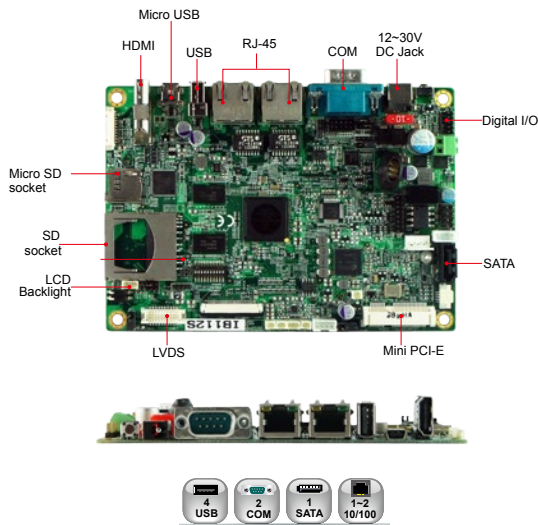


# IB112

Freescale i.MX536 Industrial-Grade Cortex-A8 Single Board Computer

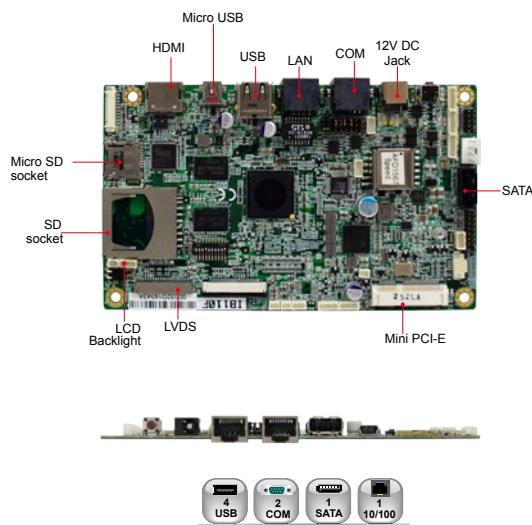
RISC SBC



# IB110

Freescale i.MX535 Consumer-Grade Cortex-A8 Single Board Computer

RISC SBC



## Features

- Freescale ARM Cortex-A8, 800MHz industrial-grade processor
- 1GB DDR3 memory on board
- Supports USB-OTG
- Supports SD card/ MicroSD card
- Rich I/O for high expansion capability
- Watchdog timer, Digital I/O

## Specifications

Form Factor	3.5" Disk-Size SBC, 102mm x 147mm (4" x 5.8")
MPU Type Operating Frequency	Freescale Industrial-Grade i.MX536: 1GHz Cortex™-A8 65nm, LP/GP 19x19 0.8mm (TE-BGA)
System Memory	1GB DDR3-800 on board
Data Memory	Optional 8GB/16 GB eMMC MicroSD slot supports up to 32GB
Display	SI9022A HDMI transmitter / LVDS
Video codec	Decode: 1080p, 30fps Encode: 720p, 30fps
LAN	1st LAN: 10/100 Base-T Ethernet 2nd LAN: 10/100 Base-T Ethernet (IB112S)
USB	USB 4x Host via USB HUB
Touch Controller	Via DA9053 (Resistive Touch Controller)
Audio	Pin header for speaker
Watchdog	By hardware
NVRAM	32KB (in IB112F, IB112S)
Edge I/O	<ul style="list-style-type: none"> <li>• 1x 1st 10/100 LAN / 1x 2nd 10/100 LAN (IB112S)</li> <li>• 1x USB (USB Host, A-type) / USB OTG x1 (mini USB B-type) Default: Device mode</li> <li>• 1x COM2 RS-232/422/485</li> <li>• 1x SD / 1x MicroSD</li> <li>• 1x 12-30V DC-in Jack</li> <li>• 1x Boot switch (Boot sequence - eMMC/MicroSD)</li> <li>• 1x HDMI Type A connector</li> </ul>
Headers & Expansion Slots	<p>Headers:</p> <ul style="list-style-type: none"> <li>• 8x GPIO (IB112F, IB112S)</li> <li>• COM (RS232) x 2 (COM1 / COM3 debug port)</li> <li>• Audio pin header (1x MIC, 1x speaker)</li> <li>• 2x USB 2.0 (2mm pitch)</li> <li>• FPC connector for 4-wire Resistive Touch x1</li> <li>• 2x CAN (Pin header in IB112S, IB112T)</li> <li>• 1x 18 bit LVDS connector</li> <li>• 1x VGA pin header (in IB112F, IB112S)</li> </ul> <p>Slots:</p> <ul style="list-style-type: none"> <li>• 1x SATA connector</li> <li>• 1x Full Size Mini PCIe(x1) socket (USB I/F only)</li> </ul>
Power	12~30V DC-in
Operating Temperature	-20°C~ 70°C (-4°F ~ 158°F)
Communication Devices	WiFi / GPRS / 3G Module (Optional)
Software Support	Ubuntu Linux 10.04 (kernel 2.6.35)/ Android 2.3/ Windows CE7

