

Developer Board 8 SPEC



Overview

Geniatech's Developer Board 8 is based on the Qualcomm® Snapdragon™ 820E embedded platform with the custom 64-bit Qualcomm® Kryo™ quad-core CPU and is compliant with the 96Boards Consumer Edition Extended Version specification managed by Linaro. The combination of the Snapdragon 820E embedded platform's powerful Qualcomm® Adreno™ 530 GPU and quad-core CPU expands the possibilities of connected computing and high quality visual experiences while providing the ultimate in power efficiency. The Developer Board 8 development board supports a wide range of interfaces and is ideal for prototyping complex embedded computing applications, from realistic visual and audio immersion for VR and AR applications, to machine vision and artificial intelligence for commercial drones and robots. The Developer Board 8 embedded platform is designed to provide a fast-track deployment path, with powered by

integration services and production-ready, customizable SoMs (System-on-Modules) and SBCs (Single Board Computers) available to turn a Developer Board 8 based invention into a commercial product.

Processor

Snapdragon 820E embedded platform, custom 64-bit Kryo quad-core CPU up to 2.35GHz , 14nm FinFET process technology

Adreno™ 530 GPU OpenGL ES 3.1 + AEP, OpenCL2.0 Full1, Vulkan, Renderscript, 64-bit virtual addressing

Memory/Storage

4GB PoP LPDDR4 1866MHz

64GB UFS2.0

Display

HDMI Full-size Type A connector (4K@60fps)

Camera

Integrated Dual ISP with support for 3 image sensors up to 28MP

Audio

PCM/AAC+/MP3/WMA, ECNS, Audio+ post-processing (optional)

All signals are routed to the analog expansion connector

Connectivity

WLAN 802.11 a/b/g/n/ac 2.4GHz/5GHz Dual Band

Bluetooth 4.2

1x 10/100/1000M Ethernet

1x USB 2.0 micro B (device mode only)

2x USB 3.0 type A (host mode only)

GPS

Expansion connector

powered by

1x 96boards 40 pin Low-Speed connector (UART x2, SPI, I2S, I2C x2, GPIO x12, DC power)

1x 96boards 60 pin High-Speed connector (4L-MIPI DSI, USB,I2C x2, 2L+4L-MIPI CSI)

2x Analog expansion connector (headset, speaker via sound-wire interface, microphones, line-outs)

1x 60 pin High-Speed connector (secondary 4L-MIPI DSI, SSC serial busses, TSIF - connection available only in hardware)

External Storage

1x Micro SD socket

User Interface

Power/Reset

Volume Up/down

7 LED indicators

- 1 - Power
- 2 - for BT、WLAN activity
- 4 - user controllable

OS-support

Android 6.0

Linux 4.14

Power, Mechanical and Environmental

Power: +5V

Dimensions:73mm*50mm

Operating Temp: -25°C to +70°C

RoHS and Reach compliant

powered by