

Embedded Single Board, OSBC Series

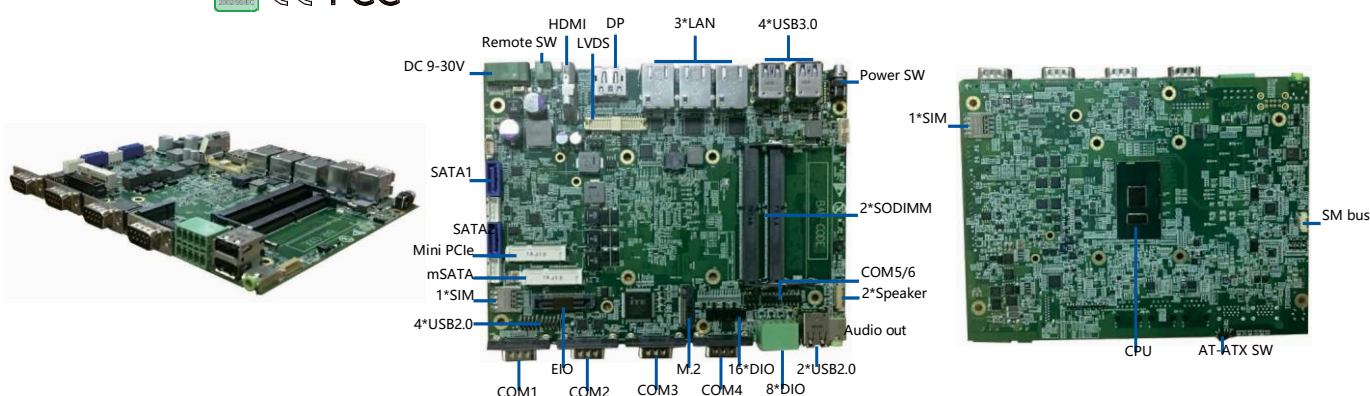
IVTK-ESB-1902

Intel® Skylake-U/Kabylake-U CPU, 3*LAN, 10*USB, 6*COM, Dual 4K Display, 24bit DIO, iVpro and TPM 2.0, DC-IN 9~30V, CPU Temp. show in LED. Easy to structured product desian.



Key Features

- Intel® Skylake-U/Kabylake-U CPU 2*DDR4
- 2133MHz SODIMM, up to 32GB
- 2*Intel® I210-AT and 1*219LM PCIe Gig LAN
- 1*HDMI,1*DP,1*48 bit LVDS/eDP, Realtek Audio
- 4*USB3.0, 4/6*USB2.0, 6*COM, 24bit DIO
- 1*M.2 2242 B-key, 1*F-Mini PCIe, EIO Express bus 2*SATA 3.0/6.0Gbps, 1*F-mSATA
- Support iVpro technology and TPM 2.0 DC
- 9~30V wide power input

