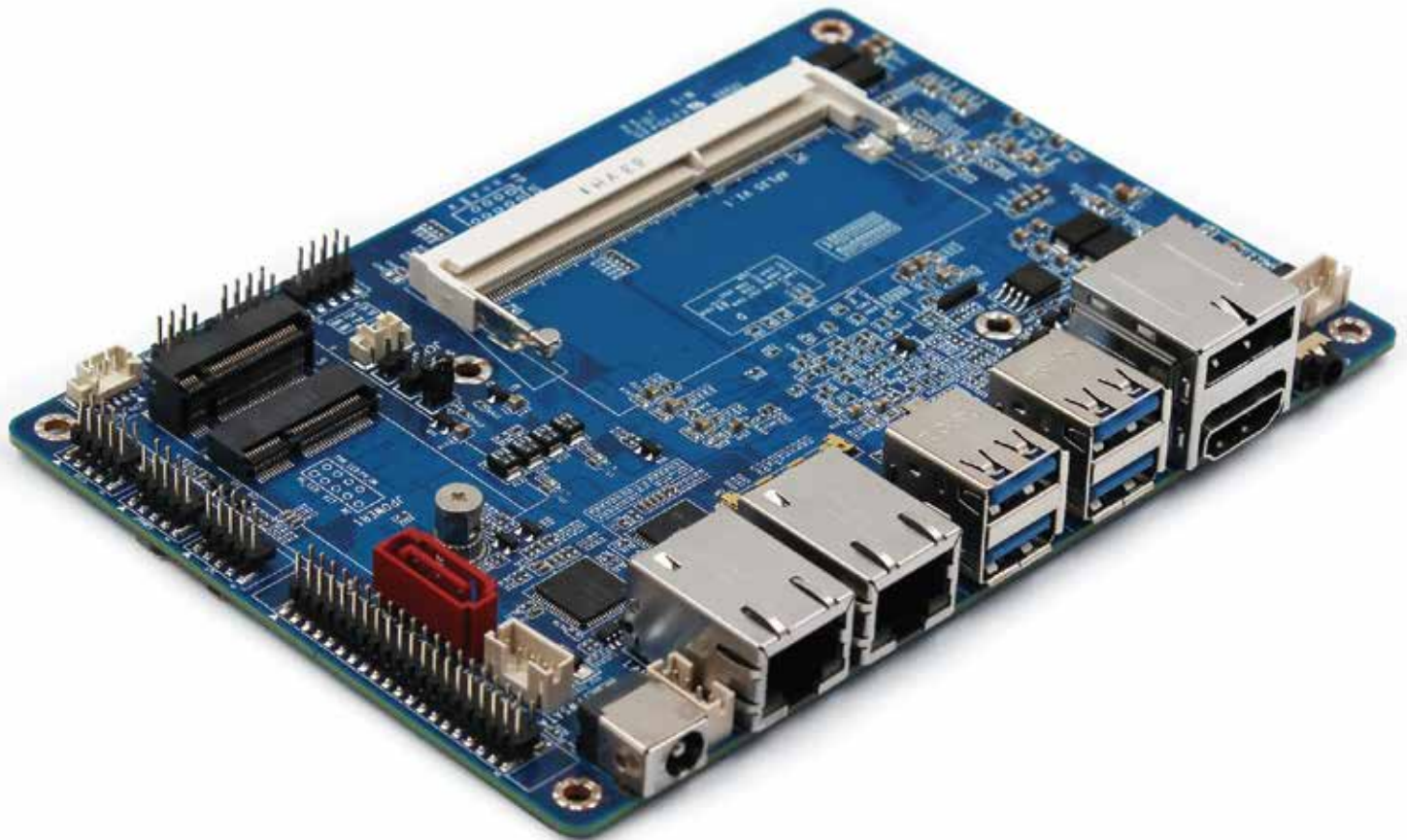


SBC-APL35

Intel® Apollo lake 3.5" Industrial Embedded Motherboard



Features

- Intel Apollo lake BGA processor
- Single channel DDR3L system memory up to 8GB
- Multiple display: HDMI, DP and eDP
- 10/100/1000Mbit ethernet card
- SATA3.0, M.2 (2242 SSD)
- 9~24V DC input

Introduction

The SBC-APL35 is an embedded motherboard, supporting Intel® Apollo lake Celeron and Pentium processors.

This board can deliver cutting-edge performance with very low power consumption. With Celeron® and Pentium processors you'll enjoy stunning visuals, effortless multi-tasking, increased speed and enhanced security to help you create, play, entertain and achieve.

This board features multiple display via 1×Display Port1.2 and 1×HDMI1.4 and 1×eDP. It carries 1×DDR3L 1600 MHz slot up to 8GB to add higher bandwidth and lower latencies for processes. It has 2×10M/100M/1000M BASE-T gigabit LAN (Intel i211), 4×USB3.0, 4×USB2.0, 4×RS232, 2×RS485, 1×LPC(optional), 8×GPIO.



