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, Vulcan, 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