W
- 802.11ax wireless network interface controller
- 1 TB NVMe populated in M.2 Key-M slot
- Quick Start Guide

Jetson T5000 Module
- 2560-core NVIDIA Blackwell architecture GPU with 96 fifthgen Tensor Cores
- 14-core Arm® Neoverse®-V3AE 64-bit CPU
- 128 GB 256-bit LPDDR5X, 273 GB/s

Reference Carrier Board
- QSFP connector
- HDMI port
- DisplayPort
- 2x USB-A 3.2 | 2x USB-C 3.1
- Gigabit Ethernet
- 2x 13-pin CAN header
- Microfit power jack

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
606-865	945-14070-0087-000	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗
606-864	945-14070-0080-000	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓
606-863	945-14070-0085-000	✗	✓	✓	✗	✗	✓	✗	✗	✗	✗

NVIDIA JETSON AGX ORIN DEVELOPER KIT 64GB

Overview

The NVIDIA® Jetson AGX Orin™ 64GB Developer Kit benefits from NVIDIA® Ampere architecture GPU coupled with next-gen deep learning and vision accelerators, high-speed IO, and fast memory bandwidth. This makes it perfect for developing solutions that leverage most complex AI models such as natural language understanding, 3D perception, and multi-sensor fusion.

Key Features

- Jetson AGX Orin™ 64GB module with heat sink and reference carrier board
- 802.11ac/abgn wireless Network Interface Controller
- Power adapter and USB-C cord
- USB Type-C to USB Type-A cord
- Quick Start and Support Guide

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
263-7369	945-13730-0050-000	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓
253-9662	945-13730-0055-000	✗	✓	✓	✗	✗	✓	✗	✗	✗	✗

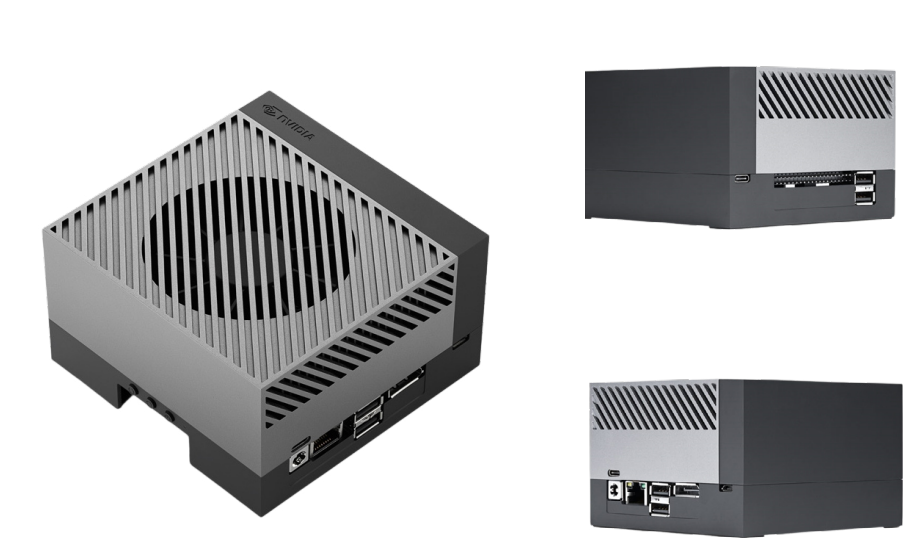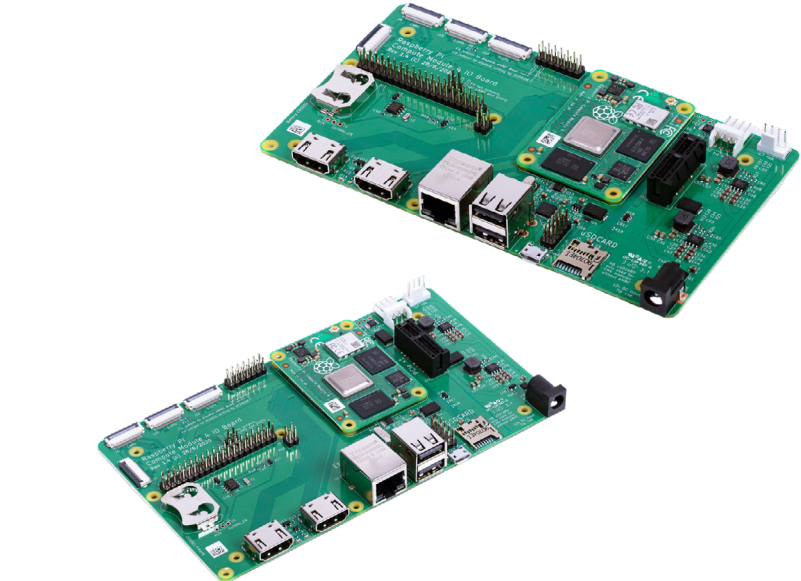## NVIDIA JETSON ORIN NANO SUPER DEVELOPER/ DEVELOPER KIT