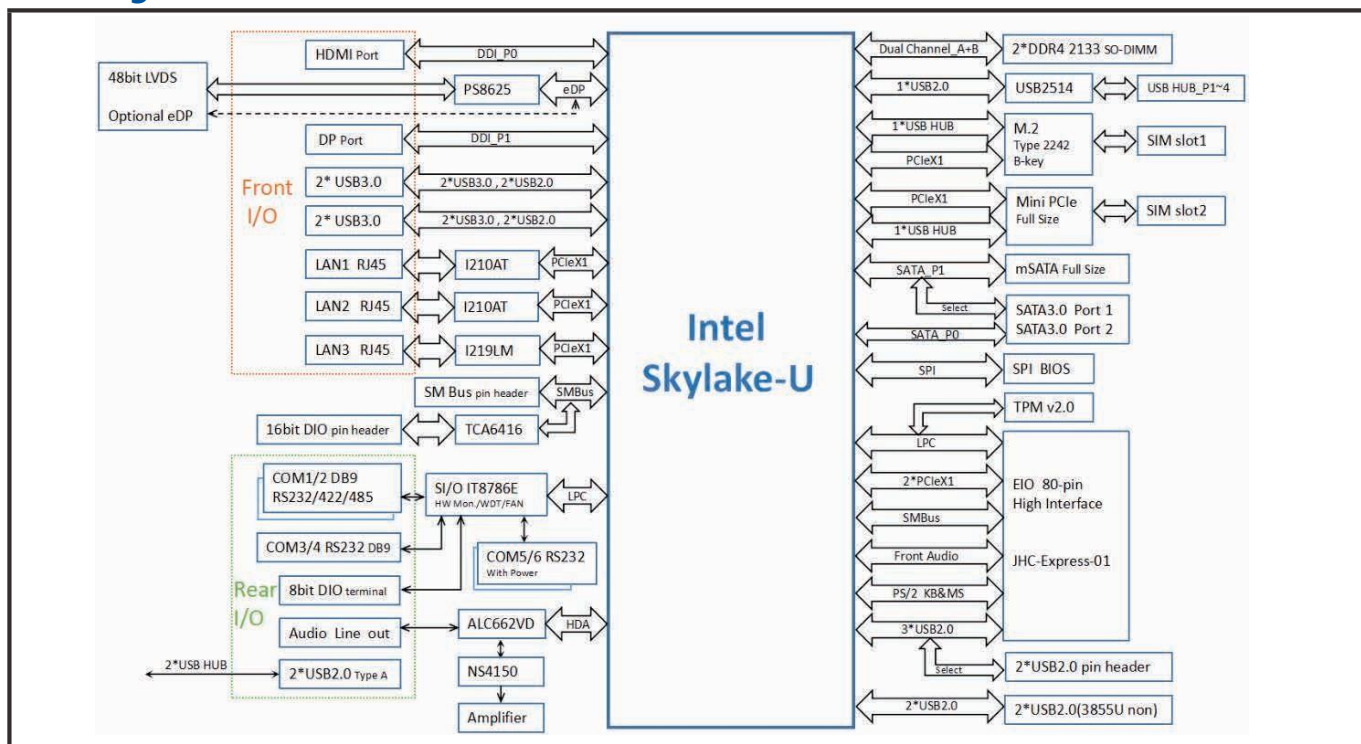


SPEC.

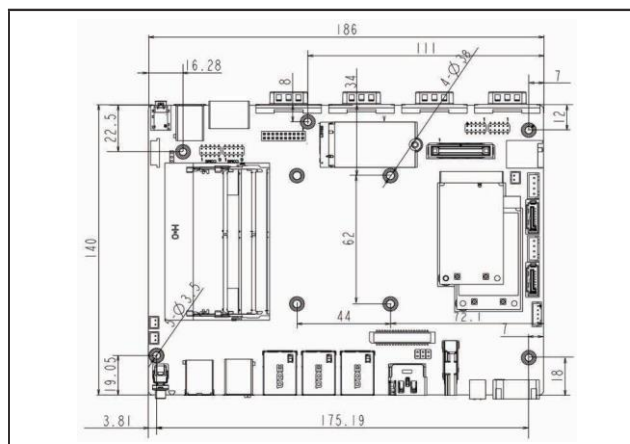
System	CPU	Gen. 6th Intel® Skylake-U Celeron 3855U; Core I3-6100U; I5-6200U; I7-6500U CPU Gen. 7th Intel® Kabylake-U Celeron 3865U; Core I3-7100U; I5-7200U; I7-7500U CPU
	System Memory	2*DDR4 2133MHz SODIMM, Dual channel Memory up to 32GB
	Expansion	1*Fullsize MiniPCIew/PCIe+USB and SIM slot, 1*M.2242 B-keyw/PCIe+USB and SIM slot, support 4G LTE/Wifi and BDS/GPS; 1*JHC-Express-01 EIO (PCIe, USB2.0, LPC, SMBus, PS2)
	Graphics	Gen.9th Intel HD Graphics. The Max resolution, DP: 4096*2160@60Hz; HDMI: 3940*2160@30Hz; 48bit LVDS: 1920*1200@60Hz. Support OpenGL 4.3, DirectX 11, OpenCL 2.0, MPGE2,H.265
	Audio	Realtek ALC662VD High Definition Audio, support 5.1 channel
	LAN	2*Intel® I210 AT PCIe Gig. Ethernet, Integrated 10/100/1000M; 1*Intel I219LM support iVpro
	Keyboard & Mouse	USB Keyboard and mouse, optional PS2 (In EIO)
	Storage	2*SATA3(3855U is 1*SATA) , support 6.0GbpsHDD/SSD; 1*Full size mSATA, support AHCI
	DIO	24bit(Optional 8bit) TTL signal, programmable input and output
	Internal I/O	48 bit LVDS opt. eDP; 4*USB2.0(3855U is 2*USB2.0); 2*RS232 pin header; 1*SM bus; 16 bit TTL DIO,; 2*SATA3 w/power; 2*speakers; 1*80-pin EIO Express-01
	Rear I/O	3*RJ45 LAN with LED(Front) 4*USB3.0 Type A(Front) and 2*USB2.0 Type A(Rear) 2*5pin Terminal 8 bit DIO (Rear) 2*RS232/422/485 COM DB9 male and 2*RS232 COM DB9 male(Rear) 1*HDMI and 1*DP(Front); 1*Line-out 3.5mm phone jack (Rear)
	LED	1*Power LED, 1*HDD LED, 3*CPU temperature LED(Red is warning; Yellow is high; Green is normal)
	Control SW	1*Power button(Front), 1*2pin terminal w/ power switch signal(Front), 1*AT/ATX Select dip(Front)
	Power Supply	DC 9~30V, 3pin terminal(Front), short circuit, overvoltage and overcurrent pro. Con. TDP: 12V/2.31A(I5-7200U 8GB)
Watchdog Timer	Watchdog timeout programmable via software from 1 to 255 seconds	
OS Support	Windows 7, Windows 8.1, Windows 10, Linux Fedora Ubuntu.	

