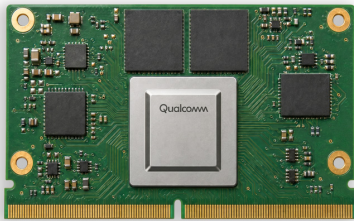




SOM-SMARC-Dragonwing-IQ8

SMARC® Rel. 2.2 module with Qualcomm Dragonwing™ IQ8 Applications Processors

Industrial AI performance in a compact SMARC® module powered by Dragonwing IQ8 processor



HIGHLIGHTS



CPU
Dragonwing IQ8 QCS8275-0-AA
Dragonwing IQ8 QCS8275-0-AC



CONNECTIVITY
1x Gigabit Ethernet port
1x 2.5 Gigabit Ethernet port



AI ACCELERATOR
Qualcomm® Hexagon™ Embedded NPU up to 40 TOPS



MEMORY
Up to 32GB LPDDR5/LPDDR5X soldered memory

Available in Industrial Temperature Range



Qualcomm branded products are products of Qualcomm Technologies, Inc. and/or its subsidiaries.

MAIN FIELDS OF APPLICATION



Coffee
& Vending



Medical



Safety,
Surveillance
& Drones



Industrial
Automation



Robotics



Smart Buildings
& Smart Cities



Transportation
& Smart Mobility

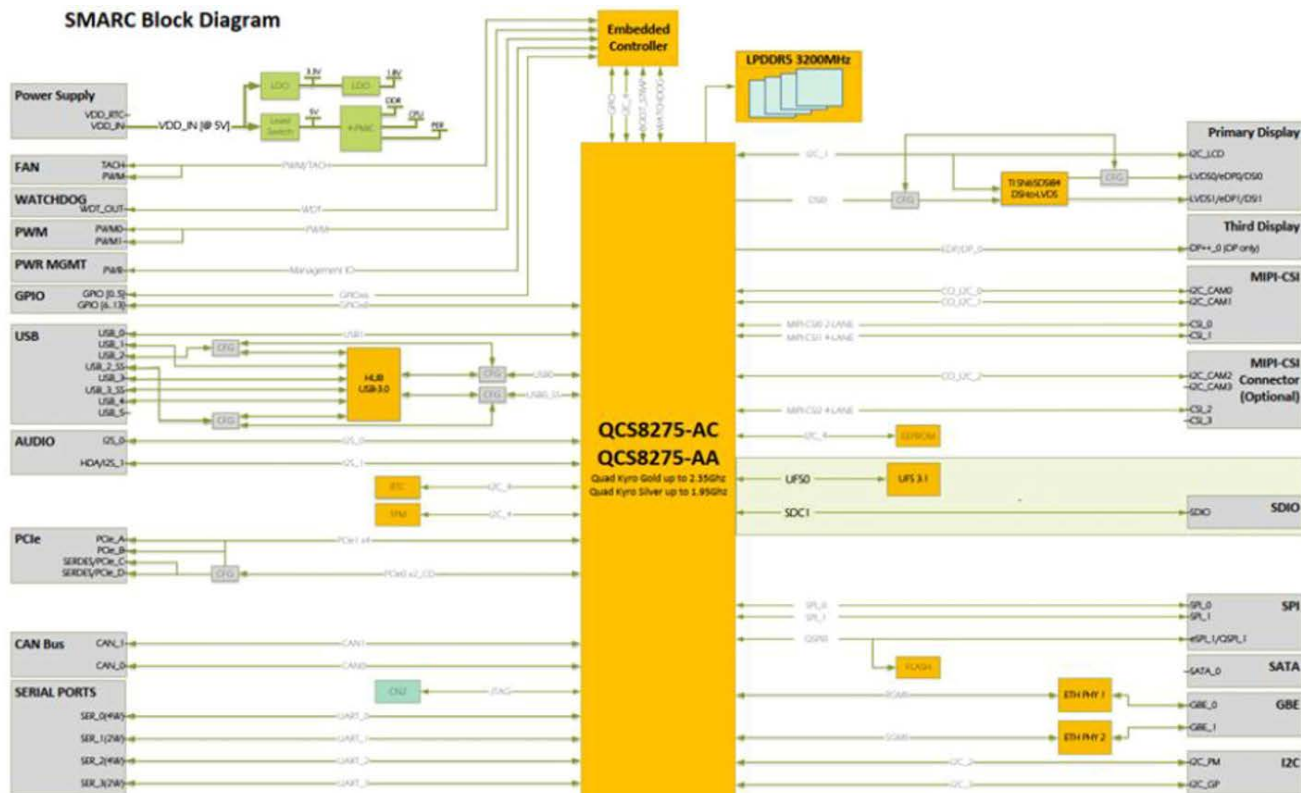
FEATURES

Processor	Dragonwing IQ8 QCS8275-0-AA Dragonwing IQ8 QCS8275-0-AC	Serial Ports	2x 4-wires UART, 2x 2-wires UART
Memory	Up to 32GB LPDDR5/LPDDR5X soldered memory	CAN Bus	2x CAN Interfaces
Video Interfaces	2 independent displays: - DP 1.4 4K@120Hz - LVDS Single/Dual Channel, max resolution 1920x1200@60Hz or DSI 4-lane interface 4K@120Hz (factory option) - 1x mipi-CSI 2-lane interface with dedicated I2C interface - 2x mipi-CSI 4-lane interface with dedicated I2C interface	Other Interfaces	Boot SPI General purpose SPI QSPI interface Power Management I2C Bus (SM Bus) General Purpose I2C Bus 8x GPIOs JTAG signals on dedicated connector ACPI signals
