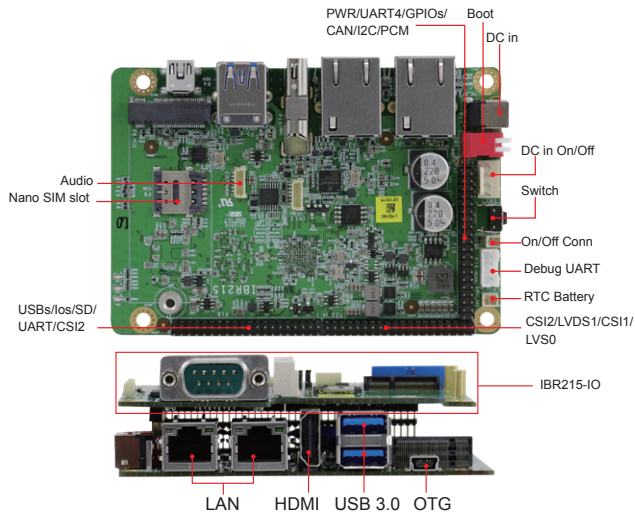




Features

- NXP Cortex™-A53, i.MX 8M Plus Quad-core 1.6GHz Processor
- Up to 2.3 TOPS NPU
- External connectivity for USB, HDMI & Ethernet
- Supports M.2 B-Key (3052)/m-PCIe for 5G module and NFC functions
- IBR215-IO: Expansion board for WiFi/BT, 4G/LTE, LCD, camera functions
- Supports Yocto5, Debian12 and Android14
- Wide-range operating temperature (-40°C~85°C)
- Ruggedized and fanless design

Specifications

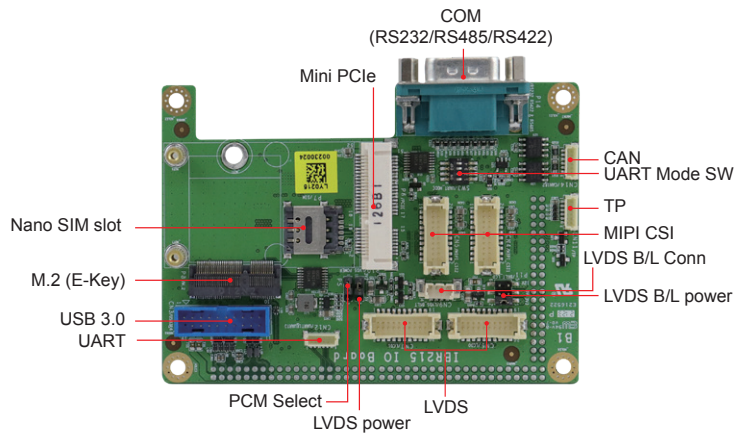
Form Factor	2.5-inch SBC
Processor	NXP i.MX 8M Plus - ARM Cortex-A53 Quad-core Processor
System Memory	3GB LPDDR4 on board (option: 4/8GB)
Flash Memory	16GB eMMC on board (up to 256GB)
Display	1x 8-lane or 2x 4-lane LVDS 1x HDMI
Video Codec	Decode: 1080p60, H.265, H.264, VP9, VP8 Encode: 1080p60, H.265, H.264
Graphics	OpenGL Es 1.1, 2.0, 3.0, 3.1, OpenCL 3.0, OpenVG 1.1, OpenGL 4.0, EGL 1.5, Vulkan 1.1
Edge I/O	1x On/Off button 1x 12V~24V DC-IN jack 1x SD socket (UHS-I SDR-104, 104MB/s max.) 1x Boot select switch (boot from eMMC or SD) 1x HDMI 2x USB 3.0 Type-A 2x RJ45 GbE LAN 1x Mini-USB OTG
Internal I/O	1x M.2 3052 B-Key with SIM socket (for 5G module) 2x I ² C / 4x GPIO in a 6-pin header 1x Audio Line-in and Line-out in a 6-pin header 1x DC power supply in a 4-pin header 3x IO expansion headers (2x 20-pin) with the following signals: 1x USB2.0, 1x PCM, 2x UART(RX,TX), 1x SDIO, 1x UART (Tx,Rx,CTS,RTS), 2x USB 3.0, 1x LVDS 2ch with Back light control, 1x I2C, 2x PWM, 3x GPIO, 1x Capacitive touch IF, 2x MIPI-CSI for cameras, 2x CAN-FD, 5V, 12V (DC-IN)
Expansion IO	3x 2mm pitch 2x20-pin headers for main board connection: 1x M.2 E-Key 2230 (SDIO, UART) for Wi-Fi/BT module 1x mPCI-E (USB2.0, SIM, PCM) for 4G/LTE/Wi-Fi modules 1x DB-9 RS232/422/485 port 2x USB 3.0 in 2x10 pin header 1x LVDS 2ch with Back light control 1x Capacitive touch IF 2x MIPI-CSI for cameras 2x CAN-FD
Watchdog	256 levels, 0~128 seconds

