

Preliminary

SOM-P101



Spotlight Features

- BGA1296 for Intel® Apollo Lake SoC
- Intel® HD Graphics 505
- Supports Single Channel DDR3L 1333/1600/1867 MHz, 1 x SO-DIMM, up to 8GB system memory
- 1 x HDMI
- 1 x USB 3.0 compatible with USB 2.0 , 1 x SATA3
- 1 x MIOe , 1 x Mini PCIe and mSATA combo
- 1 x M.2(Key E)
- Gigabit LAN : 1 x Intel LAN
- 12V DC-in

Specifications

Processor System

Dimension	PICO-ITX (3.9-in x 2.8-in)
CPU	BGA1296 for Intel® Apollo Lake SoC
Core Number	(By CPU, Max 4)
Max Speed	(By CPU)
L2 Cache	(By CPU)
Chipset	(By CPU)
BIOS	UEFI

Expansion Slot

MIOe	HDMI or DP, 2 x USB3.0, 1 x USB2.0, 3 x PCIe x1, Line out, LPC bus, SMBus
Mini PCIe	1 (combo with mSATA, full size, Mini PCIe mode supports PCIe x1 and USB device)
M.2	1 x M.2 Slot (Key E), supports type 2230 for WiFi + BT Module
mSATA	1 (combo with Mini PCIe, full size, mSATA mode supports SATA and USB device)

Memory

Technology	DDR3L 1333/1600/1867 MHz
Max.	8GB
Socket	1 x SO-DIMM

Graphics

Controller	Intel® HD Graphics 505
VRAM	Shared Memory
VGA	No
LVDS	Supports max resolution up to 1920 x 1200@60Hz
eDP	No
HDMI	Supports max resolution up to 4096 x 2160@30Hz
DVI	No
DisplayPort	No
Multi Display	Yes (Dual Display ,LVDS + HDMI)

Ethernet

Interface	10/100/1000 Mbps
Controller	1 x Intel I210T
Connector	1 x RJ45

SATA

Max Data Transfer Rate	SATA3 (6.0Gb/s)
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Rear I/O

VGA	0
DVI	0
HDMI	1
DisplayPort	0
Ethernet	1
USB	1 x USB 3.0 compatible with USB 2.0
Audio	0
Serial	0
PS/2	0

Internal Connector

USB	2 x USB 2.0 (1 x 2.00 pitch header)
LVDS/inverter	1/1
eDP	0
VGA	0
Serial	2 x COM (COM1 supports RS-232/422/485, COM2 supports RS232 only)
SATA	1
mPCIe	1 (combo with mSATA)
Parallel	0
mSATA	1 (combo with mPCIe)
IrDA	0
GPIO	4GPI + 4GPO
SATA PWR Output Con	1
Speaker Header	1

Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 segments, 0,1,2...255sec/min

Power Requirements

Input PWR	12V DC-in
Power On	AT/ATX Supported AT : Directly PWR on as power input ready ATX : Press button to PWR on after power input ready

Environment

Operating Temperature	0°C – 60°C
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