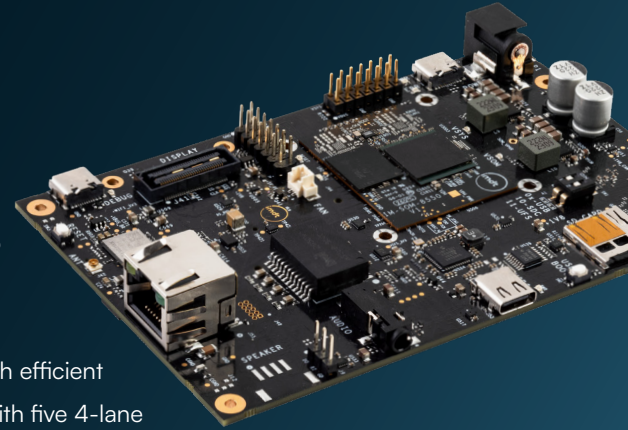




IMDT QCS6490/5430 SBC



The IMDT QCS6490/5430 SBC transforms the IMDT QCS6490/5430 SOM into a complete edge-AI platform built for real-world deployment across smart retail, logistics, industrial systems, and connected smart-city devices. Powered by the Qualcomm® QCS6490/5430, the SBC delivers up to 12 TOPS of AI compute with efficient power usage, multi-camera support, and rich wireless and wired connectivity. With five 4-lane MIPI-CSI camera interfaces, extensive connectivity options and onboard sensing, the SBC provides a solid foundation for AI vision, automation, and analytics applications. Its balanced performance and competitive system cost make the IMDT QCS6490/5430 SBC a strong choice for scaling reliable AI solutions into the field.

- Based on IMDT QCS6490/5430 SOM
- 5 x 4-lane MIPI CSI interface for cameras
- Pin-to-Pin compatible with QCS8550
- M.2 NGFF Key-E with PCIe Gen 3 1-Lane
- M.2 NGFF Key-B with PCIe Gen 3 2-Lane
- Gigabit Ethernet with RJ-45 connector
- 4-lane DSI, with touch I/F
- 6-DOF IMU, 3-Axis magnetometer
- Dimensions: (WxLxH): 125 x 81 x 20 mm

