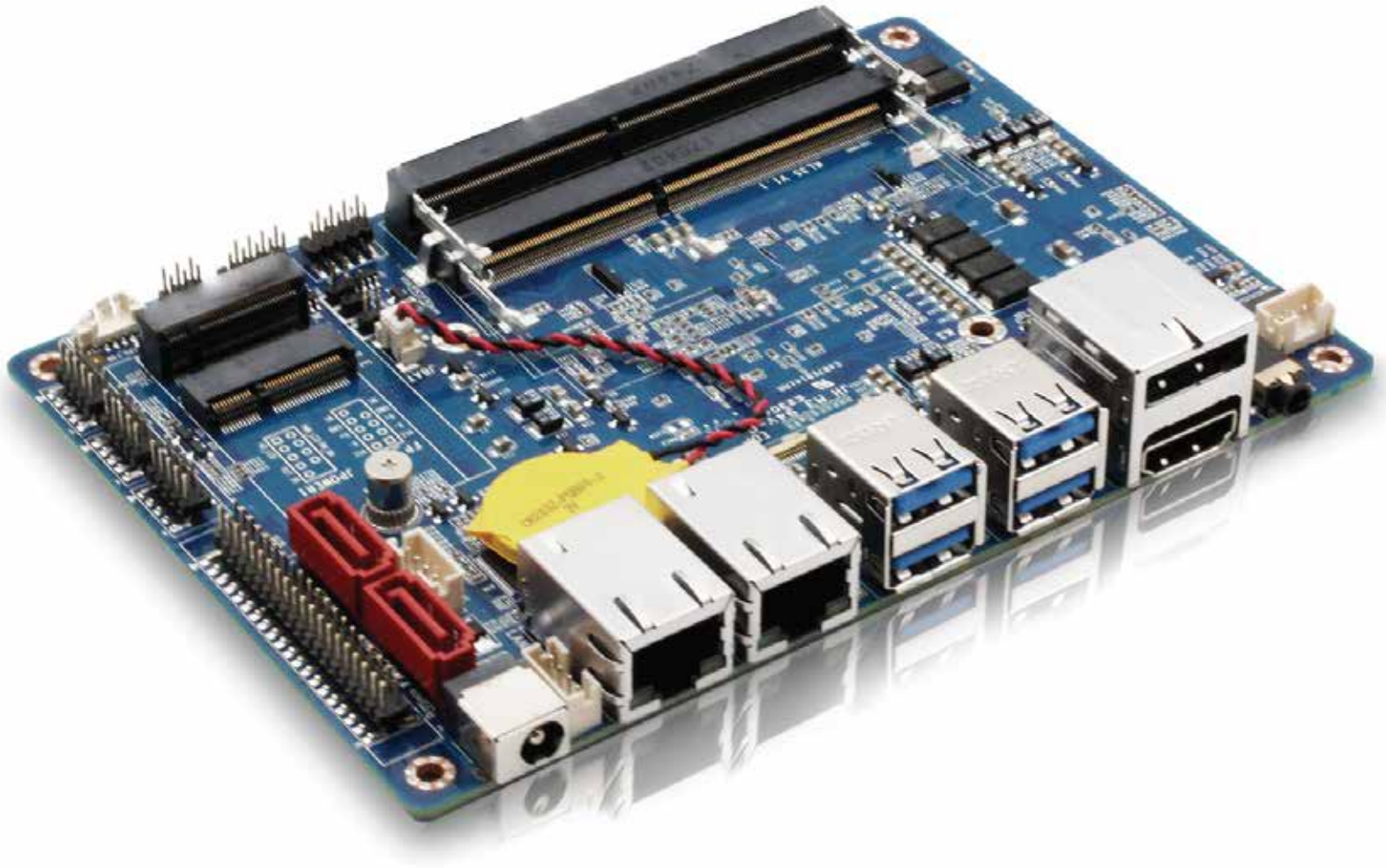


# SBC-KL35

## Intel® Kabylake-U Based 3.5" Industrial Embedded Motherboard



### Features

- Intel Skylake-U/Kabylake-U, Celeron BGA processor
- Dual channel DDR4 system memory up to 32GB
- Multiple display: HDMI, DP, eDP
- 10/100/1000Mbit ethernet card
- SATA3.0, M.2 (2242 SSD for SATA definition)
- 9~24V DC input



