



Features

- With NXP Cortex™-A9, i.MX 6Dual 1GHz Processor
- Supports HDMI and dual LVDS
- 1GB DDR3, 4GB eMMC and SD socket for expansion
- Supports embedded I/O, COM, GPIO, USB, USB-OTG, audio and Ethernet
- Supports M.2 Key-E (2230) and Mini PCI-E with SIM socket for wireless/4G/LTE connectivity

System

Form Factor	3.5-inch Disk-Size SBC
Processor	NXP Cortex™-A9 i.MX 6Dual, 1GHz
System Memory	1GB DDR3 on board
Flash Memory	4GB eMMC on board (optional 8/16/32/64 GB)
Display	2x 18/24-bits single LVDS /1x Dual LVDS, up to 1366 x 768 for 2ch, 1920 x 1080 for 1ch 1x HDMI V1.4, up to 1080P at 60Hz
Video Codec	<ul style="list-style-type: none"> • 1080p60or30 + D1 Dual 1080p decode • 1080p30 H.264BP • Dual 720p encode
Graphics	<ul style="list-style-type: none"> • Vivante GC2000, OpenGL, GL ES 2.0 & Hattl, CL EP • Vivante GC355, OpenVG 1.1
Edge I/O	1x RJ45 GbE LAN 2x USB Type-A 1x USB OTG (mini-USB Type-B) 1x HDMI 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 Dual channel LVDS (FHD) 1x Backlight, 3.3V/1A, 5V/1A, 12/1A (jumper selection) 2x USB 2.0 header 1x M.2 Key-E (2230) w/ USB, SDIO, UART, PCI-E 1x Mini PCI-E (USB only) w/ SIM socket 1x SATA & 4-pin header for the power, 5V/12V 2x CAN Bus 2.0B (2*3 pin header) 1x I ² C header 1x 2-wire UART header (for Debug Console Port) 2x 2-wire UART (6-Pin header, 1.0mm) 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 (5.8" x 4")
Power Input	12V DC-in Jack

Operating Temperature	-40°C ~ 85°C
OS Support	Yocto v2.1 (Kernel 4.1.15) Android 6.0.1 (Kernel 3.14.52)
Relative Humidity	10%~90% (non-condensing)
Certification	CE/ FCC Class B

Ordering Information

IBR117	3.5" ARM-based SBC, NXP Cortex™-A9, i.MX 6Dual 1GHz, 1GB DDR, 4GB eMMC, Dual LVDS, HDMI, RS-232/422/485, USB, M.2 Key-E (2230) and Mini PCI-E w/ SIM socket
Heatsink	HSIBR117-B
Cables	LCD403: Panel cable for 7" LCD404: Panel cable for 15" LCD434: Panel cable for 21.5" IV-76: Backlight for 7" and 15" panel IV-82: Backlight for 21.5" panel PK1-135: GPIO PK1-133: COM port USB-81: USB OTG cable PK1-100A: Debug cable
RF modules	WNFT-234ACN: WiFi/BT M.2 module UC20GC: 3G/GPS mPCI-E 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