made with
Qualcomm
Technologies



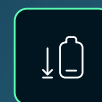
Multi-camera
solution



Small form factor



Pin-to-Pin compatible
with QCS8550



Low power

Key Features



Industrial-Grade Longevity



Advanced Camera ISP



Powerful AI Processing



Multi-OS Ecosystem Support



Kryo 670 CPU Architecture



Premium Graphics & Display



Extended Temperature Range

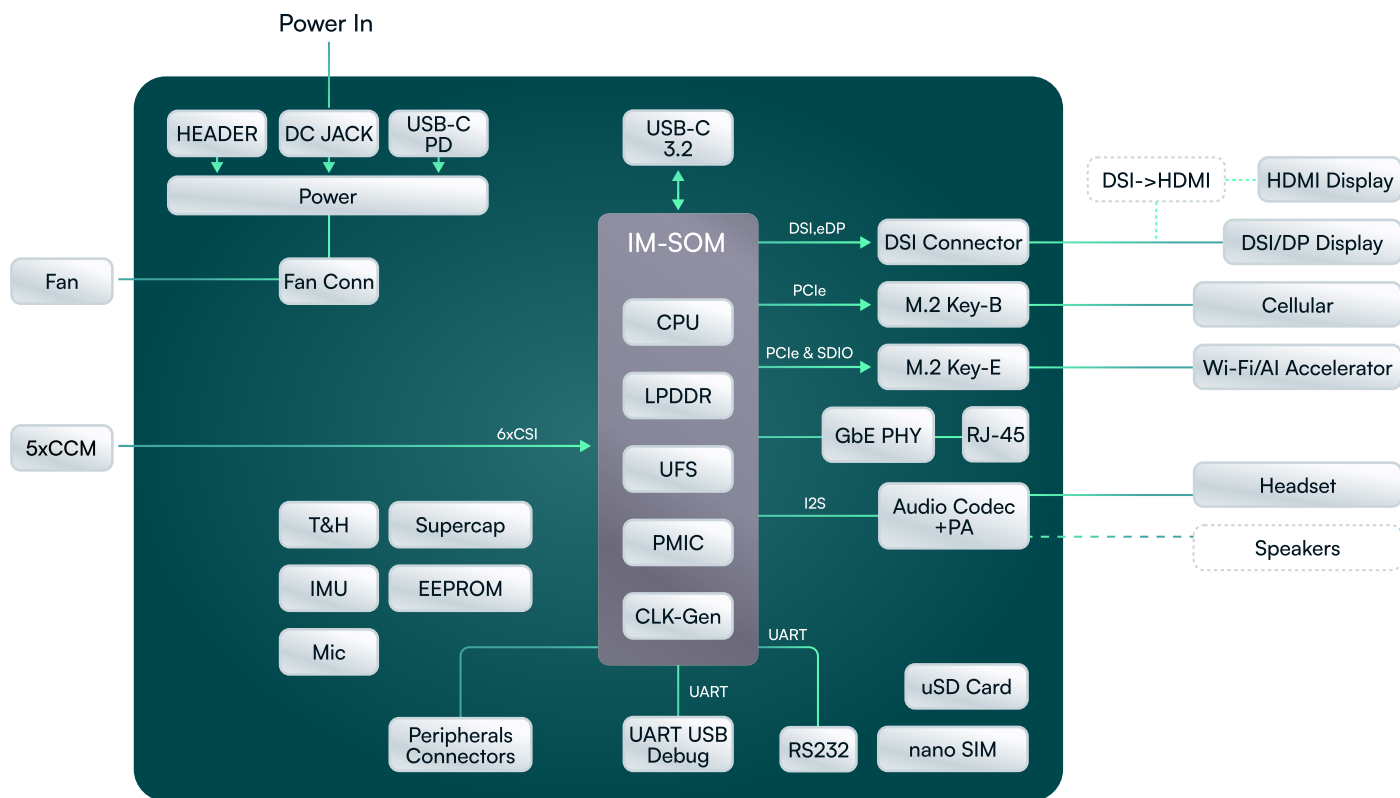


Product Specification

Specification	Description
CPU:	QCS-6490-1
Memories:	LPDDR5, 4/8GB UFS 3.1 64GB or eMMC 5.1 32GB SD card slot
Connectivity:	USB3.1 gen1 5Gbps, Type-C 2x Gen3 PCIe (1x1-Lane, 1x2-Lane) M.2 Key-B with PCIe interface M.2 KEy-E with PCIe interface Gigabit Ethernet with RJ-45 connector
Camera:	5x 4-lane MIPI CSI interface for cameras ISP — Qualcomm spectra
Display:	4-lane DSI, with touch I/F eDP

Specification	Description
Audio:	Supports headset (including Mic) PDM microphone
Sensors	6-Axis Accelerometer and Gyro 3-Axis Magnetometer Temperature & Humidity sensor
Control I/Fs:	RS-232 SPI I2C GPIOs
Debug	On board UART-USB bridge with USB-C connector
Power:	Single power input: USB-C PD / DC-Jack / 2.54mm Header
Dimensions:	125 x 81 x 20mm

Block diagram



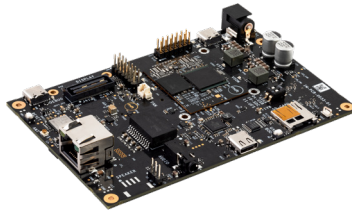
IMDT's QCS6490/5430 Evaluation Kit, based on the IMDT QCS6490/5430 SBC (Single Board Computer), is a high-performance mini-computer designed for a variety of applications in smart retail, industrial automation, smart-city sensing, and AI-driven kiosks projects. The kit offers a user-friendly board with comprehensive onboard connectivity, providing developers with an energy-efficient solution that occupies minimal space.

The QCS6490/5430 EVK can serve as a comprehensive development platform for both evaluation and application development purposes. The kit offers an excellent demonstration of the QCS6490/5430 SOM and SBC connectivity features and performance.



What's in the box

IMDT's QCS6490/5430 SBC



USB-C PD 35W Wall Adapter
with foldable US prongs &
replaceable EU and UK plugs



Optional



DSI to HDMI
adapter & HDMI cable

Optional



Up to 2 x AR1335
MIPI cameras

About IMDT

IMDT Technologies, with headquarters in the UK and Israel, specializes in creating advanced vision and AI-powered products and systems. Leveraging extensive engineering experience in real-time applications, including vision and AI on edge hardware and software, IMDT has excelled in design, development, and manufacturing since its inception in 2017. The company globally addresses complex vision and AI challenges, focusing on partnerships with leading chip manufacturers and delivering turnkey projects in medical, robotics, smart cities, smart homes, and industrial IoT.

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