## Introduction

The SBC-KL35 is an embedded motherboard, supporting Intel® latest 7th Gen. Skylake-U/Kabylake-U Core™ i3/i5/i7 and Celeron processor (BGA 1356), Celeron® 3865U, Core™ i3-7100U, Core™ i5-7200U, Core™ i3-6100U, Core™ i5-6200U.

This board features multiple display via 1×Display Port1.2 and 1×HDMI1.4 and 1×eDP. It carries 2×DDR4 SO DIMM 2133MHz slots up to 32GB to add higher bandwidth and lower latencies for processes. It has 2×10M/100M/1000M BASE-T gigabit LAN (Intel i211/i219), 4×USB3.0, 4×USB2.0, 4×RS232, 2×RS485, 1×LPC(optional), 8×GPIO.



H/W Monitor



Watchdog

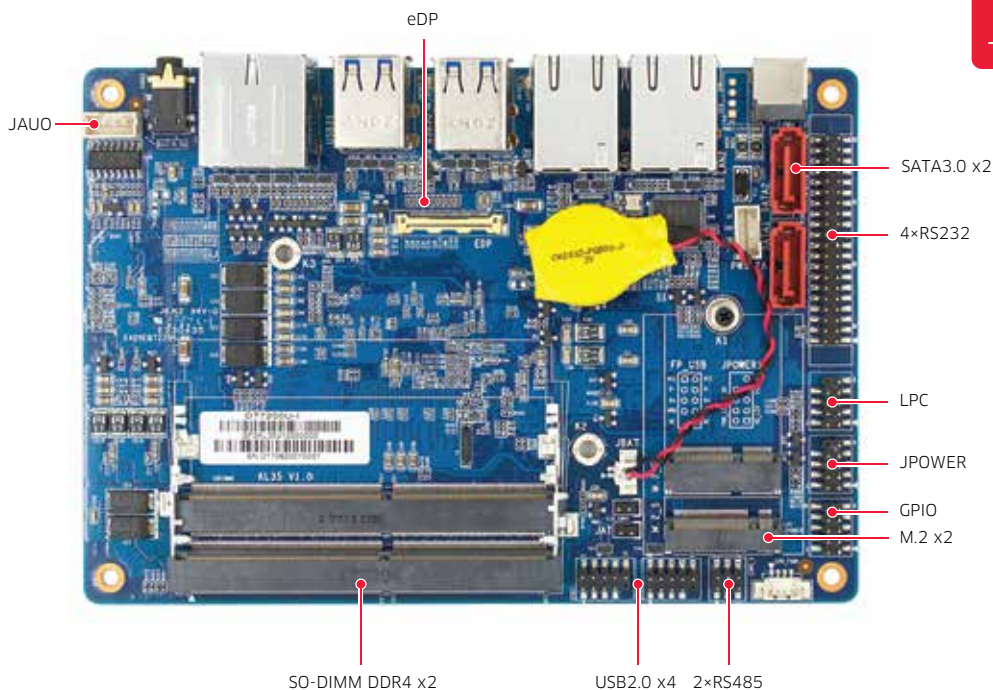


GPIO

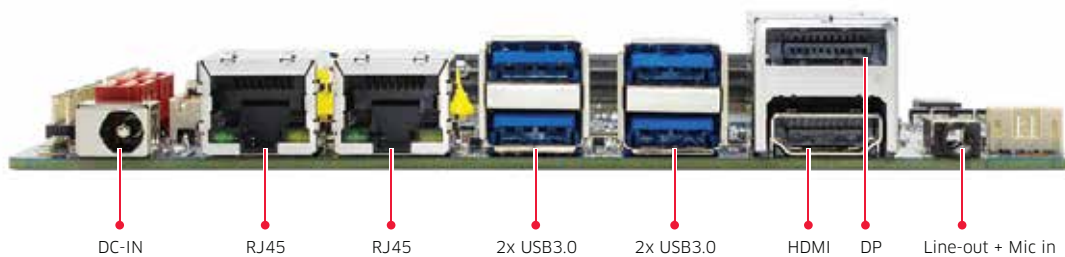


Brightness

## Internal I/O



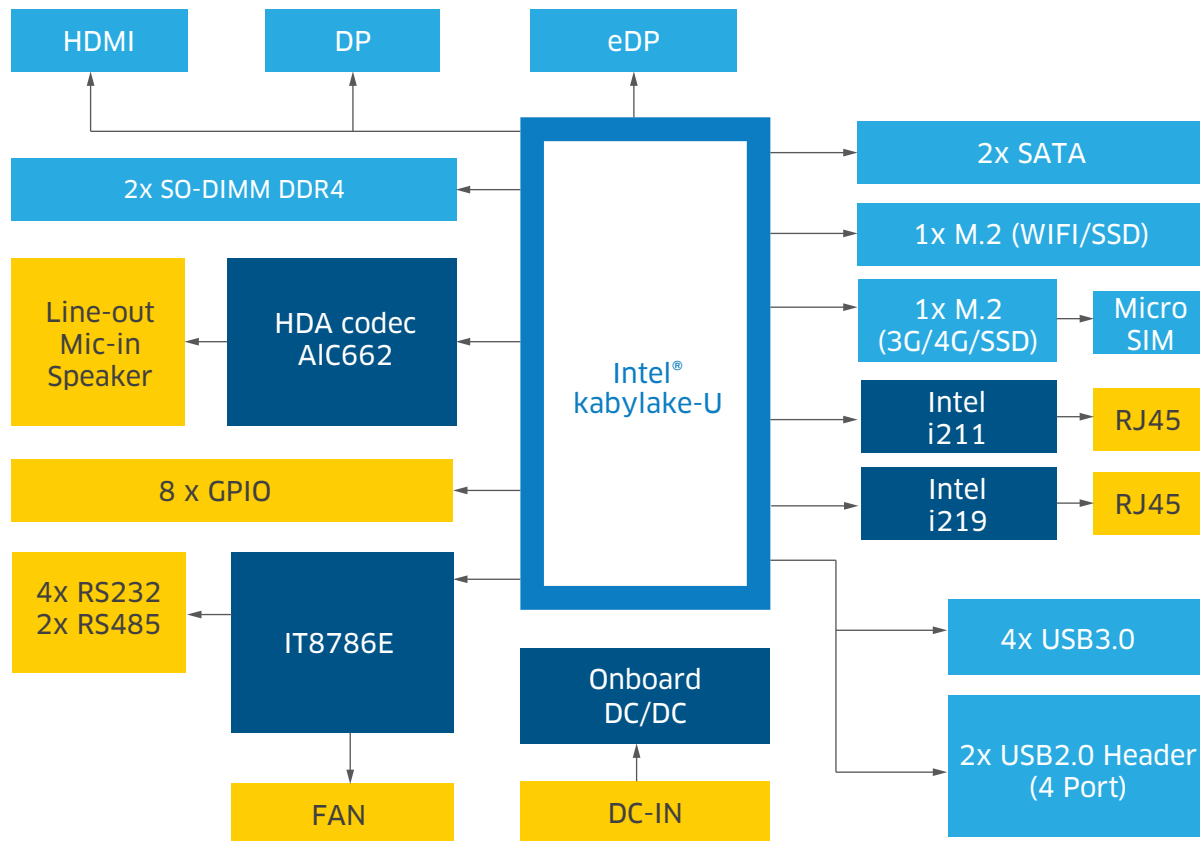
## Rear I/O Interfaces



## Technical Specifications

<b>Processor</b>	CPU	<b>3865U</b>	<b>i3-7100U</b>	<b>i5-7200U</b>	<b>i3-6100U</b>	<b>i5-6200U</b>
	Core frequency	1.8GHz	2.4GHz	2.5GHz	2.3GHz	2.3GHz
	Burst frequency			3.1GHz		2.8GHz
	Cache	2MB	3MB	3MB	3MB	3MB
	BIOS	AMI 8MB UEFI BIOS				