H/W Monitor



Watchdog

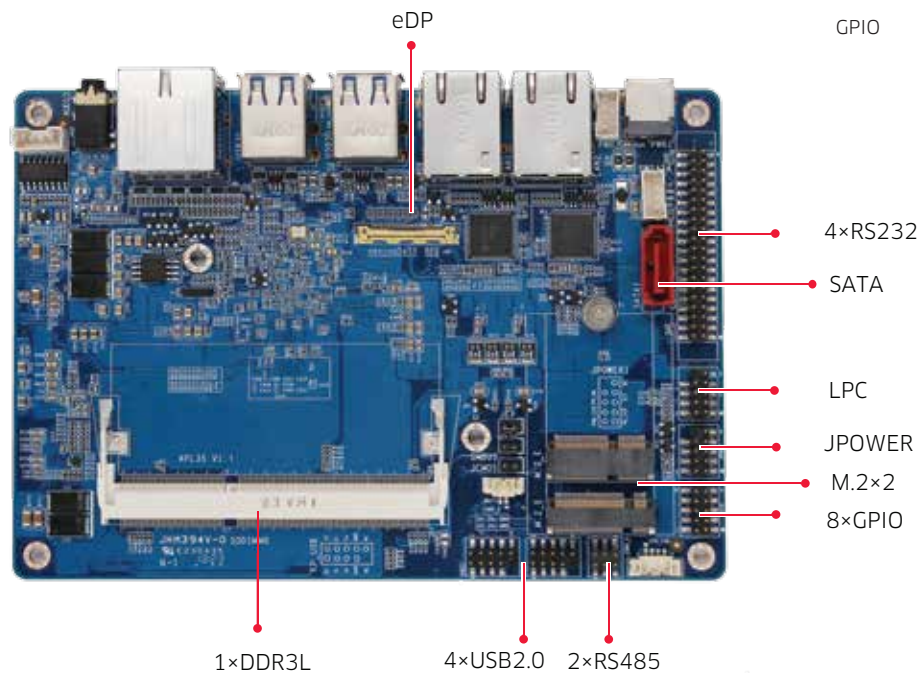


GPIO

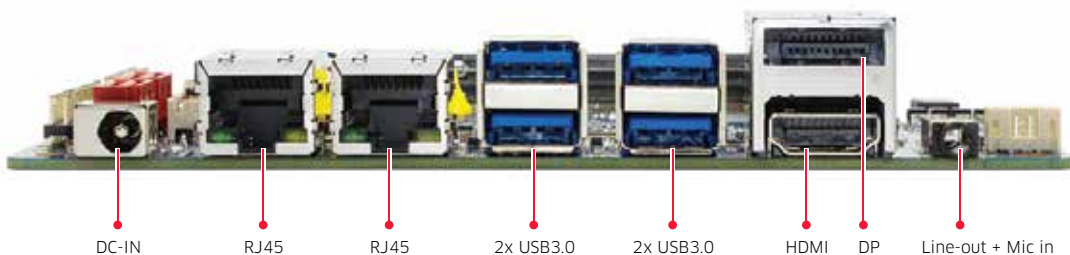


Brightness

Internal I/O



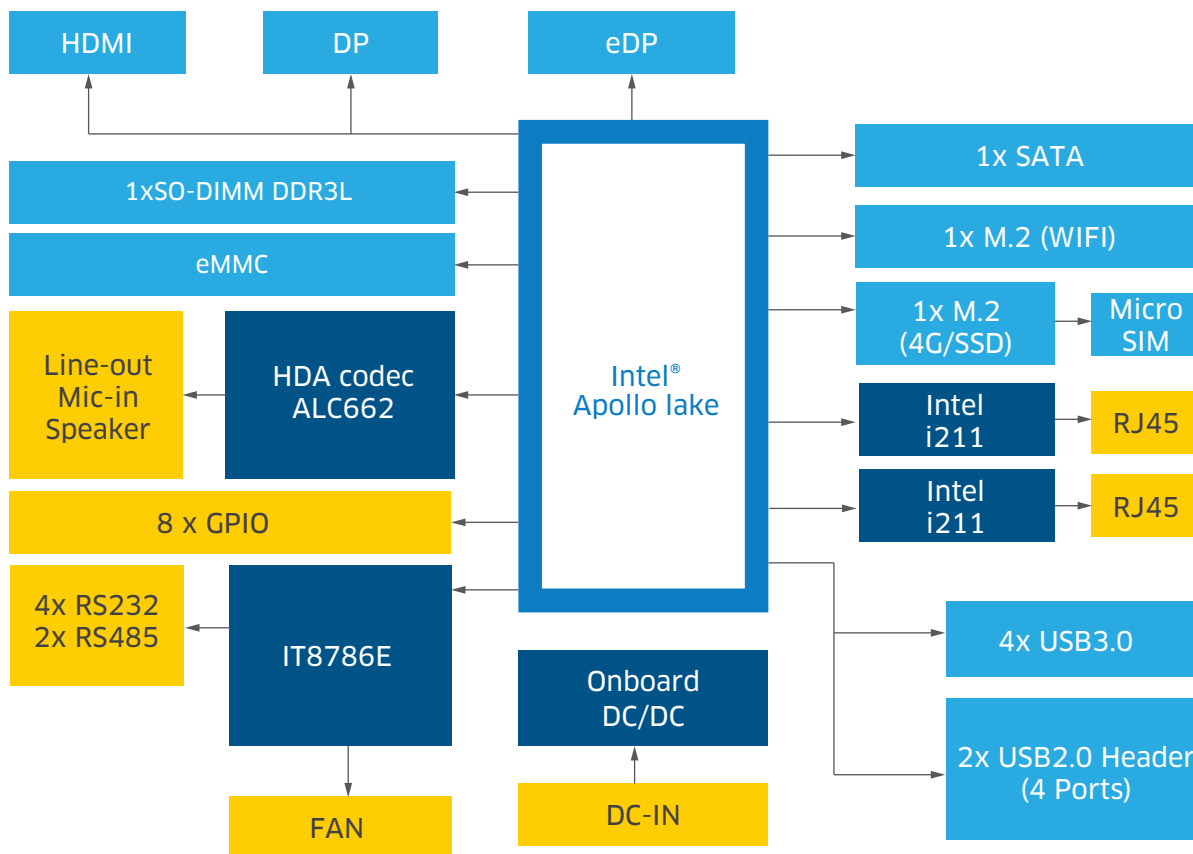
Rear I/O Interfaces



Technical Specifications

Processor	CPU	J3355	J3455	J4205	N3350	N3450	N4200
	Core frequency	2.0GHz	1.5GHz	1.5GHz	1.1GHz	1.1GHz	1.1GHz
Burst frequency	2.5GHz	2.3GHz	2.6GHz	2.4GHz	2.2GHz	2.5GHz	
Cache	2MB	2MB	2MB	2MBL2	2MBL2	2MBL2	
BIOS	AMI 8Mb/16Mb UEFI BIOS						
Memory	Type	1 x DDR3L SODIMM					
	Capacity	Max. 8GB					
Display	GPU	Intel HD Graphics 500 (based on CPU)					
	HDMI	1					
	DP	1					
	eDP	1(expanded to LVDS by daughter board)					
	Multiple display	HDMI+DP+eDP					
Ethernet	Speed	10/100/1000Mbps					
	Controller	2 x Intel i211					
	Interface	2 x RJ45					
	Wake on LAN	Yes					
Audio	Audio codec	Realtek HD ALC662					
	Interface	Line-out and MIC-in in one, amplifier header(connect passive speaker)					
Hardware	CPU/system temperature,onboard DC-IN voltage,watchdog						
Storage	M.2	1 x M.2 for 4G or 2242 SSD (SATA definition)					
	SATA3.0	1 x SATA3.0					
	eMMC	Optional					
Expansion	M.2	1 x M.2 for wifi					
	Micro SIM	1					
Rear Panel I/O	Audio	1 x Line-out+MIC-in in one					
	LAN	2(10/100/1000Mbps)					
