

SmITX-H81 (Preliminary)

Intel® H81 with Intel Core™ i7/ i5/ i3 Mini-ITX Motherboard

Mini-ITX Motherboard



Coming soon



Features

- ◆ Supports the 4th Generation Intel Core i7/ i5/ i3, Celeron® and Pentium® Processor family
- ◆ Supports 2 SO-DIMM slots up to 16GB DDR3/ DDR3L 1600/ 1333 MHz SDRAM
- ◆ Supports dual independent display configuration by multiple display interface : VGA, HDMI, LVDS and DisplayPort
- ◆ Supports DirectX 11.1, OpenGL 3.x, OpenCL 1.2 and outstanding 3D graphics performance
- ◆ Onboard 1 x PCIe x16 slot, 1 x Mini PCIe slot, 2 powered serial ports and 1 printer port support multiple applications

Specifications

Processor

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

Memory

Technology	Dual channel DDR3/DDR3L 1600/ 1333 MHz SDRAM (Non-ECC)
Max. Capacity	8GB per socket
Socket	2 x 204-pin SO-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)
LVDS	Up to 1920 x 1200
DisplayPort	Up to 3840 x 2160 (@60Hz)
Dual Display	VGA+HDMI, VGA+LVDS, VGA+DisplayPort, HDMI+LVDS, HDMI+DisplayPort, LVDS+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	1 for full-length
PCIe x16 (Gen2)	1 (8GB/s per direction)

Storage

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

Audio

Codec	Realtek ALC269
Connector	Line-in, Line-out, Mic-in

Rear I/O Connector

VGA	1
HDMI	1
DisplayPort	1

Rear I/O Connector

RJ-45	2
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	1

Internal Connector

USB 2.0	2 for 2 x USB 2.0 ports, 1 for 1 x USB 2.0 port
Serial	2 x RS-232, 1 x RS-232/ RS-485, 1 x RS-232 with 5V/ 12V power
SATA 3.0	2
SATA 2.0	1
TPM	1
LVDS	1
LVDS Inverter	1
Speaker	1
CPU Fan	1
System Fan	1
Front Audio	1
Front Panel	1
S/PDIF Out	1
GPIO	1 (8-bit)
Case Open	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) (TBD)
Power Type	ATX Mode (supports AT Mode)
Power Connector	1 x 24-pin ATX, 1 x 4-pin ATX 12V

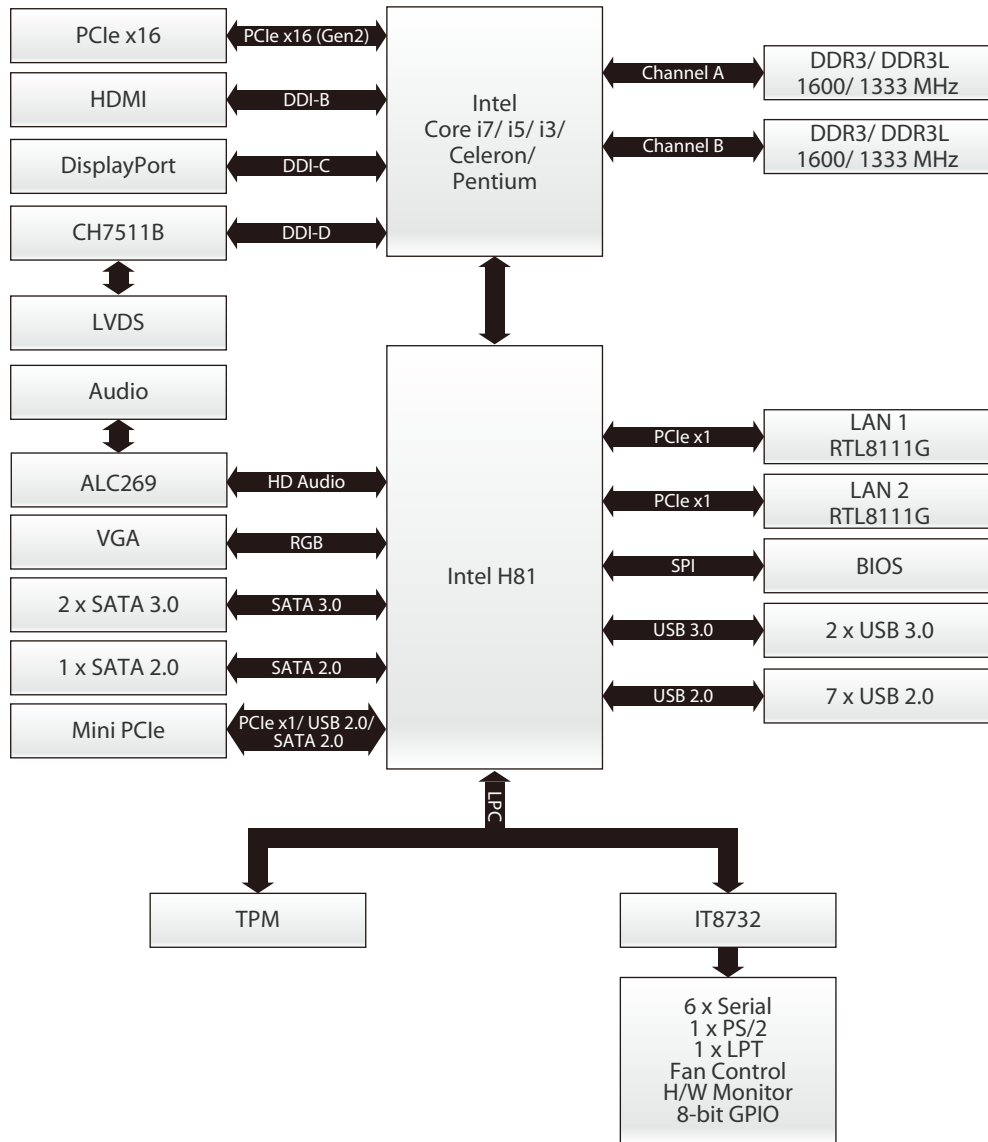
Environment

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	170mm x 170mm (6.69" x 6.69")
Weight	0.45 Kg

Block Diagram



Ordering Information

Part number	Chipset	VGA	LVDS	DVI	HDMI	DP	LAN	PClex16	PClex1	PCI	USB	Serial
TBD	H81	1	1	N/A	1	1	2	1	N/A	N/A	9	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
1700020942-01	Serial cable, 26cm