## Ordering Information

IB112	3.5-inch SBC w/ Industrial-Grade Freescale i.MX536 (800Mhz), 1GB DDR3, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini-PCIe(x1) slot
IB112F	3.5-inch SBC w/ Industrial-Grade Freescale i.MX536 (800Mhz), 1GB DDR3, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini-PCIe(x1) slot, HDMI,GPIO x8, VGA, 32K NVRAM, SATA
IB112S	3.5-inch SBC w/ Industrial-Grade Freescale i.MX536 (800Mhz), 1GB DDR3, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini-PCIe(x1) slot, HDMI, GPIO x8, CAN x2, 2nd LAN, 32K NVRAM, 16GB eMMC
IB112T	3.5-inch SBC w/ Industrial-Grade Freescale i.MX536 (800Mhz), 1GB DDR3, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini-PCIe(x1) slot, HDMI, CAN x2, 8GB eMMC

## Features

- Freescale ARM Cortex-A8, 1GHz consumer-grade processor
- 1GB DDR3 memory on board
- Supports USB-OTG
- Supports SD card/ MicroSD card
- Rich I/O for high expansion capability
- Watchdog timer, Digital I/O

## Specifications

Form Factor	90mm x 150mm (3.5" x 5.9")
MPU Type Operating Frequency	Freescale Consumer-Grade i.MX535 1GHz Cortex™-A8 65nm, LP/GP 19x19 0.8mm PoP (Consumer)
System Memory	1GB DDR3-800 on board
Data Memory	MicroSD slot supports up to 32GB
Display	SI9022A HDMI Transmitter / LVDS / TTL
Video codec	Decode: 1080p, 30fps Encode: 720p, 30fps
LAN	10/100 Base-T Ethernet
USB	USB 4x Host via USB hub
Touch Controller	Via DA9053 (Resistive Touch Controller)
Audio	Pin header for speaker
Watchdog	By hardware
Edge I/O	<ul style="list-style-type: none"> <li>• 1x 10/100 LAN (RJ45)</li> <li>• 1x USB (USB host, A-type)</li> <li>• 1x USB OTG (mini USB B-type) Default: device mode</li> <li>• 1x COM2 RS-232(RJ45 connector)</li> <li>• 1x SD</li> <li>• 1x MicroSD</li> <li>• 1x 12V DC-in Jack</li> <li>• 1x Boot switch (Boot sequence: eMMC/MicroSD)</li> <li>• 1x HDMI Type A connector</li> </ul>
Headers & Expansion Slots	<p>Headers:</p> <ul style="list-style-type: none"> <li>• 8x GPIO (IB110H, IB110F)</li> <li>• 2x COM (RS232) (COM1 / COM3 debug port)</li> <li>• Audio pin header (1x speaker)</li> <li>• 2x USB 2.0 (2.0mm pitch)</li> <li>• 1x FPC connector for 4-wire Resistive Touch</li> <li>• VGA, 18-bit TTL panel and LVDS header (IB110F)</li> </ul> <p>Slots:</p> <ul style="list-style-type: none"> <li>• 1x SATA connector (IB110F)</li> <li>• 1x Full Size Mini PCIe(x1) socket (USB I/F only)</li> </ul>
Power	12V DC-in
Operating Temperature	0°C~ 60°C (32°F ~ 140°F)
Communication Devices	WiFi / GPRS / 3G module (optional)
Software Support	Ubuntu Linux 10.04 (kernel 2.6.35)/ Android 2.3/ Windows CE7

## Ordering Information

IB110	RISC SBC w/ Consumer-Grade Freescale i.MX535 (1GHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini-PCIe(x1) slot
IB110F	RISC SBC w/ Consumer-Grade Freescale i.MX535 (1GHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3 COM Ports, Mini-PCIe(x1) slot, HDMI, GPIO x8, SATA, VGA, 18-bit TTL Panel header, LVDS header
IB110H	RISC SBC w/ Consumer-Grade Freescale i.MX535 (1GHz), DDR3 1GB, 10/100 LAN, SD, Micro-SD, 3 COM ports, Mini-PCIe(x1) slot, HDMI,GPIO x8, 8GB eMMC (option)

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