	USB3.0	4					
	DP	1					
	HDMI	1					
Internal I/O	COM	4 x RS232, 2 x RS485(COM1 to COM4 with power, optional)					
	USB2.0	4 x USB2.0					
	Digital I/O	8 x GPIO					
	LPC	Optional					
Power	Standard port	1 x 9~24V DC-IN/4 PIN Power					
	Peripheral Input	For fan and SATA power					
	LED Indicator	POWER indicator					
Mechanical & Environmental	Type	3.5"					
	Size	146mm x 102mm (L x W)					
	Operating Temp.	-20°C ~ 60°C					
	Storage Temp.	-40°C ~ 80°C					
Operating System	Win10 32 bit/64bit, Linux						

SBC-APL35 Functional Block Diagram



Ordering Information

Model	CPU	Memory	HDMI	DP	eDP	LAN	Audio	RS232	RS485	USB3.0	USB2.0	SATA3.0	M2	Power	Cooling
DTJ3355-I	Celeron J3355	1x SO-DIMM DDR3L	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive
DTJ3455-I	Celeron J3455	1x SO-DIMM DDR3L	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive
DTJ4205-I	Pentium J4205	1x SO-DIMM DDR3L	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive
DTN3350-I	Celeron N3350	1x SO-DIMM DDR3L	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive
DTN3450-I	Celeron N3450	1x SO-DIMM DDR3L	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive
DTN4200-I	Pentium N4200	1x SO-DIMM DDR3L	1	1	1	2	Yes	4	2	4	4	1	2	DC-IN	Passive