

Features

- NXP i.MX 8M Plus - ARM Cortex-A53 Quad Processor
- 3GB LPDDR4, 16GB eMMC & SD socket
- External connectivity for USB, HDMI & Ethernet
- Supports M.2 B-Key (3052) for 5G module, camera, NFC & QR-code functions
- IBR215-IO: Expansion board for wireless, 4G/LTE, LCD, camera, NFC & QR-code functions
- Ruggedized and fanless design
- Wide-range operating temperature (-40°C~85°C)

Specifications

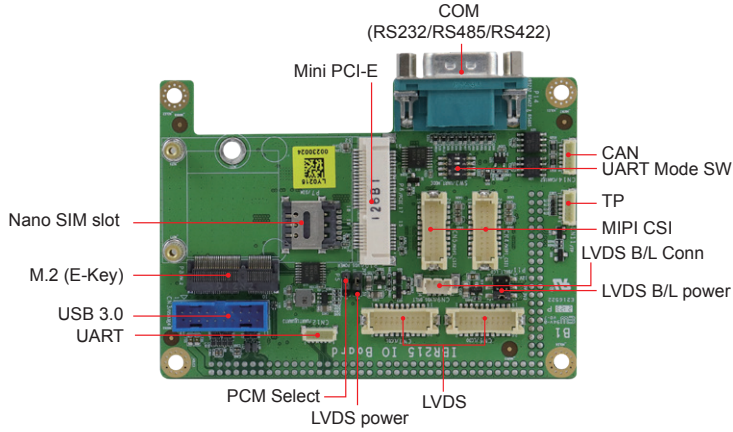
Form Factor	2.5-inch SBC
Processor	NXP Cortex®-A53 i.MX8M Plus processor
System Memory	3GB DDR4 on board (option: 1/2/4GB)
Flash Memory	16GB eMMC on board (up to 128GB)
Display	1x HDMI 1.4a 1x LVDS 2ch through IO
Video Codec	Decode: 1080p60, H.265, H.264, VP9, VP8 Encode: 1080p60, H.265, H.264
Graphics	OpenGL 3.1, OpenCL 1.2, Vulkan
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 1.4a 2x USB 3.0 Type-A 2x RJ45 GbE LAN 1x Mini-USB OTG
Internal I/O	1x M.2 B-Key(3052) with SIM socket (for 5G module) 2x I2C / 4x GPIO 1x Audio Line-in and Line-out 1x DC input 1x DC power (4-pin header) 3x IO expansion 2mm pitch 2x20 headers with following features (Contact us for design reference): <ul style="list-style-type: none"> • 1x USB 2.0 • 1x PCM • 2x UART(Rx, Tx) • 1x SDIO • 1x UART (Tx, Rx, CTS, RTS) • 2x USB 3.0 • 1x 2ch LVDS with backlight control • 1x I2C • 2x PWM • 3x GPIO • 1x Cap touch IF • 2x MIPI-CSI for cameras • 2x CAN-FD • 1x 12V~24V DC-in jack

Expansion IO	1x M.2 E-Key(2230)w/ SDIO, UART for wireless 1x Mini PCI-E w/ USB 2.0, SIM, PCM for 4G/LTE 1x DB-9 RS232/422/485 port 2x USB 3.0 in 1x19-pin headers 1x 2ch LVDS with backlight control 1x Cap touch IF 2x MIPI-CSI 2x CAN-FD
Watchdog	256 levels, 0~128 seconds
Dimensions	IBR215: 105mm(W) x 72mm(D) 4.13"(W) x 2.83"(D) IBR215-IO: 100mm(W) x 72mm 3.94"(W) x 2.83"(D) IBR215+IBR215-IO: 105mm(W) x 72mm(D) x 35mm(H) 4.13"(W) x 2.83"(D) x 1.37"(H)
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	10%~90% (non-condensing)
OS Support	Yocto v3.0 Android 11 Other OS (by request)
Certification	CE/ FCC Class-B

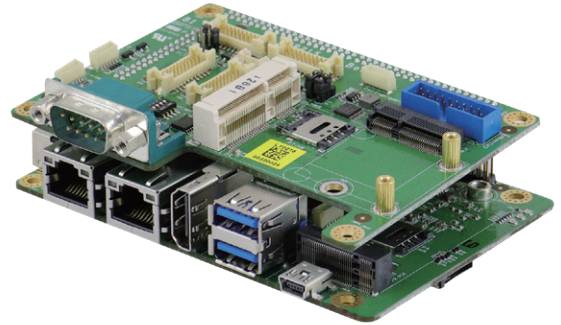
Ordering Information

IBR215-Q316I	ARM-based IoT Gateway, NXP Cortex®-A53, i.MX 8M Plus Quad 1.6GHz processor, 3GB LPDDR4, 16GB eMMC
IBR215-IO	Expansion Board for IBR215

Compatible I/O Expansion Board



IBR215-I/O



IBR215 with IBR215-I/O module

Dimensions and Drawing

