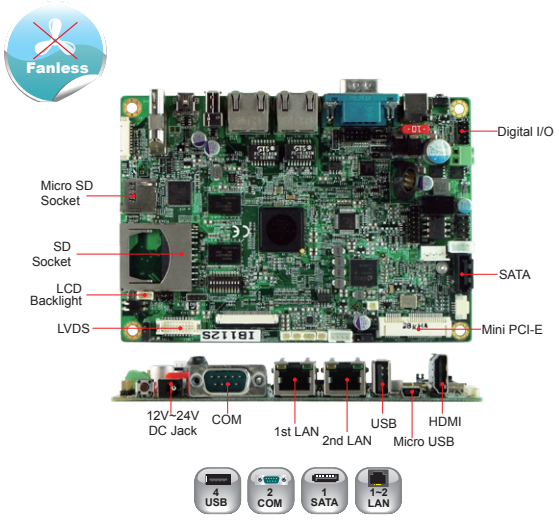
IB112

Single Board Computer

Low-Power 3.5" SBC with NXP ARM® Cortex-A8 i.MX 536Dual 800MHz Processor



Features

- With NXP ARM Cortex-A8 800MHz processor
- Supports DC 12V~24V input voltage
- 1GB DDR3, eMMC (option) on board
- Supports Resistive touch header (4-wire), and I²C/USB header for capacitive touch
- Supports OpenGL ES 2.0 and OpenVG 1.1 hardware accelerators
- Supports COM, CAN (option), USB-OTG, SD/micro-SD card, VGA, HDMI, LVDS
- Supports rich I/O interface for BOM customization

System

Form Factor	3.5-inch Disk-Size SBC
CPU	NXP Cortex™-A8 i.MX536 800MHz processor
System Memory	1GB DDR3 on board
Data Memory	eMMC (IB112T:8GB; IB112S: 16GB) on board SD socket (up to 32GB) Micro SD socket (up to 32GB)
Display	HDMI (IB112F/IB112S/IB112T) 18/24-bit single channel LVDS (up to 1366x768), VGA (IB112F)
Video Codec	Decode: 1080p, 30fps Encode: 1080p, 30fps
LAN	1st LAN: 10/100 Base-T Ethernet (Gb LAN) 2nd LAN: 10/100 Base-T Ethernet (IB112S)
Touch	Resistive touch IC (4-wire) on board USB/ I²C header on board (for capacitive touch)
Audio	Audio pin header (1x microphone, 1x speaker)
RTC	RTC IC on board
Watchdog	256 levels
NVRAM	32K NVRAM on board (IB112F/IB112S)
Edge I/O	1x 1st 10/100 LAN 1x 2nd 10/100 LAN (IB112S) 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 32GB) 1x DC-in jack 1x HDMI (Type-A) 1x Reset button
Headers & Expansion Slots	Headers: 8x GPIO pin header (IB112F/IB112S) 1x VGA pin header (112F) 1x Debug port pin header 1x USB2.0 host box header 1x I²C pin header 1x RS232 pin header 1x 4-wire resistive touch pin header 2x CAN Bus 2.0B (w/ isolation) pin headers (IB112S/IB112T) 1x Dual channel LVDS box header (supports full HD) 1x Audio pin header (1x microphone, 1x speaker) 1x SATA header (IB112F) Slots: 1x Full-size Mini PCI-E (w/ USB interface only)
Dimensions	102mm x 147mm (4” x 5.8”)
Power	12V~24V DC-in
Operating Temperature	-10°C~ 60°C (-14°F ~ 140°F)
Devices	WiFi / GPS / 3G module (option)
Software Support	Ubuntu Linux 10.04 (kernel 2.6)/ Android 2.3.4/ WINCE7
Relative Humidity	10%~90% (non-condensing)
Certification	CE/FCC Class A

Ordering Information

IB112	3,5-inch SBC w/ Industrial-Grade NXP i.MX536 (800MHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3x COM, Mini PCI-E(x1)
IB112F	3,5-inch SBC w/ Industrial-Grade NXP i.MX536 (800MHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3x COM, Mini PCI-E(x1), HDMI, 8x GPIO, VGA, 32K NVRAM, SATA
IB112S	3,5-inch SBC w/ Industrial-Grade NXP i.MX536 (800MHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini PCI-E(x1), HDMI, 8x GPIO, 2x CAN, 2nd LAN, 32K NVRAM, 16GB eMMC
IB112T	3,5-inch SBC w/ Industrial-Grade NXP i.MX536 (800MHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3x COM ports, Mini PCI-E(x1) slot, HDMI, 2x CAN, 8GB eMM
Accessory (Optional)	RF: - 3G+GPS Combo (Mini PCI-E card) - WiFi+BT Combo (Mini PCI-E card) Display: - 800 x 600, Resistive touch header (4-wires) panel Debug cable: - PK1-100A

Remarks: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user’s manual & datasheet download, visit www.ibase.com.tw.