FORTEC
ELEKTRONIK AG

Datasheet

IB811

iBASE

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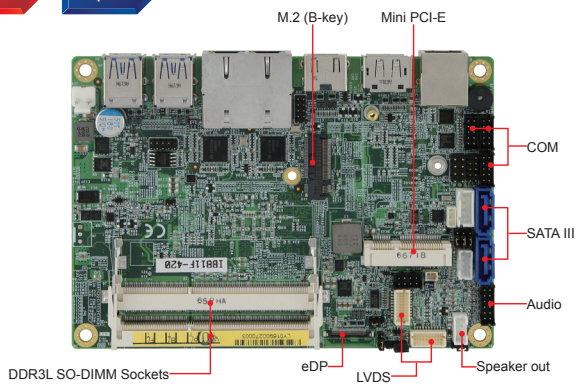
IB811

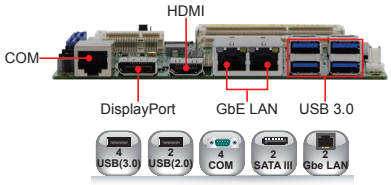
3.5" Disk-Size SBC

Intel® Atom™ x7 / x5, Pentium® & Celeron® SoC 3.5-inch Disk-Size SBC

NEW

Wide Temperature





Features

- Onboard Intel® Pentium® N4200 @ 2.5GHz or Celeron® N3350 @ 2.4GHz
- Onboard Intel® Atom™ x7-E3950 @ 2.0GHz or x5-E3930 SoC @1.8GHz [i-Temp support]
- 2x DDR3L-1866/1600 SO-DIMM, Max. 8GB
- Supports HDMI(1.4b), DisplayPort and eDP / 24 bit dual channel LVDS
- 2x Intel® I210IT PCI-E Gigabit LAN or I211AT PCI-E Gigabit LAN
- Watchdog timer, Digital I/O, mSATA, EuP/ErP
- 4x USB3.0, 2x USB 2.0, 4x COM, 2x SATA III
- 1x Mini PCI-E slots (Full-sized), 1x M.2 (B-key)
- Wide temperature support in specified models

System

CPU	Intel® Pentium® QC N4200 (1.1GHz~2.5GHz, 2MB cache) Intel® Celeron® DC N3350 (1.1GHz~2.4GHz, 2MB cache) Intel® Atom™ QC x7 /E3950 (1.6GHz~2.0GHz, 2MB cache) Intel® Atom™ DC x5 / E3930 (1.3GHz~1.8GHz, 2MB cache)
System Memory	2x DDR3L SO-DIMM, Max 8GB (Non-ECC)
System Chipset	Integrated in Intel® SoC
BIOS	AMI
Watchdog Timer	256 levels
SSD	1x mSATA
H/W Monitor	Yes
Expansion Slots	1x Mini PCI-E (full-size), 1x M.2 (B-key)

Graphics

VGA Controller	Intel® SoC integrated Gen9 18EUs graphics
VGA Memory	Shared memory
Display Interface	Supports HDMI(1.4b), DP(1.2), eDP/24-bit dual channel LVDS

LAN

Controller	2x Intel® I210IT or I210AT PCIe Gigabit LAN
Connector	2x RJ-45 on board

Multi I/O

I/O Chipset	Fintek F81846AD-I 1x RS232/422/485(Jumperless selection) 3x RS232, 2x SATA III
USB	4 ports on board (USB3.0) 2 ports for pin-header (USB2.0)
Audio	Intel® Atom™ SoC built-in HD audio controller + Realtek ALC283QHD Codec w/ class-D speaker amplifier
Others	Digital I/O, +9V~ +36V DC-In., EuP/ErP, Wide temperature

Mechanical and Environmental

Dimensions	102mm x 147mm (4" x 5.8")
Max. Power Requirement	Intel® Atom™ E3900 1.3GHz w/ 2x DDR3L 1600 4GB +12V: 1.2A
Operating Temperature	N4200/N3350: 0°C~60°C (32°F~140°F) E3950/E3930: -40°C~85°C (-40°F~185°F)
Storage Temperature	-40°C~90°C (-40°F~194°F)
Relative Humidity	90% (non-condensing @60°C)

Ordering Information

IB811F-I50	Intel® Atom™ x7 / E3950 (1.6GHZ~2.0GHz) 3.5-inch Disk Size SBC w/ dual GbE LAN, HDMI, DisplayPort & eDP or LVDS (24-bit LVDS dual channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temperature support
IB811F-I30	Intel® Atom™ x5 / E3930 (1.3~1.8GHz) 3.5-inch Disk Size SBC w/ dual GbE LAN, HDMI, DisplayPort & eDP or LVDS (24-bit LVDS dual channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temperature support
IB811F-420	Intel® Pentium® N4200 (1.1~2.5GHz)3.5-inch Disk Size SBC w/ dual GbE LAN, HDMI, DisplayPort & eDP or LVDS (24-bit LVDS dual channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in
IB811F-335	Intel® Celeron® N3350 (1.1~2.4GHz) 3.5-inch Disk Size SBC w/ dual GbE LAN, HDMI, DisplayPort & eDP or LVDS (24-bit LVDS dual channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in
HSIB811-A	Heatsink for IB811-I50/ IB811-I30
HSIB811-B	Heatsink for IB811-420/ IB811-335
IB76A	Cable Kit w/ USB, COM, Power, SATA + Power

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.

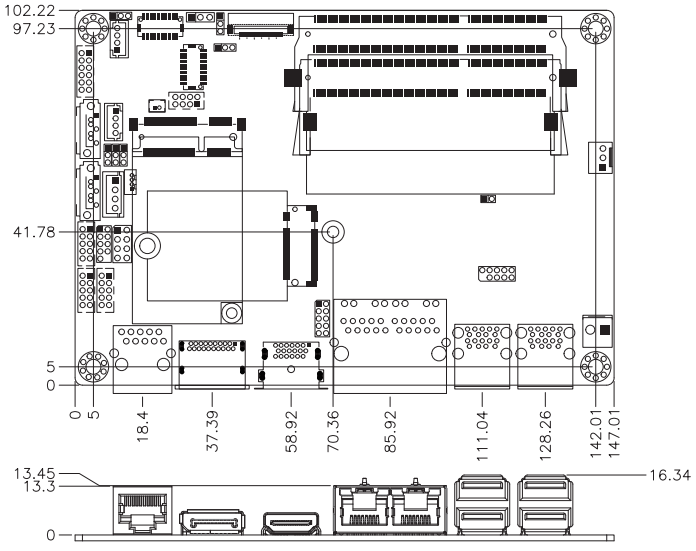
Mobile Processor Ultra Low Power Reference Table

Processor Number	Intel® Pentium® Processors – 14 nm Apollo Lake SoC Platform	Intel® Celeron® Processors – 14 nm Apollo Lake SoC Platform	Intel® Atom™ Processors – 14nm or Apollo Lake SoC Platform		
	N4200	N3350	x7-E3950	x5-E3940	x5-E3930
Base Freq (GHz)	1.1	1.1	1.6	1.6	1.3
Intel® Turbo Boost Technology 2.0 (GHz)	2.5	2.4	2.0	1.8	1.8
Last Level Cache	2M	2M	2M	2M	2M
Cores/Threads	4/4	2/2	4/4	4/4	2/2
Memory Speed Support (DDR3L)	1866	1600	1866	1866	1866
TDP	6W	6W	12W	9W	6W

IB811 with heatsink for Pentium® & Celeron® SoC

IB811 with heatsink for Atom™ SoC

Dimensions and Drawing



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