

Qualcomm Dragonwing™

IQ-9075 Module

IQ-9100 Module



High-performance, industrial-grade, AI-enabled modules designed to simplify product design, streamline System-on-Chip (SoC) integration, and shorten time to market.

The Dragonwing IQ-9075 Module and Dragonwing IQ-9100 Module are high-performance, industrial-grade, AI-enabled modules designed to simplify product design, streamline SoC integration, and shorten time to market. Built on Dragonwing IQ9 Series processors for exceptional on-device AI performance, high-compute capabilities, built-in safety and reliability features, and design flexibility, these modules are designed to meet the needs of the most demanding industrial-grade workloads in extreme environments. The processors support Ubuntu, upstream Linux with Yocto support, and the MCU subsystem runs RTOS for easy deployment.

Housed in a 1573 BGA package, the Dragonwing IQ-9075 Module and Dragonwing IQ-9100 Module feature 36 GB of ECC-enabled LPDDR5 memory and support a wide ambient operating temperature range from -40 to +85 °C. These pin-to-pin-compatible modules are optimized for long lifecycle deployments in Industry 4.0 environments. The Dragonwing IQ-9100 Module further enhances functionality with a planned support for safety certification, making it ideal for safety-critical applications.

Highlights

Industrial-Grade Reliability and Quality

Operating from -40 to +85 °C, the AEC-Q100 Grade 3-qualified Dragonwing IQ-9075 Module and Dragonwing IQ-9100 Module offer industrial-grade reliability with up to 36 GB of ECC memory. They feature an isolated MCU-like subsystem with four real-time CPU cores for safety and real-time tasks.



On-Device AI

The Dragonwing IQ-9075 Module and Dragonwing IQ-9100 Module deliver exceptional AI performance of up to 100 dense TOPS, running Llama 2 13-billion-parameter models, and generating 12 tokens per second, powering many AI and generative AI industrial uses at the edge for enhanced security and low latency.



Compact Form Factor

Measuring 65 x 65 x 4.55 mm and housed in a 1573 BGA package with a 1.27 mm pitch, these modules integrate SoC, PMICs, and LPDDR5 memory to enable compact, energy-efficient, fanless designs that are deployment-ready. The modules help speed up time to market and reduce sourcing uncertainties.



Long-Life Support

Both modules deliver long-term deployment stability and extended lifecycle support through at least 2038* with the Qualcomm Product Longevity Program. With long-term Linux and Ubuntu support, including ongoing security patching and feature maintenance, these modules ensure predictable operation and reduced redesign risk for customers building durable, industrial-grade systems.



* Longevity dates are subject to change without notice. Refer to the [Product Longevity Program](#) page for the latest information.

Block Diagram



The Dragonwing IQ-9075 Module and Dragonwing IQ-9100 Module are a part of the Product Longevity Program for Qualcomm® IoT Portfolio. These products are developed and engineered with product longevity and durability in mind, helping to bring stability to our customer product designs. Product longevity dates are subject to change without notice.





Target Applications

- Factory Automation
- Industrial Robots
- Edge AI Boxes
- Autonomous Mobile Robots (AMRs)
- Industrial Gateways
- Drones
- Machine Vision
- Industrial Personal Computers

Related Products

The [Dragonwing IQ-9075](#) and [Dragonwing IQ-9100](#) processors power the most demanding industrial-grade, compute heavy, and AI-based devices in extreme temperatures. Furthermore, the [Dragonwing IQ-9075 EVK](#) (evaluation kit) allows developers to explore the capabilities of the industrial-grade Dragonwing IQ-9075 processor.

Ordering Information

Product / Part Number

Dragonwing IQ-9075 Module / QCS-9075M-0-BGM1573B-MT-01-0-AA

Dragonwing IQ-9100 Module / QCS-9100M-0-BGM1573B-MT-01-0-AA

Part numbers are subject to change. Please check with the distributor for the most accurate ordering information.

Specifications

	Dragonwing IQ-9075 Module	Dragonwing IQ-9100 Module
SKU	QCS9075M-0-AA	QCS9100M-0-AA
SoC	Dragonwing IQ-9075	Dragonwing IQ-9100
PMICs	4x PMM8650	4x PMM8650 + 3rd-party MCU PMIC
Memory	3x 12 GB LPDDR5 3200 MHz w/ ECC	
Input Voltage	3.3V	
Output Voltage	0.9V/1.2V/1.8V	
Qualification Standard	AEC-Q100 Grade 3	
OS	Ubuntu, Upstream Linux with Yocto Support	
Temperature (Ambient)	-40 to +85 °C	
Form Factor	1573 BGA	
Dimensions	65 x 65 x 4.55 mm / 1.27 mm pitch	
Weight	33 g	
Longevity	2038*	

Specifications are subject to change.

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