<b>Memory</b>	Type	Dual channel 2×DDR4-2133MHz				
	Capacity	Max. 32GB				
<b>Display</b>	GPU	Intel HD Graphics 610/620 (Based on CPU)				
	HDMI	1				
	DP	1				
	eDP	1(expanded to LVDS by daughter board)				
	Multiple display	HDMI+DP+eDP				
<b>Ethernet</b>	Speed	10/100/1000Mbps				
	Controller	1×Intel i211/1×Intel i219				
	Interface	2×RJ45				
	Wake on LAN	Yes				
	vPro/AMT	Yes (Based on the specified CPU and Intel i219 ethernet chip)				
<b>Audio</b>	Audio codec	Realtek HD ALC662				
	Interface	Line-out and MIC-in in one, amplifier header(connect passive speaker)				
<b>Hardware</b>	CPU system temperature, onboard DC-IN voltage, watchdog, Auto power on					
<b>Storage</b>	M.2	1×M.2 for 3G/4G or 2242 SSD (SATA definition)				
	SATA3.0	2×SATA3.0 / (only 1 if Celeron onboard)				
<b>Expansion</b>	M.2	1×M.2 for wifi				
	Micro SIM	1				
<b>Rear Panel I/O</b>	Audio	1×Line-out+MIC-in in one				
	LAN	2(10/100/1000Mbps)				
	USB3.0	4				
	DP	1				
	HDMI	1				
<b>I/O header</b>	COM	4×RS232, 2×RS485 (COM1 to COM4 with power, optional)				
	USB2.0	4×USB2.0				