Overview

The NVIDIA Jetson Orin Nano Super developer kit sets a new standard for creating generative level AI powered robots, smart drones, and intelligent cameras. It also simplifies the process of starting with Jetson Orin Nano series modules. Compact design, lots of connectors and up to 67 TOPS of AI performance make this the perfect development kit to bring your AI concepts to life. With up to 80X the performance of Jetson Nano, it can run all modern AI models, including transformer and advanced robotics models.

Key Features

- The developer kit is made up of the Jetson Orin Nano 8GB module and a reference carrier board that can accommodate all Orin Nano and Orin NX modules, providing a perfect platform for prototyping next-gen edge AI solutions.
- It benefits from an Ampere GPU and a 6-core ARM CPU, enabling multiple concurrent AI application pipelines and high-performance inference. The carrier board has an array of connectors, including two MIPI CSI connectors supporting camera modules with up to 4-lanes.
- Jetson runs the NVIDIA® AI software stack, so you'll find software for your specific needs whether that's building a robotics solution, vision AI, conversational AI and more.
- The NVIDIA® Jetson Orin™ Nano Super Developer Kit is compatible with a variety of tools, add-ons, and software.

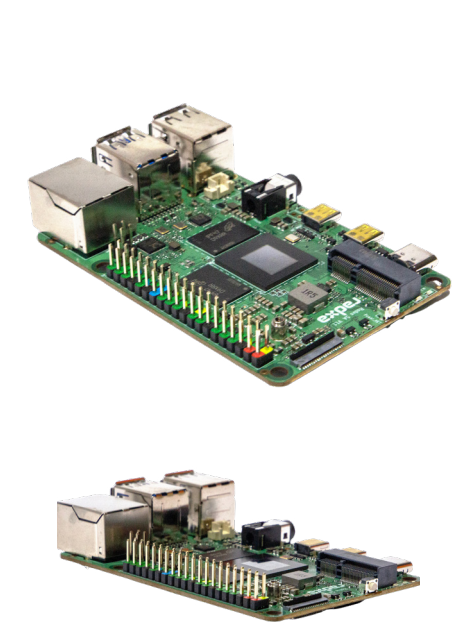| RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
264-7384	945-14070-0087-000	✗	✓	✓	✗	✗	✓	✗	✗	✓	✗
264-7383	945-14070-0080-000	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓

RASPBERRY PI CM4 IO BOARD

Overview

The Raspberry Pi CM4IO board has been designed for use with the Raspberry Pi Compute Module 4 to allow for additional interfaces to be used within your design. The CM4IO board contains many of the interfaces that the Raspberry Pi 4B has, the main difference is the addition of a PCIe x1 socket.

Key Features

- External power connector (+12V, +5V)
- 2 x full-size HDMI 2.0 connectors
- 2 x USB 2.0 connectors, with header for two additional connectors
- Gigabit Ethernet RJ45 with PoE support
- Micro USB socket for updating Compute Module 4
- MicroSD card socket for Compute Module 4 Lite (without eMMC) variants
- PCIe Gen 2 x1 socket
- Standard fan connector
- 2 x MIPI DSI display FPC connectors (22-pin 0.5 mm pitch cable)
- 2 x MIPI CSI-2 camera FPC connectors (22-pin 0.5 mm pitch cable)
- Standard Raspberry Pi HAT connectors
- Real-time clock with a battery socket and ability to wake Compute Module 4
- Various jumpers to disable specific features, e.g. wireless connectivity, EEPROM writing

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
206-4868	SC0326	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓

