

Embedded Single Board

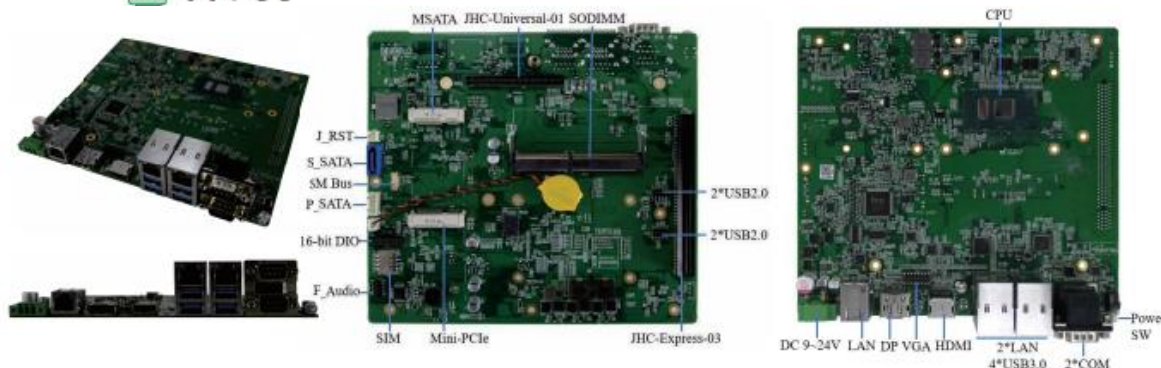
# IVTK-ESB-1905

Intel® Skylake-U/Kabylake-U CPU, 3\*LAN, 4\*USB3.0, 2\*4K display, 1\*PCIeX16 slot, iVpro, TPM 2.0, DC 12~24V, Easy to structured design.



## Key Features

- Intel® Skylake-U/Kabylake-U CPU
- 1\*PCIeX16 slot(PCIeX1 and PCIeX4 signal)
- 1\*DDR4 2133MHz SODIMM, Up to 16GB
- 2\*Intel® I211T and 1\*I219 PCIe Gig. LAN
- 1\*DP+ 1\*HDMI, 1\*VGA pin header
- 4\*USB3.0, 2/4\*USB2.0, 2\*COM, Optional 16bit DIO
- 1\*F-Mini PCIe with SIM slot, 1\*JHC-Universal-01
- 1\*mSATA, 1\*SATA bay
- Support Intel® iVpro and TPM2.0
- DC 12~24V Wide Power Input



