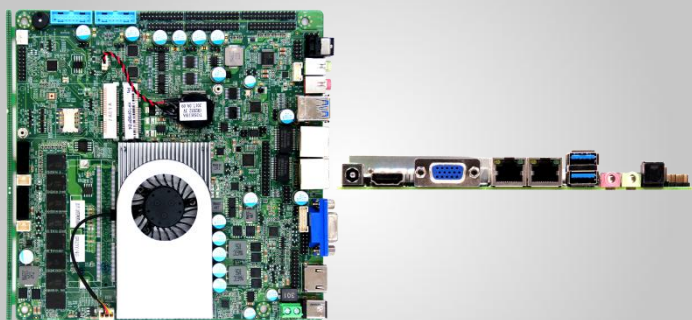


# TOP90F



- ◆ Onboard Intel® Core™ 5<sup>th</sup> Broadwell-U Single Chip CPU;
- ◆ Onboard 2GB/4GB DDR3L Memory;
- ◆ Provide 1\*VGA, 1\*HDMI1.4 (Support 4K display output) ;
- ◆ 1\*LVDS(Dual Channel 24bit) EDP1.3, 4Lanes (Optional)
- ◆ Onboard dual-channel Amplifier, 3W/4Ω each channel;
- ◆ Onboard optical digital audio output;
- ◆ Support touch screen (4wire 5wire 8wire) ;
- ◆ Support Power on rebooting , control by Jumps
- ◆ Single DC input 12V/5A power supply
- ◆ Size 170 x 170 mm;

## SPECIFICATION

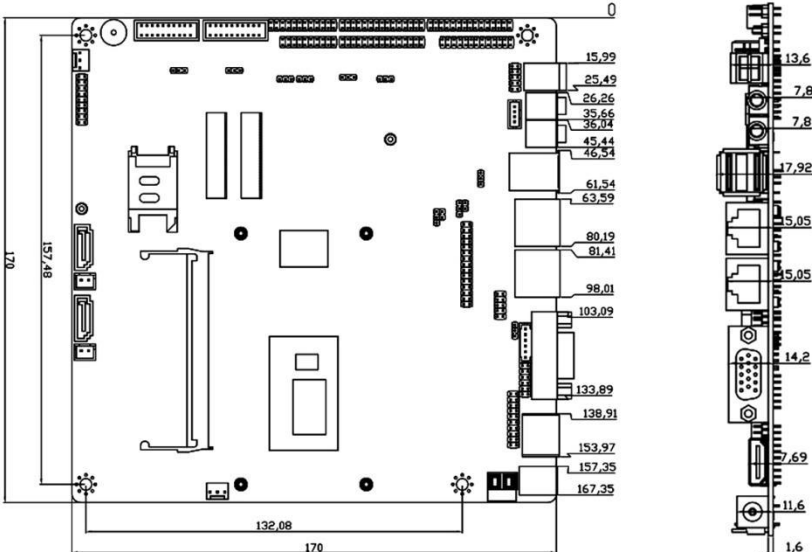
PROCESSOR	CPU	Intel® Core™ 5 <sup>th</sup> Broadwell-U Soc i3/i5/i7 CPU
	CPU Package	BGA
	Chipset	Intel® Broadwell-U series SOC
	BIOS	EFI BIOS
RAM	Technology Architecture	Single Channel DDR3L 1066/1333/1600MHz
	Capacity	Onboard 2GB\4GB DDR3L
	RAM Slot	1x RAM slot ,max. 8GB RAM
VIDEO	Graphic Controller	Intel HD Graphics 5500(I3-5010U' s Graphics) ; Graphic core depends on CPU
	Dual LVDS&EDP	Support dual channel 24bit output,max. Resolutions 1920 x 1200 , EDP max. Resolutions 3840*2160 (Optional)
	VGA	VGA support max. Resolutions :2048x1536
	HDMI	HDMI (HDMI1.4) max.resolution :3200*2000@60HZ, Support 4K output
	Dual display	LVDS + VGA, LVDS+HDMI, HDMI+VGA Synchronous or asynchronous display
	Three Display	Support LVDS+VGA+HDMI Three-screen synchronous or asynchronous display
I/O Panel	Ports	1*VGA, 1*HDMI, 1*LAN, 2*USB3.0, 2*USB2.0/1*MIC-OUT/LINE-OUT, 1*SPDIF
NETWORK	CONTROLLER	1*RTL8111E-V 1000M LAN, RJ45 port (Can choose 2*Lan card)
Audio	CONTROLLER	REALTEK HD ALC662 Audio (MIC+SPK)
Super I/O	CONTROLLER	NCT6106D
HARDWARE MONITORING	Watchdog timer	0-255sec, sample code optional
	Cooler	Alluminum Alloy heat sink with Fan (Support automatic and manual fan speed adjustment)
Input/output interface	USB	5*USB3.0 compatible USB2.0 / 1.1, 10*USB2.0(When touch screen can use, only have 9*USB2.0, max. Support +5V/1.5A
	Serial ports	4*RS-232, 2*RS422/485, RS485 Support automatic flow control (can choose as 6*RS232)
	PS/2	1*PS/2 Pin Headers
	Touch Panel	Support touch screen (4wire 5wire 8wire)
	GPIO	8bit, sample code, Free definition input or output , 3.3V@24mA
EXPANSION BUS	Mini-PCIe	1*Mini-PCIe slot, Support PCIe and USB device
STORAGE	SATA	2*Standard SATA3.0 , 6GB/s maximum speed
	Onboard SSD	Onboard SSD 16/32/64G(Optional)
	M-SATA	1*M-SATA Scoket, support SANDISK protocol , 6gb/s maximum
POWER SUPPLY	Power supply TYPE	Single DC input, DC12V, +/-5%
	Power supply consumption	35W
WORKING ENVIRONMENT	Working Temperature	-20℃ ~ +60℃
	Storage Temperature	-40℃ ~ +85℃
	Working Humidity	0% ~ 90%relative humidity, No condensation
	Storage Humidity	0% ~ 90%relative humidity, No condensation
MEASURE	Size	170 x 170 mm