ROCK 5 MODEL A 16GB

OKdo
DESIGN THE WORLD

Overview

Introducing the latest addition to the ROCK 5 Series, the ROCK 5 Model A (ROCK 5A) Single Board Computer (SBC). The ROCK 5A is a credit-card-sized SBC that boasts an array of class-leading functionalities, remarkable features, and expandability options. ROCK 5A encompasses the dependable Rockchip RK3588S System-on-Chip (SoC). This SoC features an Octa-core processor with quad Cortex A76 and quad Cortex A55 based on Arm® DynamIQ™ configuration, along with an Arm Mali™ G610MC4 GPU. The inclusion of dual micro HDMI ports, one supporting 8Kp60 video, 16GB 64-bit LPDDR4x RAM, multiple connectivity and storage possibilities, and standard compatibility with a range of operating systems all neatly enclosed within a compact form factor, make it an optimal choice for developing remarkable applications and delivering exceptionally high-performance on a reliable platform.
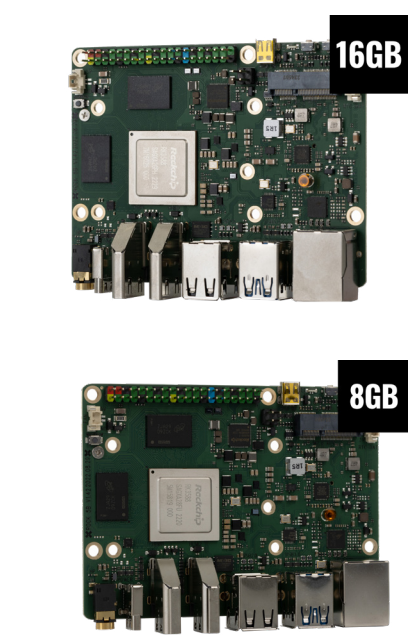
Key Features

• Reliable Rockchip SoC - At the core of the ROCK 5A lies a robust Rockchip SoC. The ROCK 5A boasts a powerful Rockchip RK3588S SoC with an octa-core CPU. With its quad Cortex A76 running at up to 2.4GHz and quad Cortex A55 running at up to 1.8GHz, the ROCK 5A not only ensures reliability but also delivers exceptional speed. Furthermore, it is equipped with an Arm Mali™ G610MC4 GPU that supports OpenGL®, OpenCL®, and Vulkan® for an enhanced multimedia experience.
• Standardized Safe Shutdowns - We understand the importance of safeguarding storage integrity. That is

why the ROCK 5A is designed with a built-in On/Off power button, enabling users to perform safe shutdowns effortlessly and minimizing the risk of storage corruption. This standard convenience allows for greater flexibility in various applications, eliminating the need for manual code entry to safely shut down the ROCK.
• Unmatched 8K Display Capabilities - The ROCK 5A proudly incorporates an impressive Arm Mali G610MC4 graphics processing unit (GPU), making it an ideal choice for supporting advanced multimedia applications, such as signage, games, and seamless playback of 8K videos at 8Kp60 through HDMI 2.1. Moreover, its powerful 6TOPS NPU enhances its suitability for artificial intelligence (AI) and machine learning applications.
• Widely compatible with a range of OS - The ROCK 5A offers remarkable practicality by supporting a diverse range of operating systems, including Android 12, Debian/Ubuntu Linux, OpenFyde OS (Chromium OS fork), the complete implementation of the Arm architecture v8 instruction set, and others.
• Ample Storage - With extensive storage capacity, 16GB 64bits LPDDR4x RAM, and a high-speed eMMC socket for eMMC modules, the ROCK 5A ensures no storage limitations, providing ample space for both the operating system and data storage.
• Efficient Cooling - Equipped with a 2-pin 1.25mm header, the ROCK 5A allows seamless connectivity to a 5V fan. The fan can be PWM controlled without speed feedback, guaranteeing excellent performance even for demanding applications.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
257-3560	RS120-D16P1	✔	✔	✔	✗	✔	✔	✔	✔	✔	✔

ROCK 5 MODEL B

OKdo
DESIGN THE WORLD

16GB

8GB

Overview

Join the SBC evolution with the ROCK 5B board from OKdo, our sister IoT specialist emerging technology company. The ROCK 5B truly takes performance to a new level with the super powerful Rockchip RK3588 SoC, packed with some incredible class-leading features, such as 8K displays (yes 8K!) and Android support, capable to run even the most demanding multimedia and industrial applications. With a Quad Arm Cortex A76 CPU, Quad Arm DynamIQ Cortex A55 and an Arm Mali G610MC4 GPU, the ROCK 5B is a robust and high-performing single board computer that incorporates an onboard stereo audio jack, on/Off power button, dual HDMI ports supporting displays up to 8Kp60 resolution, a fan connector and an eMMC socket.
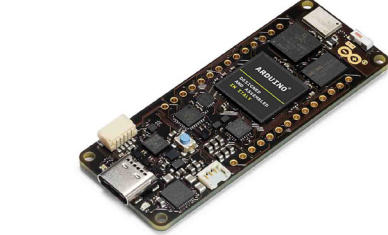
Key Features

• Reliable hardware - robust performance based on the Rockchip RK3588 SoC, Arm DynamIQ Quad Cortex - A76 @ 2.2/2.4GHz, Quad Cortex - A55 @ 1.8GHz CPU, Arm Mali - G610MC4 GPU and 16GB 64bit LPDDR4 RAM.
• Incredible 8K display support - the Arm Mali G610MC4 graphics processing unit (GPU) allows the ROCK 5B to support the most advanced multimedia applications, including games, videos, and signage, supporting dual displays up to 8Kp60 and 4Kp60 resolution.
• Power On/Off button - allows safe shutdowns with no risk of corrupting storage.
• Compatible with several operating systems - including Android 12, Debian/Ubuntu Linux, the full implementation of the Arm architecture v8 instructions set, and others.
• Extensive storage capacity – features 16GB RAM and a high-speed eMMC socket for eMMC modules which can be used for OS and data storage.
• 40-pin GPIO expansion header - supports a wide range of interface options.
• PWM fan connector – with this onboard fan connector and 2 heatsink mounting holes, the ROCK 5B will stand anything, no matter how high-performance your application may be.