	Digital I/O	8×GPIO				
	LPC	Optional				
<b>Power</b>	Standard port	1×9~24V DC-IN/4 PIN Power				
	Peripheral Input	For fan and SATA power				
	LED Indicator	POWER indicator				
<b>Mechanical &amp; Environmental</b>	Type	3.5"				
	Size	146mm×102mm (L x W)				
	Operating Temp.	-20°C ~ 60°C				
	Storage Temp.	-40°C ~ 80°C				
<b>Operating System</b>	Win7 64bit, Win10 64bit, Linux 32/64bit					

## SBC-KL35 Functional Block Diagram



## Ordering Information

Model	CPU	Memory	HDMI	DP	eDP	LAN	Audio	RS232	RS485	USB3.0	USB2.0	SATA3.0	M2	Power	Cooling
DT3865U-I	Celeron 3865U 15W	2x SO-DIMM DDR4	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive
DT7100U-I	i3-7100U 15W	2x SO-DIMM DDR4	1	1	1	2	Yes	4	2	4	4	2	2	DC-IN	Passive
DT7200U-I	i5-7200U 15W	2x SO-DIMM DDR4	1	1	1	2	Yes	4	2	4	4	2	2	DC-IN	Passive
DT6100U-I	i3-6100U 15W	2x SO-DIMM DDR4	1	1	1	2	Yes	4	2	4	4	2	2	DC-IN	Passive
DT6200U-I	i5-6200U 15W	2x SO-DIMM DDR4	1	1	1	2	Yes	4	2	4	4	2	2	DC-IN	Passive
Customized	ODM/OEM is available.														

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