



## System

Form Factor	3.5-inch Disk-Size SBC
CPU	NXP Cortex™-A9 i.MX 6Dual 800MHz processor, automotive grade
System Memory	1GB DDR3 on board
Data Memory	4GB eMMC on board SD socket (up to 32GB)
Display	HDMI 18/24 bit Dual channel LVDS (up to 1920 x 1080)
Video Codec	Decode: 1080p, 30fps Encode: 1080p, 30fps
LAN	1st LAN: 10/100/1000 Base-T Ethernet (GbE) 2nd LAN: 10/100 Base-T Ethernet
Touch	PM6000 resistive touch IC (4/5-wire) on board USB/ I²C header on board (for capacitive touch)
Audio	Audio pin header (1x microphone, 1x speaker)
RTC	Seiko RTC IC on board
NVRAM	N/A
Watchdog	256 levels
Edge I/O	1x 1st 10/100/1000 LAN 1x 2nd 10/100 LAN 1x USB 2.0 Host (Type-A) 1x USB OTG (Mini-USB Type-B) 1x COM RS-232/422/485 1x SD socket (up to 64GB) 1x DC-in jack 1x HDMI (Type-A) 1x Reset button
Headers & Expansion Slots	Headers: 8x GPIO pin header 1x Debug port pin header 1x USB2.0 Host box header 1x I²C pin header 1x 4/5-wire resistive touch pin header 2x CAN Bus 2.0B (w/ isolation) pin headers 1x Dual channel LVDS box header (supports full HD) 1x Audio pin header (1x microphone, 1x speaker) 1x SATA header Slots: 1x Full-size Mini PCI-E with USB interface
Dimensions	147mm x 102mm (5.8" x 4")
Power	12V~24V DC-in

## Features

- With NXP ARM Cortex-A9, i.MX 6Dual 800MHz processor, automotive-grade processor
- Supports -40°C~ 85°C environment, with all industrial-grade components
- Supports 12V~24V DC input voltage
- With 1GB DDR3, 4GB eMMC on board
- Resistive touch panel (4/5-wire) & capacitive touch interface
- OpenGL ES 2.0 and OpenVG 1.1 hardware accelerators
- Supports COM, CAN bus, USB-OTG, SD card, HDMI, Dual channel LVDS
- Supports rich I/O interface for BOM customization

Operating Temperature	-40°C~ 85°C (-40°F ~ 185°F)
Devices	WiFi/BT/3G+GPS module (option)
Software Support	Ubuntu Linux 12.04 (kernel 3.0.35)/ Android 4.3
Relative Humidity	10%~90% (non-condensing)
Certification	CE/FCC Class A

## Ordering Information

IB113	3.5-inch SBC w/ Industrial-Grade Freescale i.MX 6Dual core (800MHz), 1GB DDR3, 2x LAN, SD, SATA, 1x COM ports, Mini PCI-E(x1) slot, LVDS, HDMI, 8x GPIO, 2x CAN, 4GB eMMC, resistive touch panel (4/5-wire)
IB113A	3.5-inch SBC w/ Industrial-Grade Freescale i.MX6 solo core (800MHz), 1GB DDR3, 1x LAN, SD, 1x COM ports, Mini PCI-E(x1) slot, LVDS, HDMI, 8x GPIO, 4GB eMMC
HSIB113-BGA-A	Heatsink for IB113
Accessory (Optional)	RF: - 3G+GPS Combo (Mini PCI-E card) - WiFi+BT Combo (Mini PCI-E card) Display: - 800 x 600, resistive touch panel (5 wires) - LVDS cable: LCD 341 Debug cable: - PK1-100A