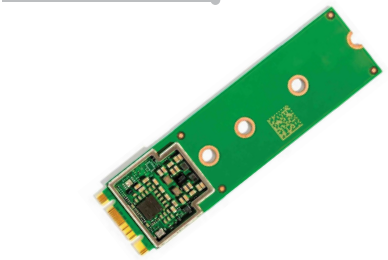| RS Stock No.	MPN		Available Country									
			JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
256-3914	RS119-D16P1	16GB	✔	✔	✔	✗	✔	✔	✔	✔	✔	✔
249-3159	RS119-D8P1	8GB	✔	✔	✔	✗	✗	✔	✔	✔	✔	✔

ARDUINO PORTENTA H7

ARDUINO

Overview

The Arduino's Portenta H7 main processor dual-core unit is made of a cortex M7 that runs at 480MHz and a cortex M4 that runs at 240MHz. It simultaneously runs high-level code along with the real-time task. The processor has two asymmetric cores that can simultaneously run high-level code such as protocol stack, machine learning or even interpreted languages like microPython or javascript along with low-level real-time task.

Key Features

• It is high-performance industry-rated board
• It has select encryption between two vendor for the crypto-chip
• It has USB-C to get it to work in OTG mode and connect it to a display

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
201-1441	ABX00042	✔	✔	✔	✗	✗	✔	✔	✔	✔	✔

MINI PCIE M.2 ACCELERATOR B/M KEY

Coral

Overview

The Google coral M.2 accelerator is an M.2 module that brings the edge TPU coprocessor to existing system and products. It enables easy integration into ARM and x86 platforms so it can add local ML acceleration to product such as embedded platforms, mini-PCs, and industrial gateway. It's weight is 5.8 g

Key Features

• It support Debian Linux and other variants on host CPU
• It has high-bandwidth connectivity

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
201-7826	G650-04686-01	✔	✔	✔	✔	✔	✔	✔	✔	✗	✔

CORAL M.2 ACCELERATOR WITH DUAL EDGE TPU

Coral

Overview

The Google coral M.2 Accelerator with Dual Edge TPU is an M.2 module (E-key) that includes two Edge TPU ML accelerators, each with their own PCIe Gen2 x1 interface. The Edge TPU is a small ASIC designed by Google that accelerates TensorFlow Lite models in a power efficient manner.

Key Features

• It offers integrated power management
• It include two Google Edge TPU ML accelerators
• Its operating temperature range is from -40 to +85°C

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
213-3255	G650-06076-01	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

CORAL DEV BOARD MINI

Coral

Overview

The Google coral dev board mini is a single-board computer that enables you to quickly prototype and deploy an embedded system with on-device ML inferencing. This board can also serve as an evaluation device for the coral accelerator module, which allows you to integrate the Edge TPU into your custom PCB hardware as a surface-mounted module.
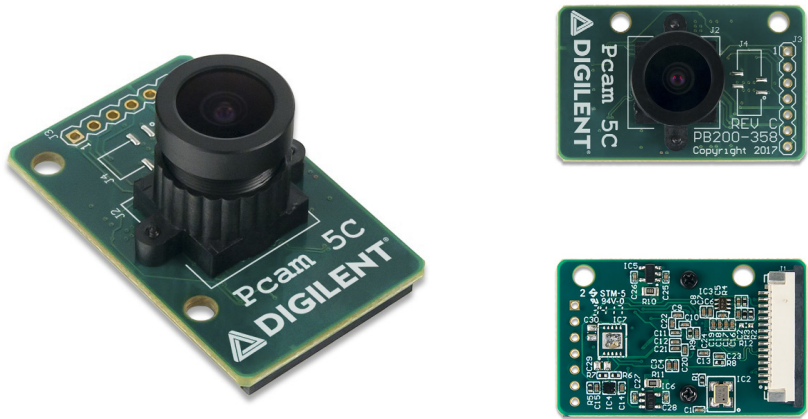
Key Features

• It has MediaTek 8167s SoC
• It has Google Edge TPU ML accelerator
• It has ARM Trust Zone security
• It has 40-pin GPIO expansion header

