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Datasheet

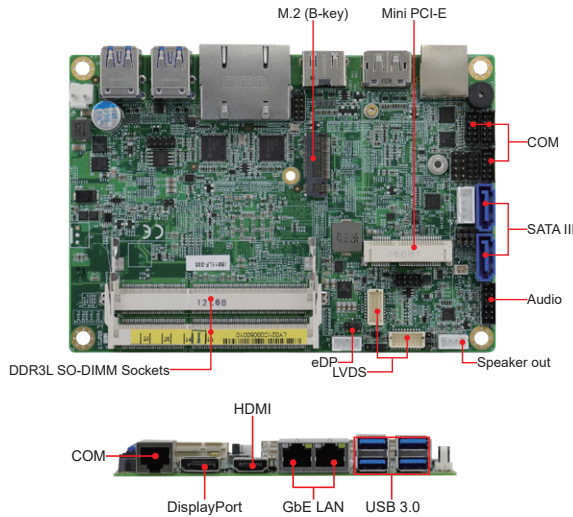
iBASE

IB811

**3,5" Single-Board Computer with Intel® Atom™ Apollo Lake
Pentium® N4200, Celeron® N3350 und Atom™ E39xx Processor,
eDP, 1x LVDS, 1x DisplayPort, COMs, up to -40°..+85°C**

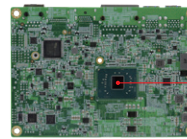


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Features

- Onboard Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 SoC [i-Temp support]
- Onboard Intel® Pentium® N4200/ Celeron® N3350
- 2x DDR3L-1866/1600 SO-DIMM, Max. 8GB
- Supports HDMI(1.4b), DisplayPort 24 bit dual-channel LVDS
- Dual Intel® Gigabit LAN
- Watchdog timer, Digital I/O, mSATA, EuP/ErP
- 4x USB 3.0, 2x USB 2.0, 4x COM, 2x SATA III
- 1x Mini PCI-E slot (full-size), 1x M.2 (B-key)
- Wide-range operating temperature in certain models



IB811 with Heatsink

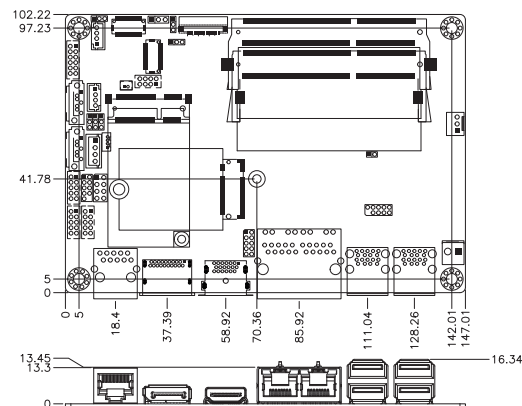
Specifications

CPU	Intel® Atom® QC x7 /E3950 (1.6GHz~2.0GHz, 2MB cache) Intel® Atom® QC x5 /E3940 (1.6GHz~1.8GHz, 2MB cache) Intel® Atom® DC x5 / E3930 (1.3GHz~1.8GHz, 2MB cache) Intel® Pentium® QC N4200 (1.1GHz~2.5GHz, 2MB cache) Intel® Celeron® DC N3350 (1.1GHz~2.4GHz, 2MB cache)
PCH	Integrated in Intel® SoC
Memory Type	2x DDR3L SO-DIMM, Max 8GB (Non-ECC)
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	1x mSATA
Mini Type Slots	1x Mini PCI-E (full-size), 1x M.2 (B-key, type:3042)
Graphics Controller	Intel® SoC integrated Gen9 18EUs graphics
Video Output	Supports HDMI(1.4b), DP(1.2), 24-bit dual-channel LVDS
Ethernet	IB811F-I50/I40/I30: 2x Intel® I210IT Gigabit LAN IB811F-I420/335: 2x Intel® I211AT or I210AT Gigabit LAN
I/O Chip	Fintek F81964D-I
Serial Port	1x RS232/422/485 (jumper-less selection) 3x RS232
USB 2.0	2x USB 2.0 via pin-header
USB 3.X	4x USB 3.0 on board
Serial ATA	2x SATA III
Audio	Intel® Atom® SoC built-in HD audio controller + Realtek ALC888SHD Codec w/ class-D speaker amplifier
TPM	TPM 2.0
Others	Digital I/O, +9V~ +36V DC-In, EuP/ErP
Dimensions (L x W)	102mm x 147mm (4" x 5.8")
Power Consumption	Intel® Atom® E3900 1.3GHz w/ 2x DDR3L 1600 4GB +12V: 1.2A
Operating Temperature	E3950/E3940/E3930: -40°C~85°C (-40°F~185°F) N4200/N3350: 0°C~60°C (32°F~140°F)
Storage Temperature	-40°C~90°C (-40°F~194°F)
Relative Humidity	90% (non-condensing @60°C)

