



## Specifications

Form Factor	3.5-inch SBC
Processor	NXP i.MX 8M Quad Cortex™ -A53 and Cortex™ -M4 processor
System Memory	3GB LPDDR4 on board
Flash Memory	16GB eMMC on board
Display	1x Dual Channel LVDS (FHD) 1x HDMI 2.0a
Video Codec	<ul style="list-style-type: none"> <li>4Kp60 HEVC/H.265 main, and main 10 decoder</li> <li>4Kp60 VP9 decoder</li> <li>4Kp30 AVC/H.264 decoder</li> <li>1080p60 MPEG-2, MPEG-4p2, VC-1, VP8, RV9, AVS, MJPEG, H.263 decoder</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>GC7000Lite</li> <li>OpenGL ES 1.1, 2.0, 3.0, 3.1, Open CL 1.2, and Vulkan</li> </ul>
Edge I/O	<ul style="list-style-type: none"> <li>1x RJ45 GbE LAN</li> <li>2x USB 3.0 Type-A</li> <li>1x USB OTG (mini-USB Type-B)</li> <li>1x HDMI 2.0a</li> <li>1x RS232/422/485 (D-SUB 9 male connector)</li> <li>1x SD socket (UHS-I SDR-104, 104MB/s max.)</li> <li>1x on/off button</li> </ul>
Internal I/O	<ul style="list-style-type: none"> <li>1x Dual channel LVDS</li> <li>1x Backlight, 3.3V/1A, 5V/1A, 12V/1A (jumper selection)</li> <li>1x MIPI-DSI (2*10 pin header)</li> <li>2x MIPI-CSI (2*10 pin header)</li> <li>2x USB 3.0 header</li> <li>1x M.2 E-Key (2230) w/ USB, SDIO, UART, PCI-E</li> <li>1x Mini PCI-E w/ SIM socket</li> <li>1x I²C header</li> <li>1x 2-wire RS232 header (for Debug Console Port)</li> <li>2x 2-wire RS232 header</li> <li>1x Audio header (Line-in and Line-out)</li> <li>8x GPIO (2*5 pin header 1.0mm)</li> <li>3x green LEDs (for power on/off, wireless status, and programmable)</li> </ul>
Expansion IO	N/A
Watchdog	256 Levels, 0~128 secs
Dimensions	147mm x 102mm (5.8" x 4")
Power Input	12V~24V DC-in jack and Internal Header
Operating Temperature	-20°C ~ 80°C (-4°F ~ 176°F)

## Features

- NXP Cortex™-A53/-M4, i.MX 8M Quad processor
- 4K HDMI, dual channel FHD LVDS
- 3GB LPDDR4, 16GB eMMC and SD socket
- Embedded I/O for COM, GPIO, USB 3.0, USB-OTG, Audio and Ethernet
- M.2 E-Key (2230) and mini-PCI-E with SIM socket for wireless/4G/LTE connectivity

Relative Humidity	10%~90% (non-condensing)
OS Support	<ul style="list-style-type: none"> <li>Yocto 2.5</li> <li>Android 9</li> <li>UBUNTU 18.04 evaluation</li> <li>Other OS (by request)</li> </ul>
Certification	CE/FCC Class-B

## Ordering Information

IBR210-Q316I	Industrial Grade 3.5" SBC, i.MX 8M Quad 1.3GHz processor, 3GB LPDDR4, 16GB eMMC
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## Dimensions

