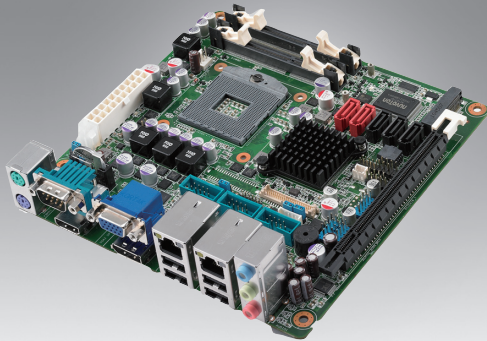


# SIMB-M21

## Intel® Core™ i7/i5/i3/Celeron® Mini-ITX with VGA/HDMI/LVDS/Display Port, 4 COM and Dual LAN



### Features

- Intel rPGA988 socket supports Mobile Intel® Core™ i7/ i5/ i3/ Celeron® processor
- Intel HM65 chipset
- Intel GMA HD 2000/ 3000 supports DirectX 10.1, OpenGL 3.0
- Two 204-pin SODIMM sockets support up to 16 GB DDR3 1333/ 1066 SDRAM
- Dual Intel Gigabit LAN : Intel 82579LM (LAN 1), Intel 82583V (LAN 2)
- Supports multiple dual display functions : VGA, HDMI, DisplayPort, dual channel 24-bit LVDS
- 1 PCIe x16 Gen. 2, 1 mini PCIe, 1 CFast
- 2 SATA III and 3 SATA II
- 4 COM (3 with Power), 10 USB 2.0