Mechanical & Environmental	Dimension	(W*H):186*140mm
	Height	Top Side: 16.5mm; Bottom Side: 3.7mm; 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

Ordering Info.

Model NO.	Introduction
IVTK-ESB-I902/S001	Embedded Single Board, Intel® I3-6100U/I3-7100U CPU, 3*LAN, 4*USB3.0, 6*USB2.0,6*COM,24bit DIO, 1*HDMI, 1*DP, 1*LVDS, Audio, 1*SMBus, 1*Mini PCIe, 1 *M.2, 1*EIO, 1*mSATA, 2*SATA3, TPM 2.0, DC 9~30V
IVTK-ESB-I902/S002	Embedded Single Board, Intel® I5-6200U/I5-7200U CPU, 3*LAN, 4*USB3.0, 6*USB2.0,6*COM,24bit DIO, 1*HDMI, 1*DP, 1*LVDS, Audio, 1*SMBus, 1*Mini PCIe, 1 *M.2, 1*EIO, 1*mSATA, 2*SATA3, TPM 2.0, DC 9~30V
IVTK-ESB-I902/S003	Embedded Single Board, Intel® I7-6500U/I5-7500U CPU, 3*LAN, 4*USB3.0, 6*USB2.0,6*COM,24bit DIO, 1*HDMI, 1*DP, 1*LVDS, Audio, 1*SMBus, 1*Mini PCIe, 1 *M.2, 1*EIO, 1*mSATA, 2*SATA3, TPM 2.0, DC 9~30V
IVTK-ESB-I902/S004	Embedded Single Board, Intel® 3855U/3865U CPU, 3*LAN, 4*USB3.0, 4*USB2.0,6*COM,24bit DIO,1*HDMI,1*DP, 1*LVDS, Audio, 1*SMBus, 1*Mini PCIe, 1*M.2, 1*EIO, 1*mSATA, 1*SATA3, TPM 2.0, DC 9~30V
IVTK-ESB-I902/T001~4	Embedded Single Board, Intel® Skylake-U/Kabylake-U CPU, 2*LAN, 4*USB3.0, 4/6*USB2.0, 4*COM, 8bit DIO, 1*HDMI, 1*DP, Audio, 1*SMBus, 1*Mini PCIe, 1*M.2, 1*mSATA, 1*SATA3, DC 9~30V

