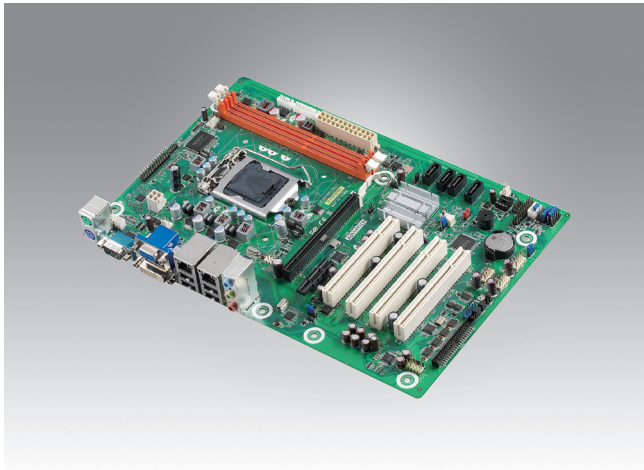


# SIMB-A21

Intel® LGA1155 Core™ i7/i5/i3, Celeron® ATX with VGA/DVI, 6 COM and Dual LAN



## Features

- Intel® LGA1155 socket supports Intel® Core™ i7/i5/i3/Celeron® processor
- Intel H61 Chipset
- Two 240-pin DIMM sockets supports up to 16GB DDR3 1066/1333 MHz SDRAM
- Intel HD Graphics 2000/3000 supports DirectX 10
- Realtek ALC892 supports 5.1 + 2 channel HD audio
- Dual Realtek RTL8111E Gigabit LAN
- 1 PCI x 16, 1 PCIe x1, 4 PCI
- 6 COM (1 x RS-232 w/ power, 1 x RS-422/485 with power, 4 x RS-232)
- 4 SATA II, 10 USB 2.0
- 8-bit GPIO

