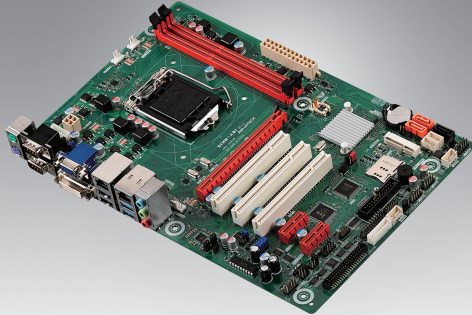


# SIMB-A31

Intel® Core™ i7/i5/i3 LGA1150 ATX with  
VGA/DVI, 6 COM, 2 USB 3.0, 7 USB 2.0,  
Dual LAN

NEW



Quiet susiAccess



CE FCC

## Features

- Supports Intel® Core™ i7/i5/i3 processor with H81 chipset
- Two DIMM sockets support up to 16 GB DDR3/DDR3L 1333/1600 MHz SDRAM
- Supports Dual display of VGA, DVI and two GbE LAN
- Supports 6 COM, 2 USB 3.0, 7 USB 2.0, TPM 1.2 (optional)
- Supports SUSIAccess, McAfee, Acronis and Embedded Software APIs

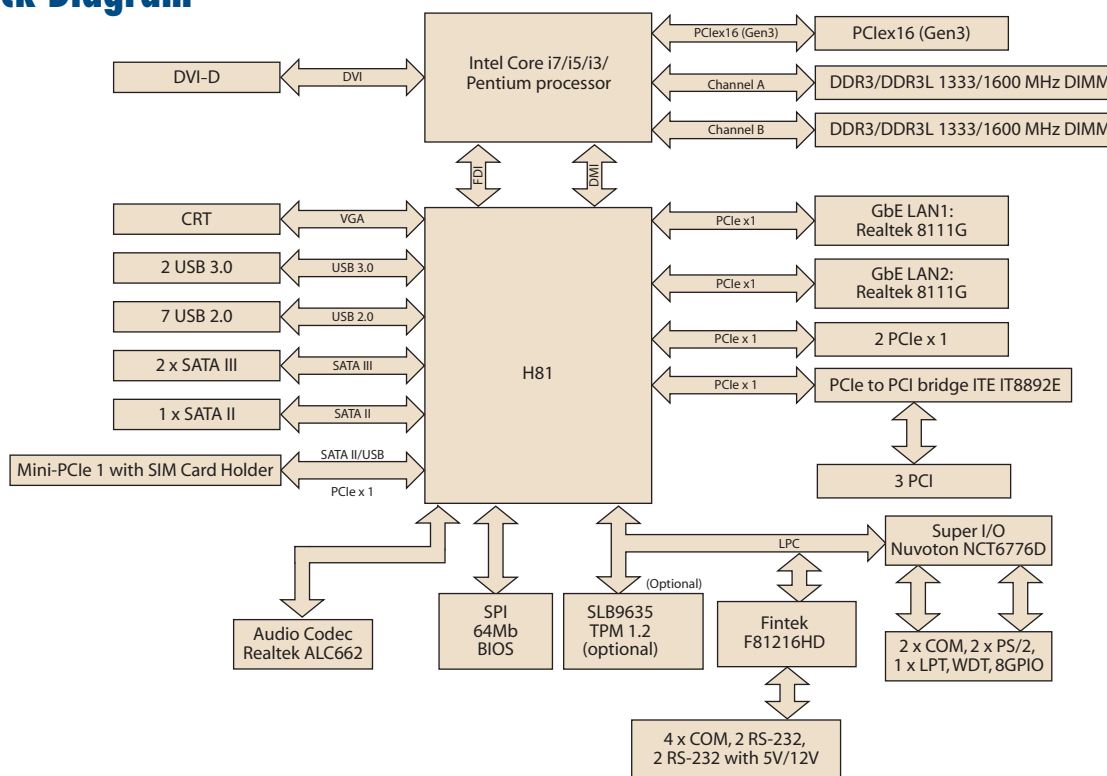
Software APIs:    

Utilities:  