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
213-3251	G650-03324-01	✔	✔	✔	✗	✗	✔	✔	✔	✗	✗

PCAM 5C: 5 MP FIXED FOCUS COLOR CAMERA

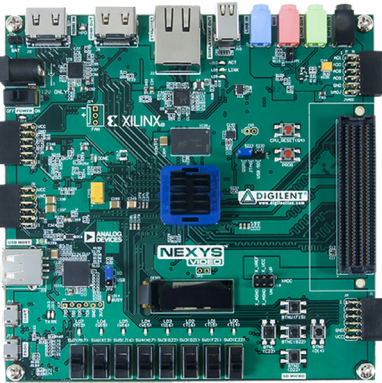**DIGILENT** — Digilent is now part of Emerson.

Overview

The Pcam 5C is an imaging module that is used with FPGA (field-programming gate array) development boards. This Omnivision OV5640 5-megapixel camera on a single chip offers a cost efficiency and high-volume autofocus (AF).

Key Features

- System-on-chip (SOC) sensor with OmniVision 1.4 micron OmniBSI
- Excellent pixel performance
- Best in class low-light sensitivity
- Full functionality of a complete camera
- Anti-shake technology
- AF (autofocus) control
- Enables 720p HD video at 60 frames per second (fps) and 1080p HD video at 30 fps with complete user control
- A post-binning re-sampling filter function removes zigzag artifacts around slant edges and minimizes spatial artifacts to deliver even sharper, crisper colour images
- Faster image preview and zoom with Scalado tagging

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
174-1555	410-358	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

NEXYS VIDEO ARTIX-7 FPGA TRAINER BOARD

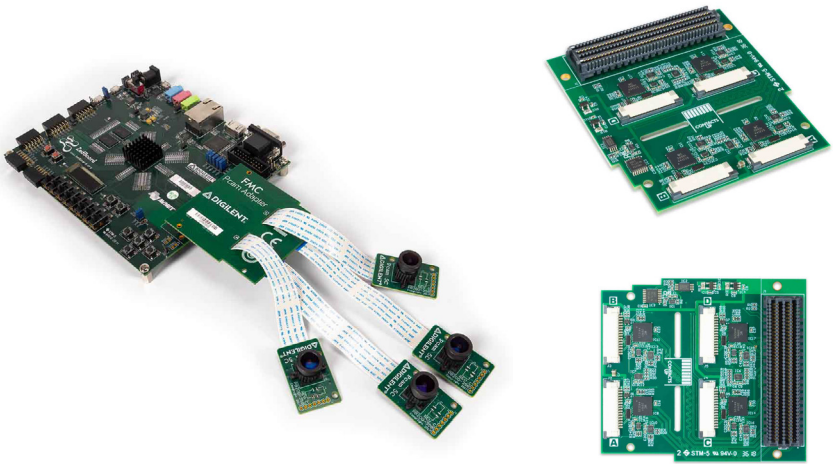**DIGILENT** — Digilent is now part of Emerson.

Overview

The Nexys Video FPGA Board features a large, high-capacity Artix-7 FPGA device, generous external memories, high-speed digital video ports and a 24-bit audio codec. It is perfectly suited for audio and video processing applications. Compatible with ISE® toolset and the Vivado® Design Suite. It is also supported under the free WebPACK™ license.

Key Features

- 215360 logic cells in 33650 slices (each slice contains 4 x 6-input LUTs and 8 x flip-flops)
- 13Mbit Fast Block RAM
- 10 x Clock Management Tiles, each with a phase-locked loop (PLL)
- 740 x DSP slices
- Internal clock speeds exceeding 450MHz
- On-chip Analogue-to-Digital Converter (XADC)
- Up to 3.75Gbps GTP transceivers

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
134-6477	410-316	✗	✔	✔	✗	✔	✔	✔	✔	✔	✔

DIGILENT, 410-372, FMC PCAM ADAPTER

DIGILENT — Digilent is now part of Emerson.

Overview

The FMC Pcam (CSI-2 interface) Adapter is a cost-effective way to add cameras to your FPGA or APSoC development board with the high speed, FMC connector.

