

# AIMB-281

Intel® Core™ i7/i5/i3/Celeron LGA1155  
Mini-ITX with CRT/DVI/LVDS, 6 COM,  
Dual LAN, PCIe x4

NEW



susiAccess



CE FCC

## Features

- Support Intel Core i7/i5/i3/ Pentium / Celeron desktop processor (LGA) with Intel H61 chipset
- Supports dual display for VGA, DVI, LVDS
- Support PCIe x4 (Gen 2) and mini PCIe
- Support 8 USB, 6 COMs, 3 SATA II, 8 bit GPIO
- Support embedded software APIs and Utilities
- Two 204-pin SO-DIMM up to 8GB DDR3 1066/1333/1600 MHz SDRAM

### Software APIs:



SMBus



H/W Monitor



Watchdog



GPIO



Brightness

### Utilities:



BIOS flash



Monitoring

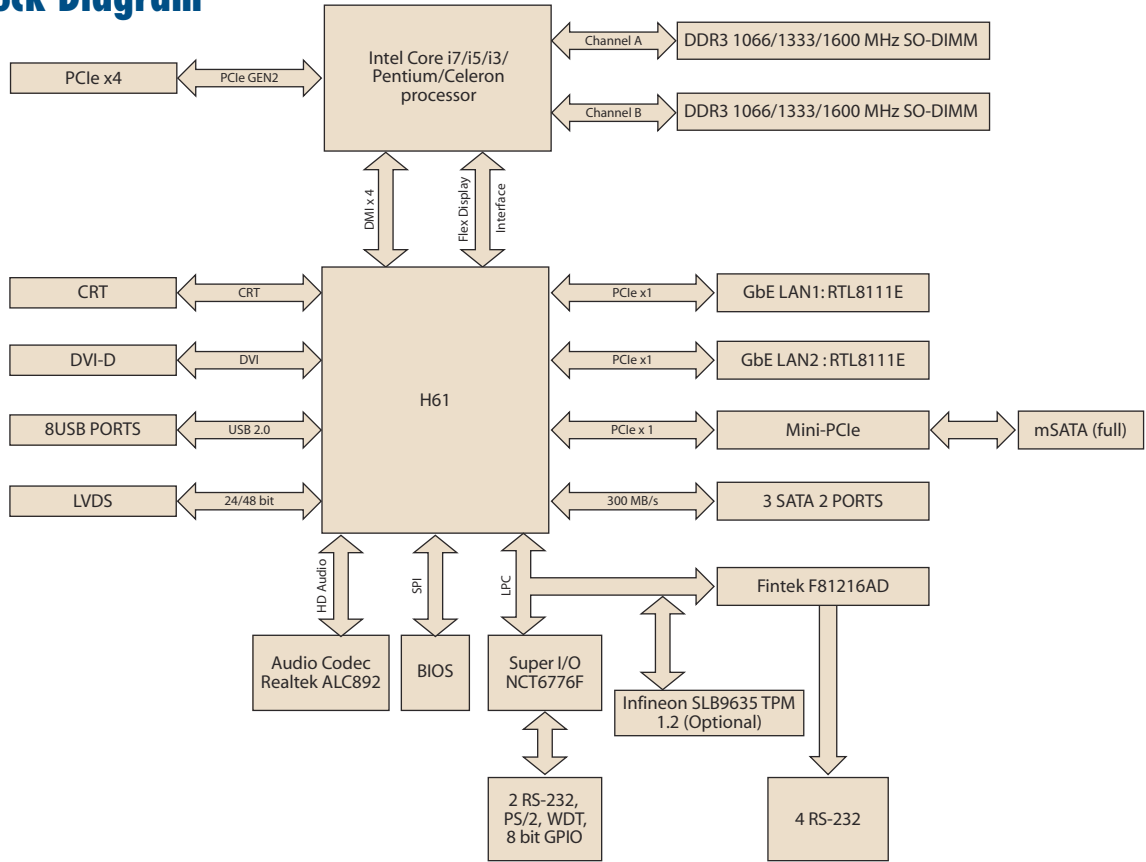


Flash Lock

## Specifications

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220	Pentium G2120	Celeron G1620
	Core Number	4	4	2	2	2
	Max Speed	3.9 GHz	3.7 GHz	3.3 GHz	3.1 GHz	2.7 GHz
	L3 Cache	8 MB	6 MB	3 MB	3 MB	2 MB
	Chipset	H61				
	BIOS	AMI EFI 32 Mbit SPI				
Expansion Slot	PCI	-				
	Mini-PCIe	1, F/S support mSATA				
	PCIe x4 (Gen2)	8 GB/s per direction, 1 slot				
Memory	Technology	Dual Channel DDR3 1066/1333/1600 MHz SDRAM				
	Max. Capacity	8 GB/4 GB per SO-DIMM				
	Socket	2x 204 PIN DDR3 SO-DIMM (Non-ECC)				
Graphics	Controller	Intel HD P3000/ 4000 graphics engine supports up to DirectX 11, Shader Model 4.1 and OpenGL 3.0				
	VRAM	Share memory up to 256MB				
	CRT	Yes, supports max. resolution 2048 x 1536				
	LVDS	Support Dual channel 48 bit and up to 1920 x 1200				
	DVI	Yes, supports max resolution 1920 x 1200				
	Dual Display	CRT+LVDS, CRT+DVI, DVI+LVDS				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	2 x RTL8111E				
	Connector	RJ-45 x 2				
SATA	Max Data Transfer Rate	300 MB/s (SATA 2.0)				
