

Huameishi Technology

IBR210 Single Board Computer

Low-Power Multimedia IoT 3.5" SBC with

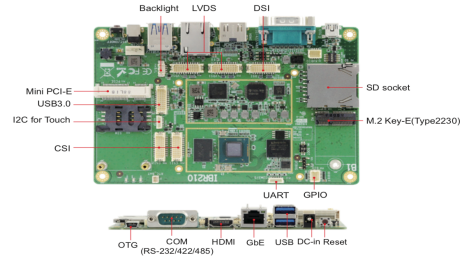
NXP ARM® Cortex-A53/Cortex-M4 i.MX 8M Quad 1.3GHz Processor

Single Board Computer

Low-Power Multimedia IoT 3.5" SBC with NXP ARM® Cortex-A53/Cortex-M4 i.MX 8M Dual/Quad 1.5GHz Processor

Features

- With NXP Cortex™-A53/Cortex™-M4, i.MX 8M Dual/Quad 1.5GHz Processor
- Supports 4K HDMI, Dual Channel FHD LVDS
- Supports 3GB LPDDR4, 8/16/32/64GB eMMC and SD socket for expansion
- Supports embedded I/O for COM, GPIO, USB3.0, USB-OTG, Audio and Ethernet
- Supports M.2 Key-E (2230) and Mini-PCI-E w/ SIM socket for Wireless/4G/LTE connectivity



Specifications

Form Factor	3.5-inch Disk-Size SBC
Processor	NXP i.MX 8M Dual/Quad Cortex™-A53 and Cortex™-M4, 1.5GHz
System Memory	3GB LPDDR4 on board
Flash Memory	8GB eMMC on board (optional 16/32/64 GB)
Display	1x Dual Channel LVDS (FHD) 1x HDMI V2.0a, support HDCP2.2 and HDCP1.4
Video Codec	• 4Kp60 HEVC/H.265 main, and main 10 decoder • 4Kp60 VP9 decoder • 4Kp30 AVC/H.264 decoder • 1080p60 MPEG-2, MPEG-4p2, VC-1, VP8, RV9, AVS, MJPEG, H.263 decoder
Graphics	• GC7000Lite • OpenGL ES 1.1, 2.0, 3.0, 3.1, Open CL 1.2, and Vulkan
Edge I/O	1x RJ45 GbE LAN 2x USB 3.0 Type-A 1x USB OTG (mini-USB Type-B) 1x HDMI V2.0a 1x RS232/422/485 (D-SUB 9 male connector) 1x SD socket (UHS-I SDR-104, 104MB/s max.) 1x ON/OFF button
Header, Expansion & LEDs	1x Dual Channel LVDS 1x Backlight, 3.3V/1A, 5V/1A, 12/1A (jumper selection) 1x MIPI-DSI (2*10 pin header) 2x MIPI-CSI (2*10 pin header) 2x USB3.0 header 1x M.2 Key-E (2230) w/ USB, SDIO, UART, PCI-E 1x Mini PCI-E w/ SIM Socket 1x I ² C header 1x 2-wire UART header (for Debug Console Port) 2x 2-wire UART header 1x Audio header (Line-in and Line-out) 8x GPIO (2*5 pin header 1.0mm) 3x Green LEDs (for Power On/Off, Wireless status, and Programmable)
Watchdog	256 Levels, 0~128 secs
Dimensions	147mm x 102mm
Power	12~24V DC-in Jack and Internal Header
Operating Temperature	0°C ~ 70°C (Option: -40°C ~ 85°C)
Relative Humidity	10%~90% (non-condensing)
Software Support	Yocto v2.5 (Kernel 4.14.62) Android 9 (Kernel 4.14.62)
Certification	CE/ FCC Class B

Ordering Information

IBR210-D308	3.5" SBC, i.MX 8M Dual 1.5GHz, 3GB LPDDR4, 8GB MLC eMMC
IBR210-D308	Industrial Grade 3.5" SBC, i.MX 8M Dual 1.3GHz, 3GB LPDDR4, 8GB MLC eMMC
IBR210-Q316	3.5" SBC, i.MX 8M Quad 1.5GHz, 3GB LPDDR4, 16GB TLC eMMC
IBR210-Q316I	Industrial Grade 3.5" SBC, i.MX 8M Quad 1.3GHz, 3GB LPDDR4, 16GB TLC eMMC