Key Features

- The FMC Pcam Adapter enables designers to develop multiple camera systems by allowing the attachment of low-cost camera modules to high speed development boards. Application areas include: developing high speed engines for video processing, advanced video algorithms, video content analysis, processing digital video in real time, intelligent vision solutions, and any embedded vision application.
- On board the FMC Pcam Adapter are system-side connectors which use level translators from MIPI-FPHY to LVDS and LVCCMOS. It is compatible with a VADJ voltages 1.8 – 3.3V. To read more about the technical specifications, please visit the FMC-Pcam Adapter Reference Manual. Because of the clocking sensitivity to video processing solutions, we recommend that you check your host board (carrier cards's) FMC specifications to determine if the FMC Pcam Adapter will work for you.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
194-6459	410-372	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

HUSKYLENS PRO

DFROBOT — DRIVE THE FUTURE

Overview

HuskyLens Pro is an easy-to-use AI machine vision sensor with 6 built-in functions: face recognition, object tracking, object recognition, line following, color detection and tag detection. Through the UART / I2C port, HuskyLens can connect to Arduino, Raspberry Pi, or micro:bit to help you make very creative projects without playing with complex algorithms.

Key Features

- Processor: Kendryte K210
- Image Sensor:
  SEN0305 HuskyLens: OV2640 (2.0Megapixel Camera)
  SEN0336 HuskyLens PRO: OV5640 (5.0MegaPixel Camera)
- Supply Voltage: 3.3~5.0V
- Current Consumption(TYP): 320mA@3.3 (mailto:320mA@3.3V), 230mA@5.0V
- (mailto:230mA@5.0V) (face recognition mode; 80% backlight brightness; fill light off)
- Connection Interface: UART; I2C
- Display: 2.0-inch IPS screen with 320*240 resolution
- Built-in Algorithms: Face Recognition, Object Tracking, Object Recognition, Line Tracking,
- Color Recognition, Tag Recognition
- Dimension: 52mm44.5mm / 2.051.75"

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
204-9900	SEN0336	✔	✔	✔	✗	✔	✔	✔	✔	✔	✔

CORAL ACCELERATOR

Coral

Overview

The Coral USB accelerator by Google, allows for an edge TPU coprocessor to be added to any system, enabling high-speed machine learning inferencing. It includes a USB-c socket to connect to a host computer to perform accelerated ML inferencing. The on-board Edge TPU is a small ASIC designed by Google that accelerates TensorFlow Lite models in a power efficient manner: it's capable of performing 4 trillion operations per second (4 TOPS), using 2 watts of power—that's 2 TOPS per watt.

Key Features

- It used USB 3.0
- It used type-C socket
- Supports Linux, mac, and windows on host CPU

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
201-7821	G950-06809-01	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

HEATSINK FOR ROCK 5B

OKDO DESIGN THE WORLD

Overview

This fan and heatsink combo is tailor-made for the ROCK 5 Model B single board computer. It's simply mounted onto your ROCK 5B with 4 screws and connects to the fan connector. It provides instant cooling and ensures your board keeps cool and running at maximum efficiency.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
257-3571	AE004	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

VAN DAMME CAT 6A FLEX RJ45 LEAD 1M

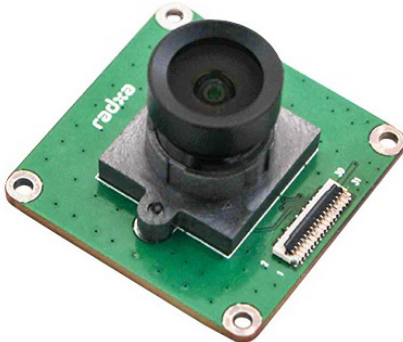VAN DAMME — THE ROUTE OF LEAST RESISTANCE

Overview

The Van Damme Cat 6A flexible S/FTP Tourcat cable designed for high-performance networking. Features a flexible PVC jacket and 26AWG stranded conductors for enhanced durability. Each pair is individually screened, with a 75% coverage overall braided screen for superior signal integrity. Supports Gigabit and 100 Mbit connections up to 75 metres.

Key Features

- Rugged flexible assembly ideal for tactical use
- Cable performance tested using a Fluke DTX cable verifier
- RoHS Compliant

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
361-246	104-466-001	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓

EMMC MODULE ADAPTER

OKDO DESIGN THE WORLD

Overview

Easily flash software images onto eMMC modules with this eMMC to MicroSD Adapter Board for ROCK single board computers.

Key Features

- It is compatible with all ROCK single board computers: ROCK 3A, ROCK 3C, ROCK 4C+, ROCK 4 SE, ROCK 5A, ROCK 5B.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
256-5012	VA003	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RADXA 4K CAMERA

OKDO DESIGN THE WORLD

Overview

This 4K Camera is a compact, camera module tailor-made for the ROCK 5 Series of single board computers (ROCK 5 Model A and ROCK 5 Model B). It simply connects to your ROCK 5 via the CSI interface. The camera not only benefits from 4K resolution, it has an IMX415 chip, and provides 8.29M pixels. It's perfect for surveillance solutions, FA cameras, industrials cameras, and much more.

