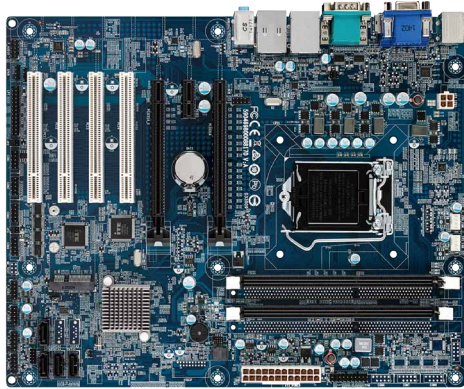


SATX-H81

Intel® B85/ H81 with Intel Core™ i7/ i5/ i3 ATX Motherboard



Features

- ◆ Supports the 4th Generation Intel Core i7/ i5/ i3, Celeron® and Pentium® Processor family
- ◆ Supports 4 DIMM slots up to 32GB DDR3 1600/ 1333 MHz SDRAM
- ◆ Supports triple/ dual independent display configuration by multiple display interface : VGA, HDMI and DisplayPort
- ◆ Supports DirectX 11.1, OpenGL 3.x, OpenCL 1.2 and outstanding 3D graphics performance
- ◆ Supports 4 x PCI, 1 x Mini PCIe and 3 x PCIe extension slots
- ◆ Supports 1 powered serial rear I/O and 1 powered serial internal connectors

Specifications

Processor	
CPU	Intel Core i7/ i5/ i3/ Celeron/ Pentium processor
Socket	LGA1150
Max. Speed	Up to 3.9 GHz
Cache	Up to 8MB
BIOS	AMI EFI 64Mbit SPI

Memory	
Technology	Dual channel DDR3 1600/ 1333 MHz SDRAM (Non-ECC)
Max. Capacity	8GB per socket
Socket	4 x 240-pin DIMM

Graphics	
Controller	Integrated Intel HD Graphics engine
VRAM	Shared memory up to 256MB
VGA	Up to SXGA 1920 x 1080 (@60Hz)
HDMI	Up to 4096 x 2304 (@24Hz)
DisplayPort	Up to 3840 x 2160 (@60Hz)
Dual Display	VGA+HDMI, VGA+DisplayPort, HDMI+DisplayPort
Triple Display	VGA+HDMI+DisplayPort

Ethernet	
Interface	10/100/1000 Mbps
LAN 1 Controller	Realtek RTL8111G GbE LAN
LAN 2 Controller	Realtek RTL8111G GbE LAN
Connector	2 x RJ-45

Expansion Slot	
Mini PCIe	Up to 1 for full-length
PCIe x1 (Gen2)	Up to 2 (500MB/s per direction)
PCIe x4 (Gen2)	Up to 1 (2GB/s per direction, by PCIe x16 slot)
PCIe x16 (Gen3)	1 (16GB/s per direction)
PCI	4 (32-bit/33MHz)

Storage	
SATA 3.0	Up to 4 (600MB/s per port)
SATA 2.0	2 (300MB/s per port)
mSATA	1 (300MB/s per port, by Mini PCIe slot)

Rear I/O Connector	
VGA	1
HDMI	1
DisplayPort	1
RJ-45	2

Rear I/O Connector	
USB 3.0	2
USB 2.0	2
Serial	1 x RS-232, 1 x RS-232 with 5V/ 12V power
Audio	3 (Line-in, Line-out, Mic-in)
PS/2	2

Internal Connector	
USB 3.0	Up to 1 for 2 x USB 3.0 ports
USB 2.0	3 for 6 x USB 2.0 ports
Serial	Up to 6 x RS-232, 1 x RS-232 with 5V/ 12V power, 1 x RS-232/ RS-485
SATA 3.0	Up to 4
SATA 2.0	2
TPM	1
CPU Fan	1
System Fan	1
Front Audio	1
Front Panel	1
S/PDIF Out	1
Speaker	1
GPIO	1 (8-bit)
Case Open	1
LAN 1 LED Extension	1
LAN 2 LED Extension	1
LPT	1