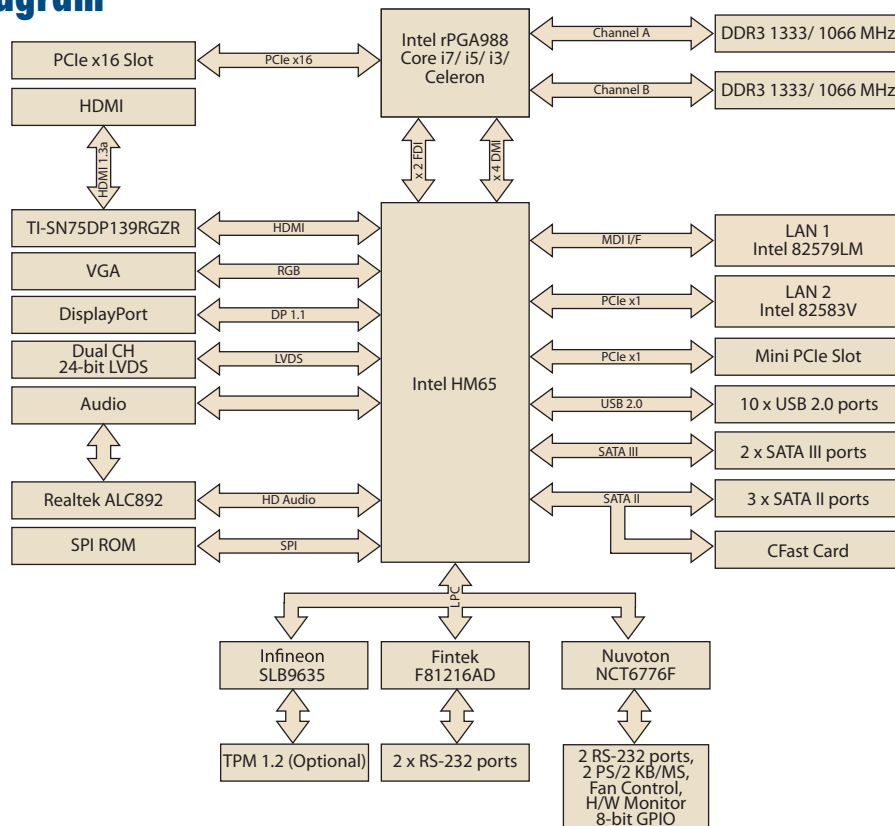


CE FCC

### Specifications

Processor System	CPU	Intel Core i7-2710QE	Intel Core i5-2510E	Intel Core i3-2330E	Intel Celeron B810
	Core Number	4	2	2	2
	Max. Speed	2.1 GHz	2.5 GHz	2.1 GHz	1.6 GHz
	L2 Cache	6 MB	3 MB	3 MB	2 MB
	Chipset	Intel HM65			
Expansion Slots	BIOS	AMI 64 Mbit , SPI			
	PCI	-			
	PCIe x16	4.0 GB/s per direction, 1 slot			
	PCIe x1	-			
Memory	Full-size Mini PCIe	1			
	Technology	Dual channel DDR3 1066/1333 MHz			
	Max. Capacity	16 GB			
Graphics	Socket	2 x 204-pin SODIMM			
	Controller	Intel Graphics Media Accelerator HD 2000/3000			
	VRAM	Shared system memory up to 1.7 GB SDRAM			
	VGA	1, supports max. resolution 2048 x 1536			
	LVDS	1, dual channel 24-bit LVDS supports max resolution 1600 x 1200			
	HDMI	1, HDMI 1.3 supports max resolution 1920 x 1080			
	Display Port	1, supports max resolution 2560 x 1600			
Ethernet	Dual Display	VGA + LVDS, VGA + DisplayPort, VGA + HDMI, DisplayPort + HDMI, LVDS + HDMI, LVDS + DisplayPort			
	Interface	10/100/1000 Mbps			
	Controller	GbE-LAN1: Intel 82579LM , GbE-LAN2: Intel 82583V			
SATA	Connector	RJ-45 x 2			
	Max Data Transfer Rate	600 MB/s (SATA III) / 300 MB/s (SATA II)			
SSD	Channel	2/3			
	CFast	1			
Rear I/O	VGA	1			
	Display Port	1			
	HDMI	1			
	Ethernet	2			
	USB	4 (USB 2.0)			
	Audio	3 (Line-out, Line-in, Mic-in)			
	Serial	1 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connectors	LVDS & Inverter	1			
	USB	6 (USB 2.0)			
	Serial	3 (RS-232)			
	SATA	5 (2 SATA III, 3 SATA II)			
	GPIO	8-bit (4-bit DI and 4-bit DO)			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1~ 255 sec/min			
Security	TPM	Optional			
Power Requirements	Power On	+12 V	+5 V	+3.3 V	-12 V
		2.59 A	0.97 A	1.10 A	0.56 A
Environment					5 Vsb
	Temperature	Operating		Non-Operating	
Physical Characteristics		0 ~ 50° C (32 ~ 122° F)		-20 ~ 70° C (-4 ~ 158° F)	
	Dimensions	170 x 170 mm (6.69" x 6.69")			

## Board Diagram



## Ordering Information

P/N	CPU	Chipset	VGA	GbE	USB	COM	SATA
SIMB-M21-7G200A1E	Intel Core i7/i5/i3/ Celeron Mobile Processor	Intel HM65	1	2	10 (4 Rear, 6 Internal)	4 x RS-232 (1 Rear, 3 Internal)	5 (2 SATA III, 3 SATA II)

Note: Minimum order quantity is 10 pieces

## Packing List

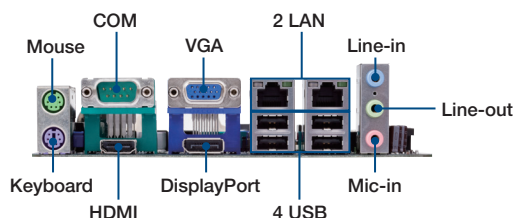
Description	Quantity
SATA cable kit (SATA/POWER)	1
I/O shield	1
CPU Cooler (25mm Height)	1
Startup manual	1 (per 10 units)
Driver CD	1 (per 10 units)

Remark: If Intel Core i7 45W is used, it is highly recommended to select CPU Cooler (40.1 mm Height, P/N 19AD13GS0700145H35) instead.

## Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
19AD13GS0700145H35	CPU Cooler (40.1 mm Height) recommended for use with Core i7 45W
1700008461	USB cable with two ports, 30.5 cm
1700019549	COM port cable with bracket, 40 cm
1700021716-01	COM port cable w/o bracket, 10 cm

## I/O View



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advantech:](#)

[SIMB-M21-7G200A1E](#)