Key Features

Sensor:
- SONY IMX415
- Diagonal 6.43 mm (Type 1/2.8)
- 8.29M pixel
- Unit cell size: 1.45 μm (H) x 1.45 μm (V)

Output:
- CSI-2 serial data output (2 Lane / 4 Lane)
- RAW10 / RAW12 output

Lens Specification:
- Interface Type: M12XP0.5
- Focal Length(EFL): 2.95±5%mm
- Back Focal Length(BFL): 4.64mm
- Focal Length(EFL): 2.95±5%mm
- Single lens operating temperature: -40°C ~ +85°C
- FOV: Field of view (Diagonal/Horizontal/Vertical) CRA
- D=88.2±5° H=75±3° V=59±2° 15°
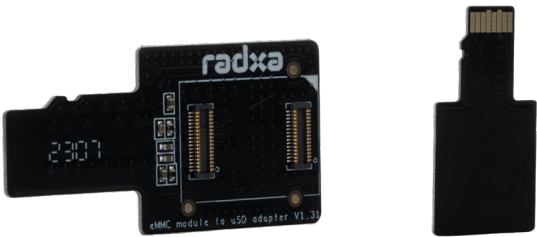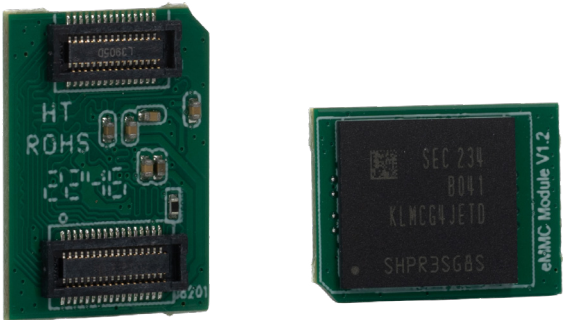- Ribbon cable length: 150 mm

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
257-3572	AS001	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓

EMMC MODULE

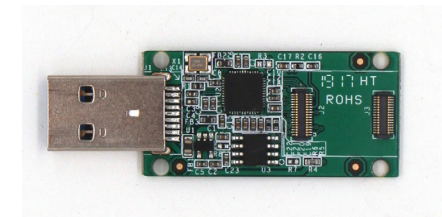VAN DAMME — THE ROUTE OF LEAST RESISTANCE

Overview

Plug on eMMC 5.1 flash storage module for ROCK single board computers.

Key Features

- Ideal memory solution for ROCK single board computers - eMMC modules benefit from fast speeds and supreme power efficiency. It's the perfect memory and storage solution for a huge range of electronics.
- Not just for ROCK - This eMMC 5.1 module is optimised for use with ROCK single board computers, but it is also compatible with ODroid, and PINE.
- A memory size to suit you - We also offer eMMC 5.1 modules in 16GB, 32GB, 64GB, or 128GB.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
256-5008	VA001-16G	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
256-5009	VA001-32G	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
256-5011	VA001-64G	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
256-5007	VA001-128G	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓

EMMC READER

OKdo
DESIGN THE WORLD

Overview

Reduce software image writing time with this USB3 eMMC reader for ROCK. It's ideal for developers who need to write images on eMMC regularly.
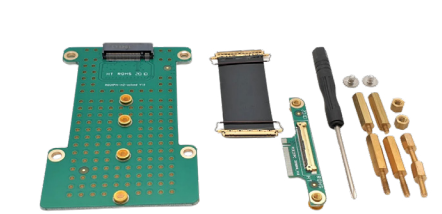
Key Features

- High-speed USB3.1 Gen2 GL3227E controller
- Write speed up to 150MB/s
- Dual mount for eMMC module
- Supports eMMC HS400 mode
- Supports ROCK eMMC modules up to 128GB
- Compatible with ODROID / PINE64 eMMC modules
- Supported under Linux, Windows, and MacOS

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
256-5000	RA004	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

M.2 EXTEND BOARD FOR ROCK 4 A/A+/B/B+/3

OKdo
DESIGN THE WORLD

Overview

Divert the M.2 interface of a ROCK single board computer with this extension board. Compatible with the ROCK SE series.

Key Features

- Stable data transmission - This extension board features robust gold-plated connectors, a locking feature to ensure the cable doesn't become disconnected by mistake, which guarantees stable data transmission.
- High performance cable - The cable features gold-plated connectors on both ends, and the layout of the cable has been designed with the shielding of high-speed data lines in mind, smart arrangement ensures that no data is lost, and a spring mechanism ensures the connection is stable even when the board is moved.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
256-4998	RA001	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

ROCK 5B METAL CASE

OKdo
DESIGN THE WORLD

Overview

This case from Radxa is tailor-made for the ROCK 5 Model B single board computer. This robust, metal case provides protection whilst allowing easy access to all the ROCK 5B's ports. It features an integrated heatsink, which ensures that your board is not only protected with this slick case, but also the passive cooling of the heatsink ensures your ROCK 5B will stay cool.