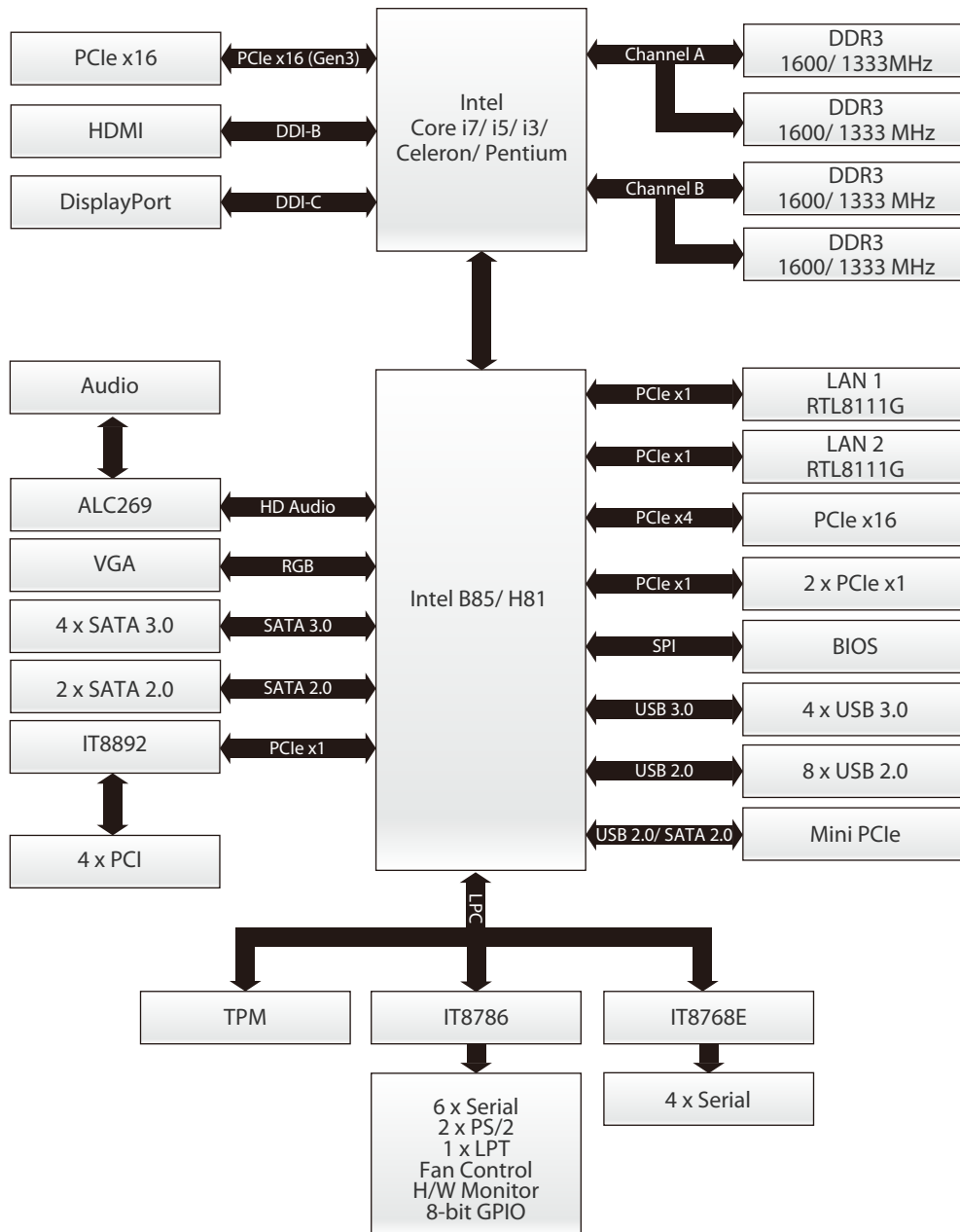
Watchdog Timer	
Output	System reset
Interval	Programmable 1-255 sec/min

Power	
Power Requirement	+12V +5V +3.3V -12V 5VSB (TBD) (TBD) (TBD) (TBD)
Power Type	ATX Mode (supports AT Mode)
Power Connector	1 x 24-pin ATX, 1 x 4-pin ATX 12V

Environment	
Operation Temperature	0 ~ 60° C (32 ~ 140° F)
Non-Operation Temperature	-40 ~ 85° C (-40 ~ 185° F)
Operation Humidity	0% ~ 90% relative humidity, non-condensing

Physical Characteristics	
Dimensions	304.8mm x 244mm (12" x 9.6")
Weight	0.65 Kg

Block Diagram



Ordering Information

Part Number	Chipset	VGA	LVDS	DVI	HDMI	DP	LAN	PClex16	PClex1	PCI	USB	Serial
TBD	B85	1	N/A	N/A	1	1	2	2	1	4	12	10
TBD	H81	1	N/A	N/A	1	1	2	1	2	4	10	6

Packing List

Description	Qty
I/O shield	1
Startup manual	1 (per 20 units)
Driver CD	1 (per 20 units)

Optional Accessories

Part Number	Description
1700003195	USB2.0 cable for 1-to-2 ports, 17.5cm
1700008809	Printer cable w/ bracket, 25cm
1700003194	SATA2.0 cable, 60cm, 180degree