Ordering Information

IB811LF-I50	Intel® Atom® x7/ E3950 (1.6GHz~2.0GHz) 3.5" SBC w/ dual GbE LAN, HDMI, DisplayPort & LVDS (24-bit LVDS dual-channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temp. support
IB811LF-I40	Intel® Atom® x5/ E3940 (1.6GHz~1.8GHz) 3.5" SBC w/ dual GbE LAN, HDMI, DisplayPort & LVDS (24-bit LVDS dual-channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temp. support
IB811LF-I30	Intel® Atom® x5/ E3930 (1.3~1.8GHz) 3.5" SBC w/ dual GbE LAN, HDMI, DisplayPort & LVDS (24-bit LVDS dual-channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temp. support
IB811LF-420	Intel® Pentium® N4200 (1.1~2.5GHz) 3.5" SBC w/ dual GbE LAN, HDMI, DisplayPort & LVDS (24-bit LVDS dual-channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in
IB811LF-335	Intel® Celeron® N3350 (1.1~2.4GHz) 3.5" SBC w/ dual GbE LAN, HDMI, DisplayPort & LVDS (24-bit LVDS dual-channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in
HSIB811-B	Heatsink for IB811F-420/ 335
HSIB811-I-A	Heatsink for IB811F-I50/ I40/ I30
HSIB811-1	Heat spreader for IB811F-420/ 335
HSIB811-I-1A	Heat spreader for IB811F-I50/ I40/ I30
IB76A-2	Cable kit w/ USB, COM, Power, SATA + Power

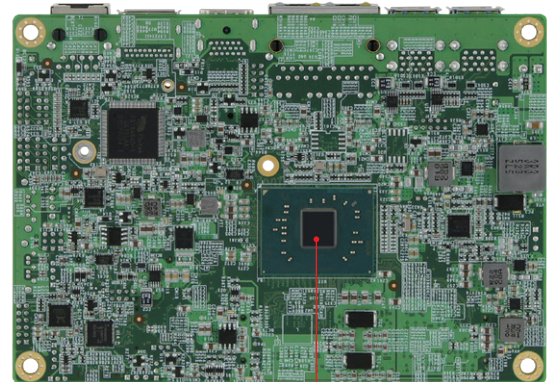
Dimensions and Drawing



Intel® Entry Processor Ultra Low Power Reference Table

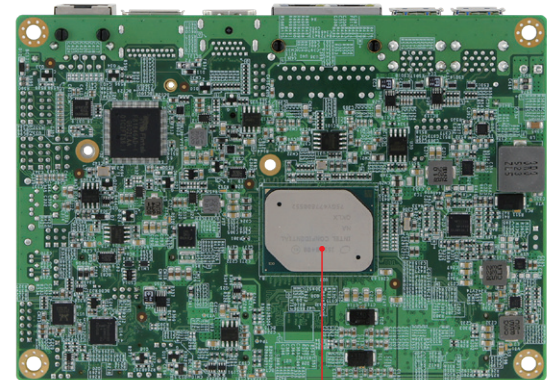
Processor Number	Intel® Pentium® Processors - 14 nm Apollo-Lake SoC Platform	Intel® Celeron® Processors - 14 nm Apollo-Lake SoC Platform	Intel® Atom™ Processors - 14nm or Apollo-Lake-I SoC Platform		
	N4200	N3350	x7-E3950	x5-E3940	x5-E3930
Base Freq (GHz)	1.1	1.1	1.6	1.6	1.3
Intel® Turbo Boost Technology 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 (DDR3L)	1866	1600	1866	1866	1866
TDP	6W	6W	12W	9W	6.5W

IB811 with heatsink for Pentium® & Celeron® SoC



Intel® Pentium® QC N4200
Intel® Celeron® DC N3350

IB811 with heatsink for Atom™ SoC



Intel® Atom™ QC x7 / E3950
Intel® Atom™ DC x5 / E3930

IB811 – 3,5" SINGLE-BOARD COMPUTER



BOARD / TFT-DISPLAY KITS WITH CABLES AND ACCESSORIES

Display Size	15,6" (39.6cm)	21,5" (54.61cm)
Part Number	G156HAB01.0	G215HVN01.0
Manufacturer	AUO	AUO
Resolution	1920x1080	1920x1080
Brightness [cd/m ²]	300	300
Backlight	LED	LED
Converter	integrated	integrated
Viewing Angle v/h	tbd.	178°/178°
Interfaces	eDP	LVDS
Dimensions mm	363x229x4.9	495.6x292.2x12.7
Touch	PCAP	

Form Factor	3,5" Single-Board Computer
Manufacturer	iBASE
Part Number	IB811F-335
Processor	Intel® Celeron® N3350
Memory	4GB DDR3L (optional up to 8GB)
SSD	64GB MLC mSATA (included)
Expansion Slot	1x miniPCIe/mSATA, 1x M.2
Display Interface	HDMI 1.4b
LVDS	24-bit Dual Channel LVDS or eDP
LAN	2x Gigabit LAN
SATA	2x SATA III
	1x RS232/422/485, 3x RS232
I/O	4x USB 3.0, 2x USB 2.0
	Digital I/O, TPM
Power	9V – 36V DC-in



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Other configuration on request!

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