Dimensions	IBR215: 105mm(W) x 72mm(D) (4.13" x 2.83") IBR215-IO: 100mm(W) x 72mm(D) (3.94" x 2.83") IBR215+IBR215-IO: 105mm(W) x 72mm(D) x 35mm(H) (4.13" x 2.83" x 1.37")
Power Input	12V~24V DC-IN jack
Operating Temperature	With heat sink or through housing design: -40°C~85°C (-40°F ~185°F) Without heatsink:-40°C~65°C (-40°F ~149°F)
Relative Humidity	0 % to 90 % RH at 60° C (non-condensing)
OS Support	Yocto 5.0, Android 14, Debian 12 Support for other OS available upon request
Certification	CE/ FCC Class-B

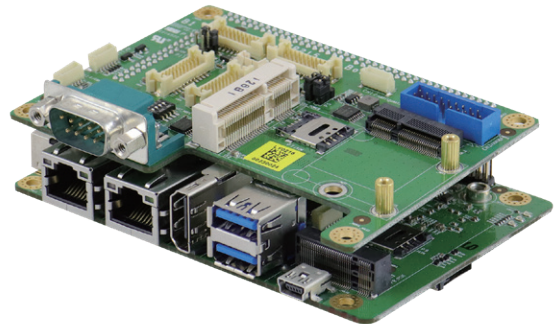
Ordering Information

IBR215-01	ARM-based IoT Gateway, NXP Cortex®-A53, i.MX 8M Plus Quad-core 1.6GHz processor, 3GB LPDDR4, 16GB eMMC
IBR215-IO	Expansion Board for IBR215
HSIBR215-A	Heat sink

Compatible I/O Expansion Board



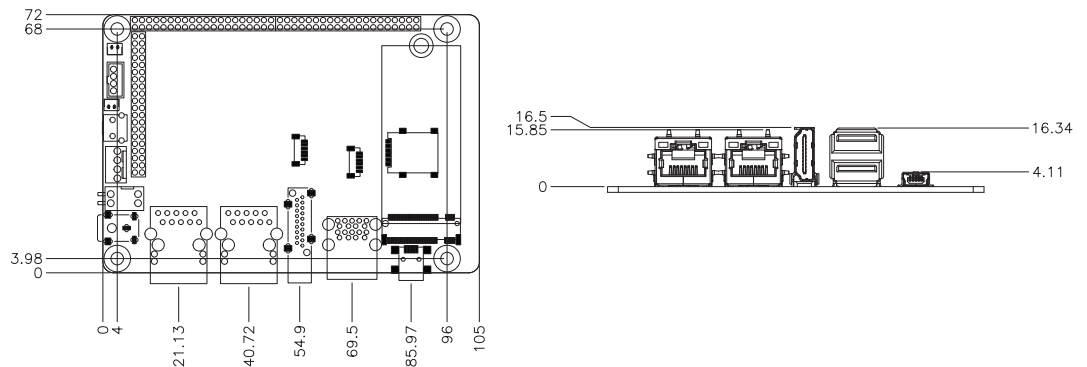
IBR215-I/O



IBR215 with IBR215-I/O module

Dimensions and Drawing

IBR215



IBR215-I/O

