



OUR GLOBAL
COMPETENCE
CENTRES

 APOLLO DISPLAY
TECHNOLOGIES



 DISTEC



 DISPLAY
TECHNOLOGY



Datasheet

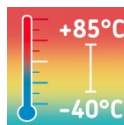
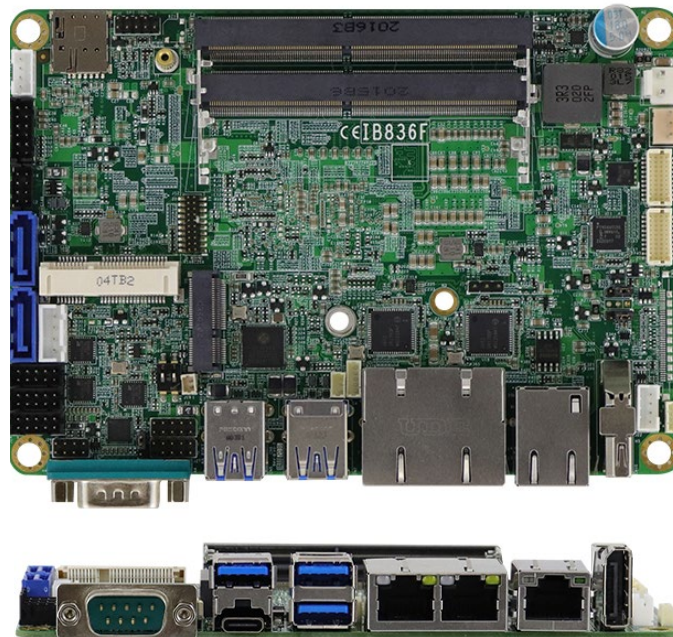
iBASE

IB836

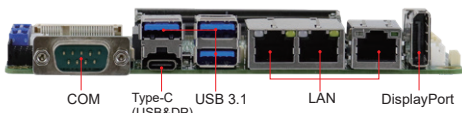
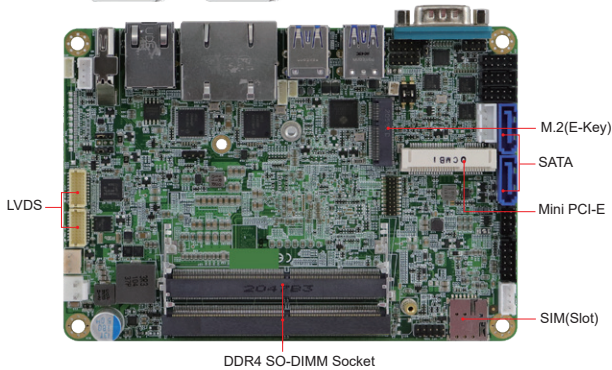
3,5" Embedded Single-Board Computer with Intel®

Atom™ x6000 series / Pentium® / Celeron®

Elkhard Lake Processor

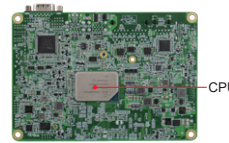


The information contained in this document has been carefully researched and is, to the best of our knowledge, accurate. However, we assume no liability for any product failures or damages, immediate or consequential, resulting from the use of the information provided herein. Our products are not intended for use in systems in which failures of product could result in personal injury. All trademarks mentioned herein are property of their respective owners. All specifications are subject to change without notice.



Features

- Onboard Intel® Atom® x6000 Series processor
- 2x DDR4-3200 SO-DIMM, Max.32GB, supports IB ECC
- Supports 2x DisplayPort (DP and Type-C), eDP or 24-bit dual-channel LVDS
- 3x Intel® 2.5G LAN
- 2x USB 2.0, 4x USB 3.1, 2x SATA III
- 1x M.2 sockets (E-Key), 1x Mini PCI-E slot (Full-size)
- Watchdog timer, Digital I/O, TPM (2.0), mSATA(Share with SATA port)
- Wide-range operating temperature from -20°C to 85°C