Key Features

- ROCK solid protection
- This sturdy case made from metal will provide excellent protection for your ROCK 5B.
- Easy access to ports
- The cut-outs of the case take into account all of the ROCK 5B's ports, meaning you won't have to sacrifice convenience for protection.
- Simple assembly
- It's been designed to be easy to assemble, within a few minutes of opening the box your brand-new ROCK 5B enclosure will be ready to use.
- Built-in thermal management
- The case's built-in heatsink will ensure your ROCK 5B keeps cool and runs at maximum efficiency.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
257-3570	AE003	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

ROCK 5B MIPI CSI ADAPTER CABLE FOR RADXA

OKdo
DESIGN THE WORLD

Overview

The Radxa Rock 5B MIPI DSI adapter cable for camera is a hardware adapter kit in which a board is connected to a camera, through MIPI adapter cable.
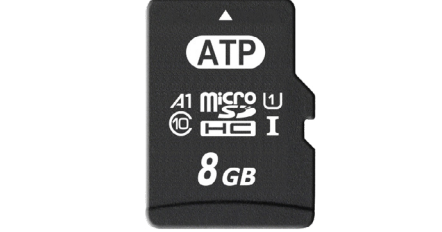
Key Features

- For interface between Rock 5B to camera, the MIPI adapter cable uses M2 M key

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
257-3567	AC006	✔	✔	✔	✔	✗	✔	✔	✔	✔	✔

ATP S600SI 8GB MICROSD CARD

ATP

Overview

The ATP 8GB micro SD card is a SIP (System In Package) process water proof, dust proof and ESD resistant storage solutions. It has enhanced endurance enabled by Advanced Static/Dynamic Wear-Levelling. It supports auto Refresh technology to ensure data integrity in frequent read operations. It has enhanced F/W algorithm to minimize the risk of a sudden power-off.
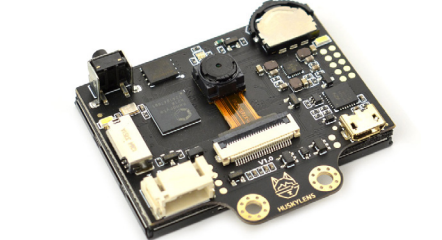
Key Features

- Utilizing MLC and pSLC configured MLC Technology
- Available in Industrial and Commercial Operating Temperature Ranges
- 5 plus Years Supply Longevity

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
278-586	FM8G00UD3V36BFI	✔	✔	✔	✗	✔	✔	✔	✔	✔	✔

GRAVITY: HUSKYLENS - AN EASY-TO-USE AI V

DF ROBOT
DRIVE THE FUTURE

Overview

HuskyLens is an easy-to-use AI machine vision sensor. It is equipped with multiple functions, such as face recognition, object tracking, object recognition, line tracking, color recognition, and tag(QR code) recognition.

Key Features

- Through the UART / I2C port, HuskyLens can connect popular main control boards like Arduino, micro:bit, Raspberry Pi and LattePanda to help you make very creative projects without playing with complex algorithms.

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
204-9898	SEN0305	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

BLACK USB 3.0 TO ETHERNET ADAPTOR

RS PRO

Overview

Introducing the RS PRO USB 3.0 Gigabit Ethernet Adapter, designed to let you instantly connect to a 10/100/1000 Mbps network through a USB port. This adapter is a convenient and easy-to-use device, adding network connectivity without the effort of installing an internal card to your computer or laptop. This RS PRO adapter has been designed with the highest quality and versatility in mind, making it an ideal addition to any application or environment requiring flexible network connectivity.

Key Features

- This range of RS PRO ethernet adapters are an ideal addition to offer greater flexibility for network connections across a range of USB 3.0 to 10 / 100 / 1000 Mbps Gigabit Ethernet applications
- The connector offers an easy to use way of adding network connectivity to a device like a laptop, especially while working on the go or is ideal USB-to-LAN alternative for games consoles that need network access in an environment lacking wireless capability
- Thanks to the ABS shell and PVC cable flex, the adapter is highly durable, especially when being transported from different working areas
- The device is easy to use and install with no additional software required and has been designed and manufactured to USB 3.0 specifications
- ISupports Windows 10, Windows 8 and Windows 7 and is backwards compatible with USB 2.0
- RoHS, REACH and CE compliant

RS Stock No.	MPN	Available Country									
		JP	SG	MY	PH	TH	HK	AU	NZ	CN	TW
195-4912	USB3-ETHGIG-BK	✔	✔	✔	✗	✗	✔	✔	✔	✔	✔

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