	Weight	0. 5KG
CERTIFICATION		CE, ROHS, FCC

TOP90F

尺寸

单位：mm



ORDER INFORMATION

MODEL	SPECIFICATION	MARK
TOP90F-I3	Onboard Intel Core 5 <sup>th</sup> Broadwell-u Onboard 2G/4GDDR3L RAM (Can be expanded to 12G) Onboard USSD(16-512GB)	Supported 5th Intel® Core™ i3 E.g. I3-5005U, I3-5010U
TOP90F-I5	Onboard Intel Core 5 <sup>th</sup> Broadwell-u Onboard 2G/4GDDR3L RAM (Can be expanded to 12G) Onboard USSD(16-512GB)	Supported 5th Intel® Core™ i5 E.g. I5-5200U, I5-5300U
TOP90F-I7	Onboard Intel Core 5 <sup>th</sup> Broadwell-u Onboard 2G/4GDDR3L RAM (Can be expanded to 12G) Onboard USSD(16-512GB)	Supported 5th Intel® Core™ i7 E.G. I7-5500U, I7-5600U

Packing List

1*I/O Plate
1* driver cd
1*SATA cable
1*SATA-P power supply cable

Accessories

Model	SPECIFICATION	MARK
Internal USB Cable	Cable length 32CM, 2*USB To Pin Header	Pin Header 2.0mm/2.54 optional Cable Length Optional
Internal COM Cable	Cable length 32CM, COM (DB9) to Pin Header	
Internal VGA Cable	Cable length 36CM, VGA to Pin Header	
Internal LPT Cable	Cable length 36CM, LPT to Pin Header	
More accessories, please contact Salesman (SSD, DC power supply, 3G/4G/WIFI model, LCD display etc)		