Video Resolution	Up to 2x 4K120Hz	Security	TPM 2.0, FIPS 140-3 compliant (SLB9678)
Graphics	Qualcomm® Adreno™ 623 GPU up to 877MHz	Embedded Controller Functionalities	Watchdog FAN management
Mass Storage	UFS 3.1 Gen4 2-lane drive soldered on-board, up to 1TB, boot device SDIO interface, boot device	Power Supply	+5VDC ± 5%
Networking	1x Gigabit Ethernet port 1x 2.5 Gigabit Ethernet port	Operating System	Clea OS (Yocto Linux) Compatibility with Arduino
USB	Up to 5x USB 2.0 2x USB SS 5Gbps or 1x USB SS 10 Gbps (factory option)	Operating Temperature*	Commercial Temperature Range: 0° ÷ +60°C Industrial Temperature Range: -40° ÷ +85°C
PCI-e	1x PCI-e x4 Gen4 or 2x PCI-e x2 Gen4 (factory option)	Dimensions	82 x 50 mm
Camera Interface	2x 4-Line MIPI CSI, with ISP support	*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.	
Audio	2x I2S Audio interface		

SOM-SMARC-Dragonwing-IQ8

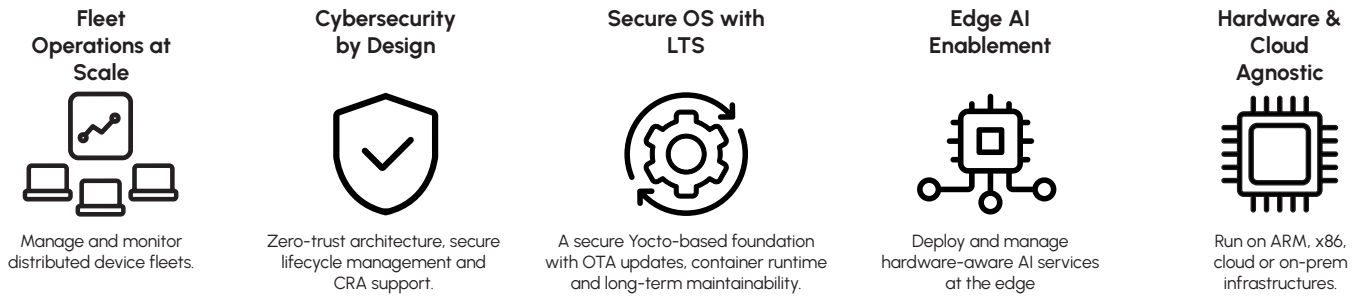
SMARC® Rel. 2.2 module with Qualcomm
Dragonwing™ IQ8 Applications Processors

BLOCK DIAGRAM



Build, Deploy and Maintain Secure Edge Products at Scale.

The secure framework for industrial edge devices, combining fleet operations, cybersecurity, data orchestration and Edge AI enablement.



From Development to Operations

Clea supports the entire product lifecycle, from embedded software development and deployment to fleet operations, maintenance and continuous updates.