## Specifications

Processor System	CPU	E3-1268L V3	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE	Pentium G3320TE	Pentium G3420	
	Core Number	4	4	4	4	2	2	2	2	2	
	Max. Speed	2.3GHz	3.1 GHz	2.3 GHz	2.9 GHz	2.7 GHz	3.5 GHz	2.4 GHz	2.3 GHz	3.2GHz	
	L3 Cache	8M	8M	8M	6M	4M	4M	4M	3M	3M	
	TDP (W)	45W	65W	45W	65W	35W	54W	35W	35W	54W	
	Chipset	H81									
Expansion Slot	BIOS	AMI EFI 64 Mbit SPI									
	PCI	32-bit/33 MHz, 3 slot									
	PCIe x1 (Gen2)	500 MB/s per direction, 2 slot									
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot									
Memory	Full-size Mini-PCIe	F/S support mSATA with SIM card holder									
	Technology	Dual Channel DDR3/DDR3L1333/1600 MHz SDRAM									
	Max. Capacity	16 GB/8 GB per DIMM									
Graphics	Socket	2 x 240-pin DIMM (Non-ECC)									
	Controller	Intel HD Graphics									
	CRT	Yes, supports max. resolution 1920 x 1200									
	DVI	Up to 1920 x 1200 @ 60Hz refresh rate									
Ethernet	Dual Display	VGA+DVI									
	Interface	10/100/1000 Mbps									
	Controller	GbE LAN1:Realtek RTL8111G GbE LAN2:Realtek RTL8111G									
SATA	Connector	RJ-45 x 2									
	Max Data Transfer Rate	600 / 300 MB/s (SATA 3.0 / SATA 2.0)									
Rear I/O	Channel	2 / 1									
	CRT	1									
	DVI-D	1									
	Ethernet	2									
	USB	4 (USB 2.0 x 2 /USB 3.0 x 2)									
	Audio	3 (Mic-in, Line-out, Line-in)									
	Serial	2 (COM1 supports RS-232, COM2 supports RS-232/RS-422/RS-485 with 5V/12V)									
	PS/2	2 (1 x keyboard and 1 x mouse)									
Internal Connector	USB	5 (USB 2.0)									
	Serial	4 (COM3/4 support RS-232 with 5V/12V, COM5/6 support RS-232)									
	PS/2	2 (1 x keyboard and 1 x mouse)									
	SATA	2 x 600 MB/s (SATA 3.0), 1 x 300 MB/s (SATA 2.0)									
	GPIO	8-bit GPIO									
	LPT	1									
Watchdog Timer	Output	System reset									
	Interval	Programmable 1 ~ 255 sec/min									
Power Requirements	Power On	5V		+3.3V		12V		-12V		5VSB	
		1.79A		0.30A		0.41A		0.35A		0.36A	
Environment	Operating								Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution							-40 ~ 85° C (-40 ~ 185° F)		
Physical Characteristics	Dimensions	305 x 203 mm (12" x 8.0")									

## Block Diagram



## Ordering Information

Part Number	PCH	Memory	VGA	DVI	USB 3.0/2.0	COM	SIM Card Holder	LAN	PCIe x 16	PCIe x 1	PCI	AMP
SIMB-A31-H8100A1E	H81	Non ECC	1	1	2/7	6	1	2	1	2	3	(1)

\*( ) BOM options available on MP version.

Note: Minimum order quantity is 200 pieces.

## Packing List

Description	Quantity
SATA Cable Kit (DATA/POWER)	1
I/O port bracket	1
Startup manual	1

## I/O View



## Optional Accessories

Part Number	Description
1700002204	USB cable with dual ports, 27 cm
1960053207N001	LGA1150 CPU cooler for CPU TDP 65W, 92.9 (W) x 92.9 (L) x 46 (H) mm
1960060732N001	LGA1150 CPU cooler for CPU TDP 45W, 80 (W) x 80 (L) x 32.2 (H) mm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm

## Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP3PF-21A1E	2U riser card with 1 PCIe x16 and 2 PCI expansion
AIMB-RF10F-01A1E	1U riser card with 1 PCIe x16 expansion