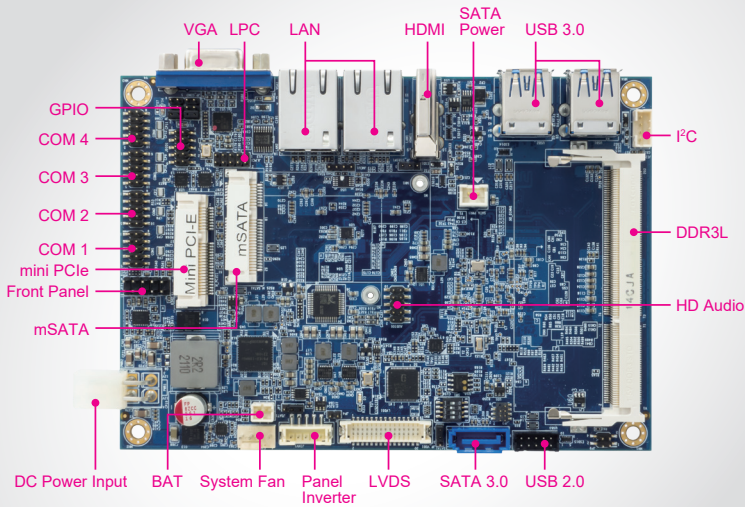


# BE-0986

3.5" SBC Intel® Celeron® / Pentium® / Atom® SoC / HDMI / 12V, 19V and 24V



## Features



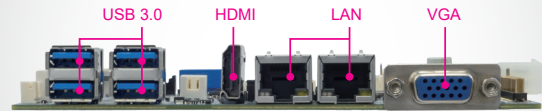
- Intel® Celeron® N3350, J3455 / Pentium® N4200 / Atom® E3950 SoC
- Wide Range DC input (12V, 19V and 24V)
- 1 x I<sup>2</sup>C, 2 x LAN, 4 x COM, 6 x USB, fTPM
- Programmable 8bit GPIO
- Supports 3 displays: LVDS + VGA + HDMI1.4b (up to 4K)
- 1 x full-sized mSATA (with USB signal)
- 1 x full-sized mPCIe

## Specifications

### System

CPU Support	Intel® Celeron® J3455: 10w, 4C, 1.5GHz Intel® Celeron® N3350: 6w, 2C, 1.1GHz Intel® Atom® x7-E3950: 12w, 4C, 1.6GHz
Memory Support	1 x SO-DIMM socket, supporting 1600/1866MHz DDR3L up to 8G (non-ECC)
BIOS	AMI UEFI BIOS
API/SW/FW	API/SW: Watchdog / GPIO / Backlight Control / Fan Control / I <sup>2</sup> C / HW monitor FW: fTPM, selectable by BIOS
Power Supply	Supports both 12V and 19~24V DC power input Connector: onboard 4 pin (2 x 2)
Dimensions	102 x 145 mm (4.02" x 5.71")
Certifications	FCC / CE
O.S. Support	Windows 10 64bit

### I/O Panel View



### I/O Ports (Rear side)

DisplayPort	1 x HDMI1.4b (rear I/O), resolution: up to 3840x2160@30Hz
VGA	1 x VGA (rear I/O), resolution: up to 1920x1200 @60Hz
LVDS	1 x LVDS (onboard connector), up to dual channel, 24 bit, resolution range: 800 x 600 to 1920x1200, set by slide switch

### I/O Ports (Front side)

SATA Interface	1 x SATA III port (6.0Gb/sec)
Serial Ports	4 ports (pin header) COM 1: RS232 COM 2: RS232/422/485, selectable under BIOS COM 3: RS232 with RI/5V/12V selectable by jumper COM 4: RS232 with RI/5V/12V selectable by jumper
LAN	Dual LAN (2 x RJ45 on rear I/O) Supports Wake-On-LAN Controller: 2 x Intel® I210-IT
Audio	Mic In / Line In / Line Out (pin header) Codec IC: Realtek ALC888 (high definition codec)
GPIO	8 bit programmable GPIO (with API/utility support)
USB	6 ports: 2 x USB 2.0 (internal wafer) 4 x USB 3.0 (rear I/O) Powered by VCC or VSB up to jumper selection.
Expansion Bus	1 x full-sized mSATA slot (with SATA and USB signal) 1 x full-sized mPCIe slot (with PCIe and USB signal) 1 x I <sup>2</sup> C onboard connector with 5V power (with API/utility support)
FAN	1 x 4 pin connector for system fan (with API/utility support)

### Environment

Operating Temp. (Ambient with airflow)	Celeron® and Pentium®: 0°C~60°C (32°F~140°F) Atom®: -40°C~85°C (-40°F~185°F)
Storage Temp.	-40°C~85°C (-40°F~185°F)
Humidity	20%~90%

\* All information contained in this document is subject to change without prior notice. Please log on [www.protech.com.tw](http://www.protech.com.tw) to acquire latest information. For detail mechanics drawing, please contact our sales.