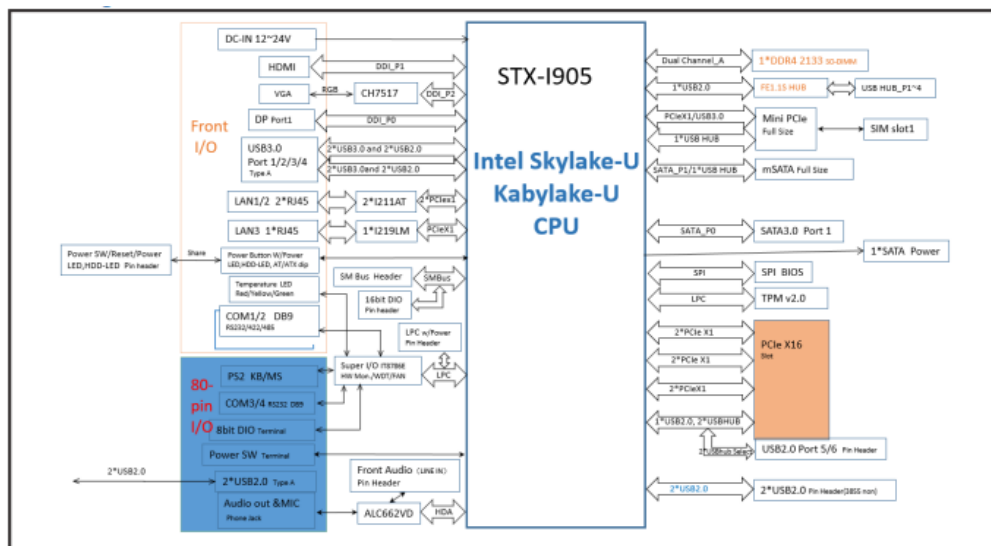
## SPEC

System	CPU	Gen. 6th Intel® Skylake-U Celeron 3855U; Core I3-6100U; I5-6200U; I7-6500U CPU Gen. 7th Intel® Kabylake-U Celeron 3865U; Core I3-7100U; I5-7200U; I7-7500U CPU
	System Memory	1*260-Pin SODIMM, 1*DDR4 2133MHz, up to 16GB
	Expansion	1*Full size Mini PCIe(PCIe+ USB) with SIM slot, support 4G LTE/Wifi/BT; 1*Full size mSATA(SATA3+ USB), 1*JHC-Universal-01 UIO interface(PS/2, DIO, COM, USB2.0 etc.)
	Graphics	Gen. 9th Intel® HD Graphics, DP max. res. 4096*2304@60Hz, HDMI max. res. 4096*2304@24Hz, support DirectX 12, OpenGL 4.4, MPEG2, H.265
	Audio	Realtek ALC662VD controller, Audio out and MIC
	LAN	2*Intel I211AT PCIe Gig. Ethernet; 1*Intel I219LM PCIe Gig. Ethernet support iVpro
	Keyboard & Mouse	USB Keyboard and mouse, Optional PS/2 signal in UIO interface
	Storage	1*SATA3(3855U SATA2), 6.0Gbps HDD/SSD; 1*Full size mSATA
	DIO	1*16-bit pin header, programmable input and output, Optional 8-bit in UIO interface
	Internal I/O	1*VGA, 16-bit DIO, 2/4*USB2.0, 1*SM bus, 1*LINE IN, 1*Reset
	Front I/O	3*RJ45 Gig-LAN 4*USB3.0 Type A 2*RS232/422/485 DB9 1*HDMI + 1*DP
	LED	1*Power LED, 1*HDD LED, 3*CPU term. LED (Red is warning, Yellow is high, Green is normal)
	Control SW	1*Power button, 1*AT/ATX Select dip
	Power Supply	DC 12~24V, 3pin ter., Consumption: TBD
Watchdog Timer	Watchdog timeout programmable via software 1 to 255 second	
OS Support	Windows 7, Windows 10, Linux Fedora Ubuntu	

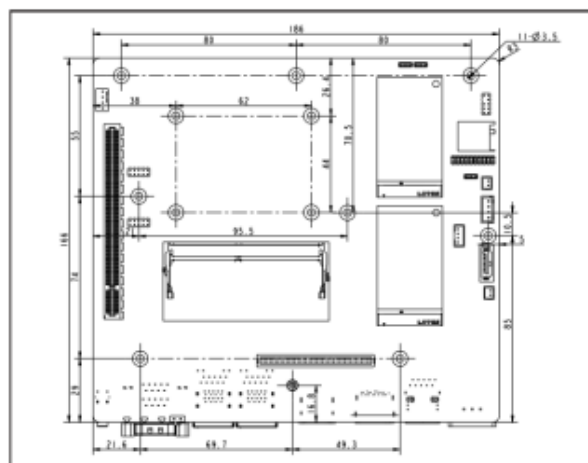
\* All specifications and photos are subject to change without notice.

<b>Mechanical &amp; Environmental</b>	Dimension	(W*H): 186*166mm
	Height	Top Side: 31.3mm; Bottom Side: 11.2mm; PCB: 1.6mm
	Operating Temperature	0°C~60°C
	Storage Temperature	-40°C~85°C
	Storage Humidity	10~90%@40°C, Non-condensing
	Certification/EMC	CE/FCC Class A

## Block Diagram



## Dimension



Unit:mm

## Odering Info

Model NO.	Introductions
IVTK-ESB-I905/S001	Embedded Single Board, Intel® I3-6100U/; CPU, 1*PCIeX16, 3*LAN, 4*USB3.0, 4*USB2.0, 2*COM, 16-bit DIO, 1*Mini PCIe, 1*HDMI,1*DP, 1*VGA, 1*LINE IN, 1*UIO, SM Bus, TPM2.0, 1*SATA bay, 1*mSATA, DC 12~24V
IVTK-ESB-I905/S002	Embedded Single Board, Intel® I5-6200U/I5-7200U CPU, 1*PCIeX16, 3*LAN, 4*USB3.0, 4*USB2.0, 2*COM, 16-bit DIO, 1*Mini PCIe, 1*HDMI,1*DP, 1*VGA, 1*LINE IN, 1*UIO, SM Bus, TPM2.0, 1*SATA bay, 1*mSATA, DC 12~24V
IVTK-ESB-I905/S003	Embedded Single Board, Intel® I7-6500U/I7-7500U CPU, 1*PCIeX16, 3*LAN, 4*USB3.0, 4*USB2.0, 2*COM, 16-bit DIO, 1*Mini PCIe, 1*HDMI,1*DP, 1*VGA, 1*LINE IN, 1*UIO, SM Bus, TPM2.0, 1*SATA bay, 1*mSATA, DC 12~24V
IVTK-ESB-I905/S004	Embedded Single Board, Intel® Celeron 3855U/3865U CPU, 1*PCIeX16, 3*LAN, 4*USB3.0, 2*USB2.0, 2*COM, 16-bit DIO, 1*Mini PCIe, 1*HDMI,1*DP, 1*VGA, 1*LINE IN, 1*UIO, SM Bus, TPM2.0, 1*SATA bay, 1*mSATA, DC 12~24V
IVTK-ESB-I905/T001~4	Embedded Single Board, Intel® Skylake-U/Kabylake-U CPU, 1*PCIeX16, 2*LAN, 4*USB3.0, 2/4*USB2.0, 2*COM, 1*Mini PCIe, 1*HDMI,1*DP, 1*VGA, 1*UIO, SM Bus, TPM2.0, 1*SATA bay, 1*mSATA, DC 12~24V

