

DS-011

Qualcomm QCS6490 Edge-AI Box

Preliminary



Features

- Power by Qualcomm Dragonwing™ 8-cores QCS6490 2.1Ghz
- Hexagon™ 770 AI Engine up to 12 TOPS
- Triple-ISP for camera up to 192MP capture
- Qualcomm AI Hub for Application development
- Dual HDMI 4K Display Support
- Dual LAN, RS232 & USB ports

WISE-PaaS/SignageCMS WISE-DeviceOn

Introduction

DS-011, an Edge-AI Box equipped with 2X UHD HDMI ports, designed for application-level display in AI applications, making it ideal for interactive-AI and signage-AI solutions. With low power CPU, compact 23 mm height, and fanless design, it can be seamlessly installed in constrained spaces, ensuring reliable 24/7 operation in smart city environments.

Specifications

		DS-011QF-U0A1E	DS-011QF-U1A1E
Processor	Chipset	Qualcomm QCS6490	Qualcomm QCS6490
	Clock Speed	1x A78 @ 2.7 GHz, 3x A78 @ 2.4 GHz, 4x A55 @ 1.9 GHz	
Memory	Technology	8GB LPDDR5 8533MT/s on board	
GPU		Adreno™ 643, 812Mhz	
Thermal Solution		Fanless	
NPU	AI Engine	Hexagon™ 770, 1.45Ghz, 12 TOPS	
Display	Output	2 x HDMI 2.1 TMDS	
	HDMI Resolution	3840 x 2160 @ 60Hz	
Ethernet	Controller	RTL8211FS	
	Interface	Gigabit LAN Controller	
	Connector	2 x RJ45	
I/O Interfaces	Audio	1 x (Line-Out or Mic-In)	
	USB	2 x USB 3.2 Gen1	
	Serial Port (RS-232)	2 x RS232	
	LED Indicators	1 x Power, 1 x SSD Access	
	GMSL	2 x GMSL	
Storage	M.2	1 x 2280 M Key (NVME)	
Power Requirement	Input Voltage	19 V DC-in (ATX/AT mode)	
Physical Characteristics	Mounting	Wall Mount	
	Dimensions (W x D x H)	180 x 177 x 23mm	
	Weight	0.9 kg	
Environment	Operating Temperature	0~40°C (with 0.7 m/s airflow)	
	Relative Humidity	95% @ 40 °C (non-condensing), operating	
Operating System	Operating System	Linux Yocto Ubuntu 22.04 LTS	
Certifications	EMC	CE/FCC Class B, BSMI, UKCA	
	Safety	UL, CB, BSMI	