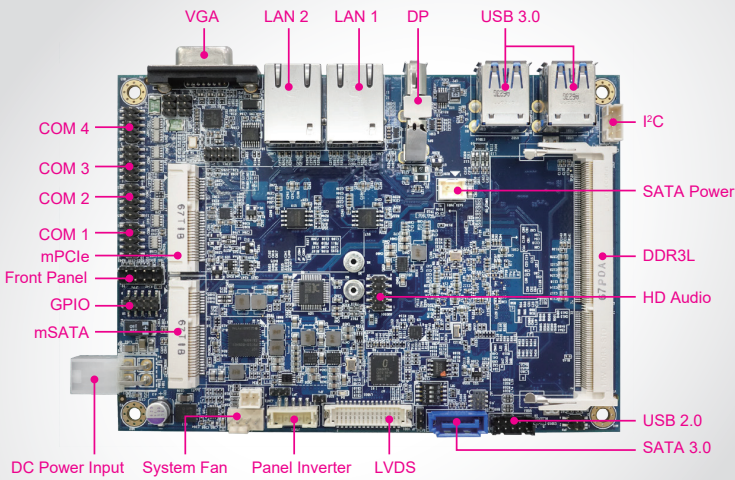


# BE-0981

3.5" SBC with Intel® Atom™ x5/ x7/ Celeron® / Pentium® SoC, DC-in 12V



## Features



- Intel® Celeron® N3350, J3455 / Pentium® N4200 SoC / Atom® E3950
- Intel® SoC
- 1 x SO-DIMM sockets (non-ECC)
- 4 x COM, 6 x USB, 2 x LAN, I²C
- 3 display supporting, 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, 2.4GHz Intel® Pentium® N4200 2.5GHz Intel® Atom™ x7-E3950: 12w, 4C, 2.0GHz
Chipset	Intel® SoC
Memory Support	1 x SO-DIMM socket, supporting 1600/1866MHz DDR3L up to 8G (non-ECC)
BIOS	AMI UEFI BIOS
API	Watchdog / DIO / Backlight Control / Fan Control / I²C / HW monitor
Power Supply	DC In 12V only (onboard 4 pin connector)
Power Consumption	+12V; 0.8A (N3350 SKU)
Dimensions	102 x 145 mm (4.02" x 5.71")
Certifications	FCC / CE
O.S. Support	Windows 10 64bit

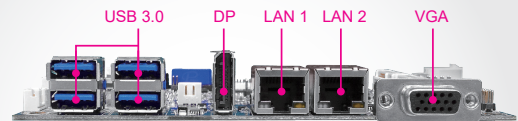
### Graphics

VGA	1 x VGA (rear I/O) up to 1920 x 1200 @60Hz
Display Port	1 x DP 1.2a (rear I/O), resolution: up to 4096 x 2160 @60Hz
LVDS	1 x LVDS (onboard conn), Up to dual channel, 24-bit, Resolution range: 800 x 60 to 1920 x 1200, set by slide switch

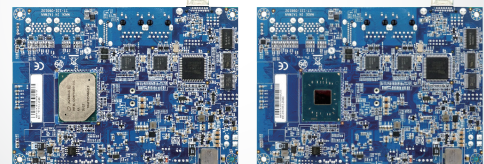
### Environment

Operating Temp.	0°C~60°C@ humidity 20%~95% (fanless heatsink) for Pentium®/ Celeron® SOC -40°C~85°C@ humidity 20%~95% (fanless heatsink) for Atom™ x7/ x5 SOC
Storage Temp.	-40°C~85°C (-40°F~185°F) @humidity 20%~95%

### I/O Panel View



Rear View



### I/O Ports

SATA Interface	1 x SATA III port (6.0Gb/sec)
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 I²C onboard conn w/ 5V power (with API / utility support)
Serial Ports	4 ports (internal pin header) COM 1: RS-232 COM 2: RS-232/422/485, selectable under BIOS COM 3: RS-232 w/ RI/5V/12V, selected by jumper COM 4: RS-232 w/ RI/5V/12V, selected by jumper
LAN	Dual LAN (2 x RJ45 on rear I/O) Supports Wake-On-LAN Controller: 2 x Intel® I210-IT/AT
Audio	Line In / Line Out / Mic-In (onboard pin header) Codec IC: Realtek ALC888 (high definition codec)
FAN	1 x 4-Pin connector for system fan (with API / utility support)
Digital I/O	8 bit programmable DIO (with API / utility support)
USB	6 ports: 2 x USB 2.0 (internal wafer) 4 x USB 3.0 (rear I/O)

\* 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.