	Channel	3				
Rear I/O	VGA	1				
	DVI	1				
	Ethernet	2				
	USB	6 (USB2.0)				
	Audio	2 (Mic-In, Line-out)				
	Serial	2 (1 x RS232, 1 x RS232/422/485)				
	PS/2	1				
Internal Connector	USB	2 (USB 2.0)				
	LVDS/ inverter	1/1				
	Serial	4 (RS-232)				
	IDE	-				
	SATA	3 (SATA 2.0)				
	Mini-PCIe	1				
	Parallel	1				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirements	Power On	Intel Core i7-2700K 3.5GHz, 4GB DDR3 1333MHz SDRAM				
		+12V	+5V	+3.3V		
		13.35A	3.74A	2.19A		
Environment		Operating			Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			-20 ~ 70° C (-4 ~ 158° F)	
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")				

**Block Diagram**



**Ordering Information**

Part Number	Chipset	CRT	DVI	LVDS	GbE LAN	COM
AIMB-281G2-00A1E	H61	Yes	Yes	Yes	2	6

**Packing List**

Part Number	Description	Quantity
1700021952-01	SATA HDD cable (180° ~ 90°)	1
17AD14GS0000074V04	SATA HDD cable (180° ~180°)	1
17AD14GS0000073V04	1-to-4 serial ports cable kit	1
1960062821T000	I/O port bracket	1
2006028110	Starup manual	1
2066028101	Driver CD	1

**I/O View**



**Optional Accessories**

Part Number	Description
17AD14GS0000063V04	USB 2 Port Cable w/o bracket PH=2.00mm L=25cm
19AD13GS0700149C13	CPU Cooler (for standard chassis)
1960060732N001*1+	CPU cooler solution (for AIMB-B2000)
1960064227N001*1	
1700025386-01	Transferred cable of system fan (for AIMB-B2000)
1700013714	LPT(parallel) cable

**Embedded OS/API**

OS/API	Part Number	Description
Win XPE	2070012450	WES2009
	2070012451	WES7E x64 Embedded
WES7	2070012462	WES7E x86 Embedded
	2070012514	WES7P x86 Embedded
WES8.1	TBD	Win 8.1 Embedded
Software API	NA	SUSI 4.0 SW API for AIMB-281 XP+WIN7