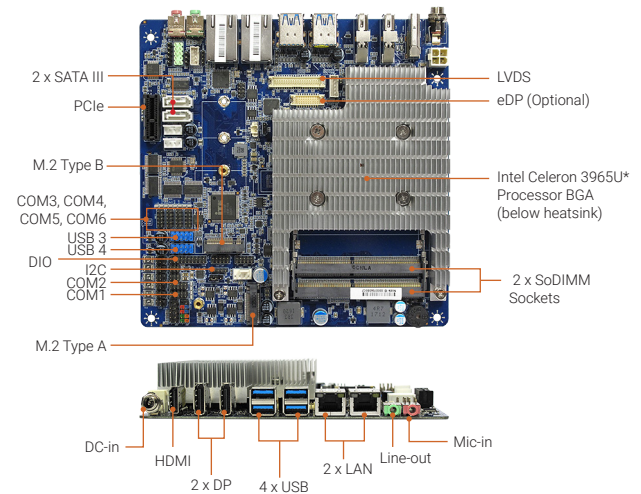


# MX3965U

7th Gen Intel Celeron Processor 3965U BGA  
Mini-ITX Motherboard

## Features

- Onboard 7th Gen. Intel® Celeron® BGA 3965U\* Processor
- 2 x 260-pin DDR4 2133 MHz SoDIMM supports up to 32 GB
- DP++, HDMI/DP, Dual channel 18/24-bits LVDS
- 1 x Intel® i211AT PCIe Gigabit Ethernet
- 1 x Intel® i219LM Gigabit Ethernet PHY
- Realtek ALC888S Audio Codec
- TI TPA3113D2PWP Stereo Class-D 6W x 2 Audio Amplifier
- 1 x M.2 Type B 3042/2242/2260/2280, 1 x M.2 Type A, 1 x SIM Card Slot, 1 x PCIe, SD Card Slot
- 2 x SATA III, 2 x SATA Power, 4 x USB 2.0, 4 x USB 3.0
- 4 x RS232, 2 x RS232/422/485, 16-bit GPIO
- Mic-in, Line-out, 1 S/PIDF, Onboard Infineon SLB9665 TPM 2.0
- Optional eMMC
- DC in +12V~24V



## Specifications

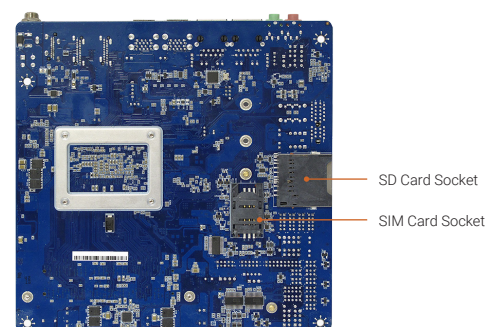
System	
CPU	7th Gen Intel® Celeron® 3965U, 2-Core, 2.2GHz CPU Onboard. Intel® Kaby Lake Platform * Also available with these processors: - Intel® Core™ i7-7600U Processor, 4M Cache, up to 3.90 GHz - Intel® Core™ i5-7300U Processor, 3M Cache, up to 3.50 GHz - Intel® Core™ i3-7100U Processor, 3M Cache, 2.40 GHz
System Memory	2 x 260-pin DDR4 2133 MHz SoDIMM supports up to 32 GB
I/O Chip	EC iTE IT8528E
Audio	Realtek HD Audio support 7.1 channel sound playback
Ethernet	LAN1: Intel® I219-LM Gigabit Ethernet Controller LAN2: Intel® I211-AT Gigabit Ethernet Controller
BIOS	AMI 128Mbit SPI BIOS
Expansion	1 x PCIe 1 x M.2 Type B 3042/2242/2260/2280 1 x M.2 Type A 1 x SD card slot Supports SD/ SDHC Card 1 x SIM card slot)
Watchdog Timer	Reset: 1 sec. ~ 255min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring System Temperature, Voltage, with Auto Throttling Control
Supported OS	Win 10, Win 8, Linux

Display	
Chipset	Intel HD Graphics 610
Interface	DP: 4096 x 2160 @ 60Hz (1 x HDMI/DP, 1 x DP++) HDMI: 3840 x 2160 @ 30Hz LVDS: 1920 x 1080 @ 60Hz
LVDS	2CH 18/24bits LVDS 1920 x 1080 Chrontel. CH7511B eDP to LVDS Converter
Multiple Display	Supports 3 Independent Displays

External I/O	
Display	1 x HDMI, 2 x DisplayPort
LAN	2 x RJ45
USB	4 x USB 3.0
Audio	Mic-in, Line-out
DC-in	1 x DC-In Jack

Internal I/O	
LVDS	1 x LVDS Header Optional: 1 x eDP
USB	2 x USB Header (4 x USB 2.0)
COM	4 x RS232 2 x RS232/422/485
SATA	2 x SATA III, 2 x SATA Power
MIO	1 x Front Audio, 1 x SPDIF, 1 x LPC, 1 x SPI, 1 X DIO, 1 X Front Panel, 1 x 4-pin Power Connector, 1 x I2C

Mechanical & Environment	
Power Type	12V-24V Wide Range DC-In
Operating Temp	0°C ~ 60°C (32°F ~ 140°F)
Storage Temp	-40 ~ 75°C (-40 ~ 167°F)
Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing
Form Factor	Mini ITX
Dimensions	6.7" (L) x 6.7" (W)
Certification	CE, FCC Class B
Weight	0.88 lbs



\* All product specifications and images are subject to change without notice. Last update: 2020/12/14