IB837

3.5" Single Board Computer

Intel® Celeron® N & J Series

M.2 (E2230)
Mini PCI-E
LVDS #2
LVDS #1
COM (#2~#6)
SATA III
M.2(B3042)
USB 2.0
Audio
DDR4 SO-DIMM socket

COM1   2.5GbE   USB 3.1   DisplayPort

Features

- Onboard Intel® Celeron® N & J series processor
- 1x DDR4-3200 SO-DIMM, Max. 16GB
- supports 1x DisplayPort & 2x dual channel LVDS
- 2x I226V PCI-E 2.5G LAN, 6x COM ports
- 4x USB 3.1, 2x USB 2.0, 1x SATA III (shared with M/2 B-Key)
- 2x M.2 sockets (E-Key & B-Key), 1x Mini PCI-E slot (full-size)
- Watchdog timer, Digital I/O, fTPM, mSATA, 12V only DC-in

CPU

IB837 with Heat spreader   IB837 with heatsink

Specifications

CPU	Intel® Celeron® QC J6412 (2.0GHz/2.6GHz) Intel® Celeron® DC N6210 (1.2GHz/2.6GHz)
PCH	N/A
Memory	1x DDR4 SO-DIMM, Max. 16GB
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	1x mSATA 1x M.2 B3042
Mini Type Slots	Mini PCI-E [for PCI-E (x1) + USB2.0 +SATA] 1x M.2 (B-Key, type:3042, SATA) 1x M.2 (E-Key, type:2230, PCI-E x1 + USB2.0)
Graphics Controller	Intel® SoC integrated Gen11 Graphics
Video Output	1x DisplayPort, 2x 24-bit dual-channel LVDS
Ethernet	2x Intel® I226V PCI-E Gigabit LAN
I/O Chipset	Fintek F81966D-I
Serial Port	1x RS232/422/485 (Jumperless selection) & 5x RS232
USB 2.0	2x USB 2.0 (pin-header)
USB 3.X	4x USB 3.1 (Type A)
Serial ATA	1x SATA III (shared with M.2 B-Key)
Audio	Built-in HD with Realtek ALC888S + amplifier
TPM	fTPM
Others	Digital I/O (4-in/4-out), +12V DC-in
Dimensions (L x W)	102mm x 147mm (4" x 5.8")
Power Consumption	Intel® Celeron® J6412 2.00GHz w/ 8GB DDR4-3200 +12V:1.57A
Operating Temperature	0℃~60℃ (32℉ ~140℉)
Storage Temperature	-20℃~80℃ (-4℉ ~176℉)
Relative Humidity	95% (non-condensing@60℃)

Ordering Information

IB837F-J6412	Intel® Celeron® J6412 (2GHz~2.6GHz) onboard 3.5-inch SBC, w/ 2x 2.5GbE LAN, 1x DisplayPort, 2x LVDS (24-bit LVDS dual channel), mSATA, M.2, 12V DC-in
IB837F-N6210	Intel® Celeron® N6210 (1.2GHz~2.6GHz) onboard 3.5-inch SBC , w/ 2x 2.5GbE LAN, 1x DisplayPort, 2x LVDS (24-bit LVDS dual channel), mSATA, M.2, 12V DC-in
HSIB837-A	Heatsink for IB837
HSIB837-1	Heat spreader for IB837

Dimensions and Drawing