IB836 with Heatsink

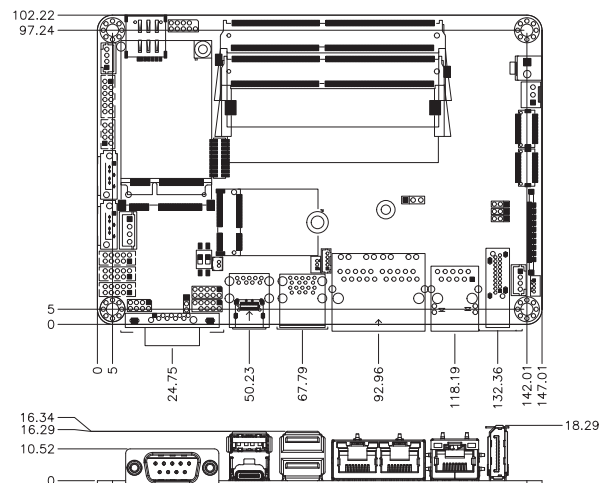
Specifications

CPU	Intel® Atom® QC x6425E (1.8GHz/3.0GHz) Intel® Atom® QC x6413E (1.5GHz/3.0GHz) Intel® Atom® DC x6211E (1.2GHz/3.0GHz) Intel® Celeron® DC N6210 (1.2GHz/2.6GHz) Intel® Celeron® QC J6413 (1.8GHz/ 3.0GHz)
PCH	Integrated in Intel® SoC
Memory Type	DDR4-3200 SO-DIMM, Max. 32GB, (supports IB ECC depend by CPU)
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	1x mSATA (Share with SATA port)
Mini Type Slots	1x M.2 (E-Key, type:2230) 1x Mini PCI-E (full-size)
Graphics Controller	Intel® SoC integrated Gen11 Graphics
Video Output	2x DisplayPort (DP connector & Type-C) eDP or 24-bit dual-channel LVDS
Ethernet	3x Intel® I225IT 2.5G LAN for Atom® (x6000) 3x Intel® I225V 2.5G LAN for Celeron®/ Pentium®
I/O Chip	Fintek F81964D-I
Serial Port	1x RS232/422/485 (Jumper-less selection) 3x RS232
USB 2.0	2x USB 2.0 (Pin-header)
USB 3.X	3x USB 3.1 (Type-A) 1x USB (Type-C)
Serial ATA	2x SATA III
Audio	Built-in HD with Realtek ALC888S w/ class-D amplifier
TPM	TPM (2.0)
Others	Digital I/O (4-in/4-out), EuP/ErP, +9V~+36V DC-in
Dimensions (L x W)	102mm x 147mm (4" x 5.8")
Power Consumption	Intel® Atom® x6413E 1.5GHz w/ 2x DD4 3200 16GB +12V: 1.87A
Operating Temperature	Atom® x6000: -40°C~85°C(-4°F~185°F) Celeron®/ Pentium®: 0°C~60°C (0°F~140°F)
Storage Temperature	-40°C~85°C (-40°F ~185°F)
Relative Humidity	90% (non-condensing@60°C)

IB836F(E)-6413E	Intel® Atom® x6413E (1.5GHz~3.0GHz) 3.5" SBC w/ 3x 2.5G LAN, 2x DisplayPort (DP connector& Type-C), eDP or LVDS, mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temperature support
IB836F(E)-6211E	Intel® Atom® x6211E (1.2GHz~3.0GHz) 3.5" SBC w/ 3x 2.5G LAN, 2x DisplayPort (DP connector& Type-C), eDP or LVDS, mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temperature support
IB836F(E)-N6210	Intel® Celeron® N6210 (1.2GHz/2.6GHz) 3.5" SBC w/ 3x 2.5G LAN, 2x DisplayPort (DP connector& Type-C), eDP or LVDS (24-bit LVDS Dual channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in
IB836F-J6413	Intel® Celeron® J6413 (1.8GHz/3.0GHz) 3.5" SBC w/ 3x 2.5G LAN, 2x DisplayPort (DP connector& Type-C), LVDS (24-bit LVDS Dual channel), mSATA, M.2, EuP/ErP, 9V~36V DC-in
HSIB836-X-1	Heat Spreader for IB836F/FE (Atom® x6000)
HSIB836-X-B	Heatsink for IB836 F/FE(Atom® x6000)
HSIB836-1	Heat Spreader for IB836F/FE (Celeron®/Pentium®)
HSIB836-B	Heatsink for IB836F/FE (Celeron®/Pentium®)

*model name with "F" is LVDS, "FE" is eDP

Dimensions and Drawing



Ordering Information

IB836F(E)-6425E	Intel® Atom® x6425E (1.8GHz~3.0GHz) 3.5" SBC w/ 3x 2.5G LAN, 2x DisplayPort (DP connector& Type-C), eDP or LVDS, mSATA, M.2, EuP/ErP, 9V~36V DC-in, wide temperature support
-----------------	--

Our company network supports you worldwide with offices in Germany, Austria, Switzerland, the UK and the USA. For more information please contact:

Headquarters

Germany



FORTEC Elektronik AG

Augsburger Str. 2b
82110 Germering

Phone: +49 89 894450-0
E-Mail: info@fortecag.de
Internet: www.fortecag.de

Fortec Group Members

Austria



Distec GmbH Office Vienna

Nuschinggasse 12
1230 Wien

Phone: +43 1 8673492-0
E-Mail: info@distec.de
Internet: www.distec.de

Germany



Distec GmbH

Augsburger Str. 2b
82110 Germering

Phone: +49 89 894363-0
E-Mail: info@distec.de
Internet: www.distec.de

Switzerland



ALTRAC AG

Bahnhofstraße 3
5436 Würenlos

Phone: +41 44 7446111
E-Mail: info@altrac.ch
Internet: www.altrac.ch

United Kingdom



Display Technology Ltd.

Osprey House, 1 Osprey Court
Hichingbrooke Business Park
Huntingdon, Cambridgeshire, PE29 6FN

Phone: +44 1480 411600
E-Mail: info@displaytechnology.co.uk
Internet: www.displaytechnology.co.uk

USA



Apollo Display Technologies, Corp.

87 Raynor Avenue,
Unit 1 Ronkonkoma,
NY 11779

Phone: +1 631 5804360
E-Mail: info@apolloDisplays.com
Internet: www.apolloDisplays.com