
Datasheet

iBASE

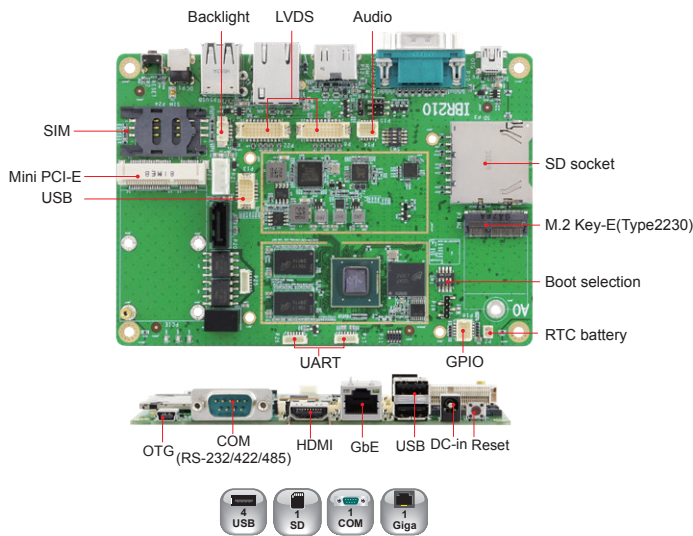
IBR210

3,5" Single-Board Computer with

NXP Cortex™-A53

i.MX 8M Dual Processor

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System

Form Factor	3.5-inch Disk-Size SBC
CPU	NXP Cortex™-A53 i.MX 8M Dual 1.5GHz processor
System Memory	2GB DDR4 on board
Data Memory	8GB eMMC on board
Display	1x 18-/24-bit Dual LVDS, 4K HDR10 1x HDMI V2.0a, support HDCP2.2 and HDCP1.4
Video Codec	Encoder: FHD 1080p 30 H.264. Decoder: UHD 4Kp 60 HEVC/ H.265 10-bit MP, RV9, AVC/ H.264, VP8, MPEG-2, MPEG-4p2, VC-1, AVS/ AVS+, MJPEG, H.263
Graphics	OpenGL 3.1, OpenCL 1.2, Vulkan
LAN	10/100/1000 Mbps
Touch	USB
Audio	2x 5 pin header, pitch 1.0 mm for Line-in/out
RTC	IDT 1337AGDVG18
Watchdog	256 Levels, 0~128 secs
Edge I/O	1x GbE (RJ45 connector) 2x USB 3.0 Type-A, 1x USB OTG Mini-USB 1x HDMI V2.0a 1x RS232/422/485 (D-SUB 9 male connector) 1x SD socket (UHS-I SDR-104, 104MB/s max.) 1x Reset button
Header, Expansion & LEDs	1x Backlight, 3.3V/1A, 5V/1A, 12/1A (jumper selection) 1x 4-pin wafer (for Debug Console Port) 1x Audio pin Header (Line-in and Line-out) 2x 2-wire UART pin header 2x USB 3.0 by pin header 1x M.2 Key-E (2230) w/ USB, SDIO, UART, PCI-E 1x Mini PCI-E (USB only) w/ SIM Socket 3x Green LEDs (for Power On/Off, Wireless status, and Programmable) 8x GPIO (2*5 pin header 1.0mm) 1x MIPI-CSI (2*10 pin header)
Dimensions	147mm x 102mm (5.8" x 4")
Power	12V DC-in by DC-Jack

Features

- With NXP Cortex™-A53, i.MX 8M Dual 1.5GHz processor
- Supports HDMI, Dual LVDS to 4K HDR
- Supports 2GB DDR4, 8GB eMMC and SD socket
- 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 connectivity

Operating Temperature	-40°C ~ 85°C (-40°F ~ 185°F) with heatsink
Devices	WiFi/BT module (option) 3G/GPS module (option)
Software Support	Yocto 2.1 (Kernel 4.1.15) Android 8
Relative Humidity	10%~90% (non-condensing)
Certification	CE/ FCC Class B

Ordering Information

IBR210	3.5" ARM-based SBC, Cortex™-A53 i.MX 8M Dual 1.5GHz, 2GB DDR4, 8GB eMMC, Dual LVDS, HDMI, RS-234/422/285, USB, M.2 Key-E(2230) and Mini PCI-E w/ SIM socket
Cable	LCD403, Panel cable for 7" LCD404, Panel cable for 15" LCD434, Panel cable for 21.5" VT-76, Backlight for 7" and 15" panel VT-82, Backlight for 21.5" panel PK1-135, GPIO PK1-133, COM port USB-81, USB OTG cable PK1-100A, Debug cable
RF module	WNFT-234ACN, WiFi/BT M.2 module UC20GC, 3G/GPS mPCIe module
Display	AM-1024600ATMQW-A0H: - 7" Capacitive LVDS TFT LCD, 1024 x 600 M150GNN2 R1: - 15" Capacitive LVDS TFT LCD, 1024 x 768 LM215WF3-SLS1: - 21.5" Transmissive LVDS TFT LCD, Full HD

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