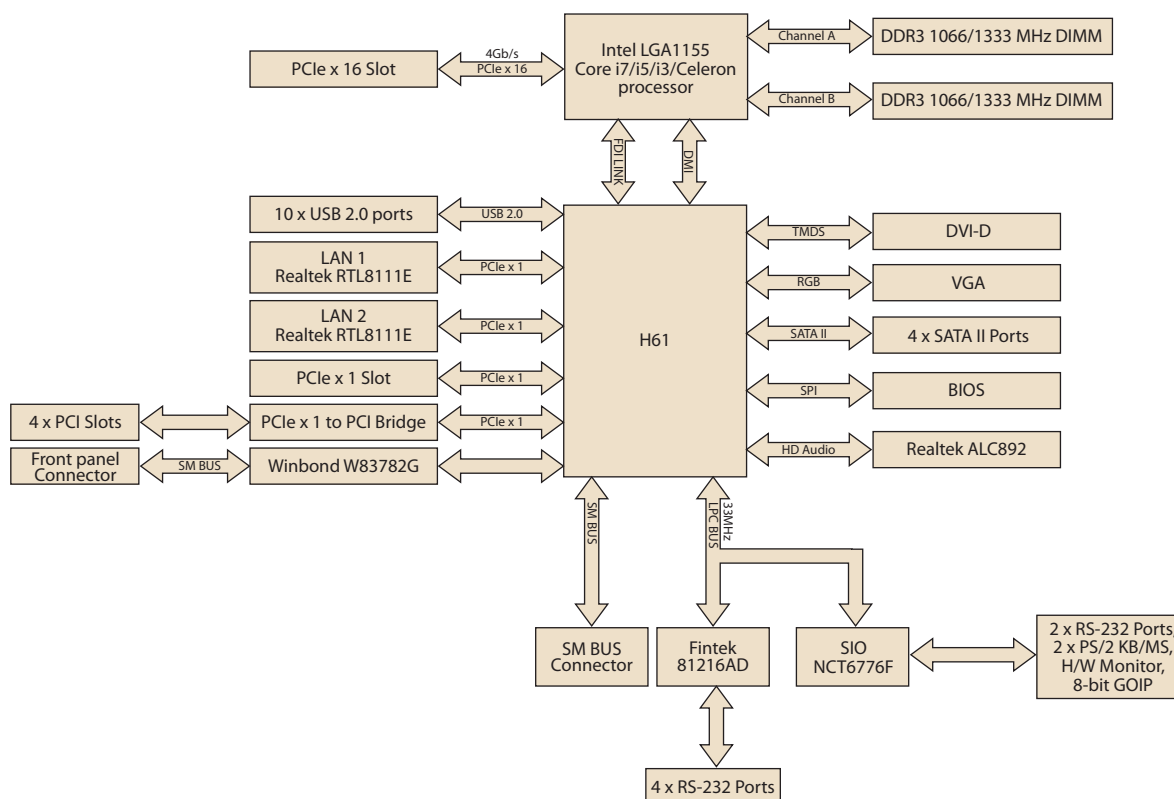


CE FCC

## Specifications

Processor System	CPU	Intel Core 3rd gen. i7	Intel Core 2nd gen. i7	Intel Core 3rd gen. i5	Intel Core 2nd gen. i5	Intel Core 2nd gen. i3	Intel Celeron
	Core Number	4	4	4	4	3	2
	Max Turbo Frequency	i7-3770S 3.9GHz	i7-2600 3.8 GHz	Intel i5-3550S 3.7 GHz	i5-2400 3.4 GHz	i3-2120 3.3 GHz	Celeron G540 2.5 GHz
	L2 Cache	8 MB	8 MB	6 MB	6 MB	3 MB	2 MB
	Chipset	Intel H61					
	BIOS	AMI EFI 32 Mbit, SPI					
	Front Side Bus	1066/1333 MHz					
Expansion Slot	PCI	32-bit/33 MHz, 4 slot					
	PCIe x 16	4.0 GB/s per direction, 1 slot					
	PCIe x1	250 MB/s per direction, 1 slot					
	Full-size Mini-PCIe	-					
Memory	Technology	Dual channel DDR3 1066/1333 MHz					
	Max. Capacity	16 GB/8 GB per DIMM					
	Socket	2 x 240-pin DIMM					
Graphics	Controller	Intel HD Graphics 2000/3000					
	VRAM	Shared memory up to 224 MB					
	VGA	1, supports max. resolution 2048 x 1536					
	DVI-D	1, supports max. resolution 1920 x 1200					
	Dual Display	VGA + DVI					
Ethernet	Interface	10/100/1000 Mbps					
	Controller Connector	GbE-LAN1: Realtek RTL8111E, GbE-LAN2: Realtek RTL8111E RJ-45 x 2					
SATA	Max Data Transfer Rate	300 MB/s					
SSD	Channel	4					
	SATA DOM	Power Pin7 of SATA 1					
Rear I/O	VGA	1					
	DVI-D	1					
	Ethernet	2					
	USB	4 (USB 2.0)					
	Audio	3 (Line-out, Line-in, Mic-in)					
	Serial	1 (RS-232 w/ 5V/12V)					
	PS/2	2 (1 x keyboard and 1 x mouse)					
Internal Connector	USB	6 (USB 2.0)					
	Serial	5 (4 x RS-232, 1 x RS-232/422/485)					
	SATA	4 (SATA II)					
	Parallel	1 LPT Port header (2 x 13 pin)					
	GPIO	8-bit (4-bit DI and 4-bit DO)					
	Watchdog Timer	Output	System reset				
Security	Interval	Programmable 1~ 255 sec/min					
	TPM	Optional Module via TPM Header					
Power Requirements	Power On	+12 V	+5 V	+3.3 V	5 Vsb		
		6.04 A	4.34 A	2.38 A	0.82 A		
Environment	Temperature	Operating			Non-Operating		
		0 ~ 50° C (32 ~ 140° F)			-20 ~ 70° C (-4 ~ 158° F)		
Physical Characteristics	Dimensions	305mm x 203 mm (12" x 8.0")					

## Block Diagram



## Ordering Information

P/N	CPU	Chipset	VGA	GbE	USB	COM	SATA
SIMB-A21-8VG00A1E	Intel Core i7 / i5 / i3 / Celeron	Intel H61	1	2	10 (4 Rear, 6 Internal)	6 (1 Rear, 5 Internal)	4 SATA II

Note: Minimum order quantity is 10 pieces

## I/O View



SIMB-A21-8VG00A1E

## Packing List

Description	Quantity
SATA Cable Kit (SATA/POWER)	1
I/O Shield	1
Startup Manual	1 (per 10 units)
Driver CD	1 (per 10 units)

## Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with two ports, 30.5 cm
1960047670N001	LGA1156 CPU cooler for 2U and wallmount chassis
1700008809	Printer port cable kit, 25 cm
1700020294-01	Printer port cable kit, 42 cm
1700019549	COM port cable with bracket, 40 cm
1700021716-01	COM port cable w/o bracket, 10 cm

Remark: Using Advantech Cooler (P/N 175000334) with SIMB-A21 is not recommended.