



## Features

- NXP Arm Cortex® -A55 Dual Core cluster and Arm Cortex® -M33 processor
- 2GB LPDDR4, 32GB eMMC & SD socket for expansion
- Embedded I/O for COM, USB, HDMI, Ethernet
- Supports M.2 E-Key (2230) for WiFi/BT module
- Ruggedized and fanless design
- Wide-range operating temperature (-40°C~85°C)

## Specifications

Form Factor	2.5-inch SBC
Processor	NXP Cortex®-A55 i.MX93 Dual Core industrial-Grade SoC operating up to 1.7 GHz MCU: Cortex®-M33 CPU operating up to 250 MHz NPU: ARM Ethos®-U65 microNPU (256 MACs operating up to 1.0 GHz and 2 OPS/MAC)
System Memory	2GB LPDDR4 on board (option: 4GB)
Flash Memory	32GB eMMC on board (up to 256GB)
Display	1x LVDS 1x MIPI-DSI
Video Codec	N/A
Graphics	Pixel processing pipeline (PXP) engine to support 2D image processing
Edge I/O	2x USB2.0 (Type-A) 1x Reset button 1x 12V~24V DC-in lock jack 2x Gigabit LAN port 1x COM port for RS232/422/485
Internal I/O	2x USB 2.0 (2x5-pin wafer connector) 3x COM port (1x debug, 2xRS232,3-pin header) 2x CAN FD pin header 1x I2C / 1x UART pin header 1x Audio Line-in and Line-out (6-pin header) 1x RTC battery pin header 1x DC power (4-pin header) 1x Pin DIP Switch 2x Green LED for power on/off 1x M.2 E-Key (2230) for WiFi/BT module 1x Micro SD slot 1x I²C 1x UART
Expansion IO	N/A
Watchdog	256 Levels, 0~128 Secs
Dimensions	100mm x 72mm (3.9" x 2.8")
Power Input	12/24VDC-In Jack and Internal header
Operating Temperature	-40°C~+85°C (-40°F ~185°F)
Relative Humidity	0%~90% (non-condensing)
OS Support	Yocto 4.2 Other OS (by request)
Certification	CE/ FCC Class-B

## Ordering Information

IBR300-Q232I	ARM-based IOT Gateway, NXP i.MX 93 Cortex-A55, 1.7GHz, 2GB LPDDR4, 32GB eMMC
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## Dimensions

