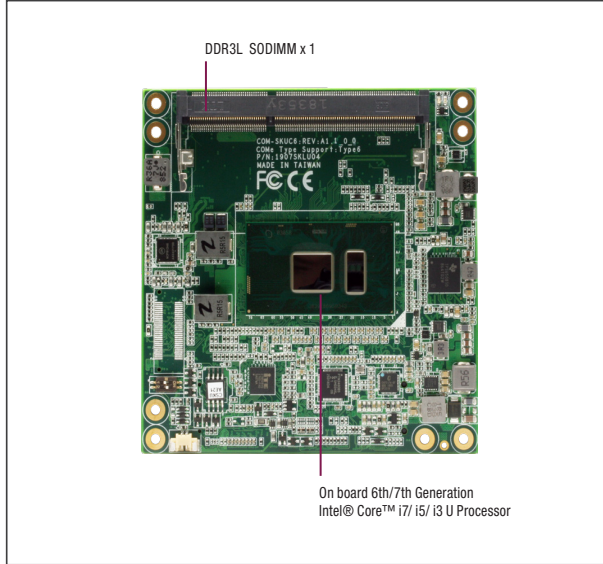


# COM-SKUC6/KBUC6

COM Express Type 6 Compact Size with 6th/7th Gen Intel® Core™ U Processors

COM Express CPU Modules



## Features

- 6th/7th Gen Intel® Core™ U Series Processor
- DDR3L SODIMM x 1, up to 8 GB, non-ECC only
- Intel i219LM Gigabit Ethernet x 1
- 18/24bit Single/Dual Channel LVDS LCD / eDP, VGA x 1 , DDI x1 (Up to 2 if no VGA required)
- High Definition Audio Interface
- SATA x 3 (3rd Port for i5/i7 sku only)
- USB 2.0 x 8, USB 3.2 Gen 1 x 4
- PCIe [x1] x 5 (Up to 8 lanes by custom BIOS)
- COM Express Type 6 Compact Size 95mm x 95mm



## Specifications

System	
Form Factor	COM Express Compact Size, Type 6
CPU	6th/7th Generation Intel® Core™ U-series Processor
CPU Frequency	Up to i7-7600U (2.8 GHz)
Chipset	6th/7th Generation Intel® Core™ U-series SoC
Memory Type	DDR3L, SO-DIMM x 1
Max. Memory Capacity	8 GB
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12 V and +5 VSB for ATX, +12V for AT
Power Supply Type	AT/ ATX
Power Consumption (Typical)	1.32A@12V, full load, i7-7600U
Dimension (L x W)	3.74" x 3.74" (95mm x 95mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) -40°F ~ 185°F (-40°C ~ 85°C) Option
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC Class A
Display	
Graphic Controller	Intel® HD Graphics 620/610/520/510
Video Output	3 Simultaneous Display : Single/Dual Channel LVDS (18/24bit) or eDP, VGA x 1, DDI x 1 (Up to 2x DDI shared with LVDS/eDP)
I/O	
Ethernet	Intel® i219LM GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8, USB 3.2 Gen 1 x 4
Serial Port	2-Wire UART (Tx/Rx) x 2
HDD Interface	SATA 3 x 2
Expansion Slot	PCIe[x1] x 8 (Up to 5 devices) LPC SMBus I2C
GPIO	8-bit
Onboard Storage	—
TPM	TPM 2.0

## Packing List

- COM-KBUC6 / COM-SKUC6 x 1

## Optional Accessories

- **ECB-920A-A11-0001**  
COMe Type 6/10, Carrier Board, ATX, 2.5GbE, 8USB, 2COM, 4SATA, PCIe, AT/ATX, Rev. A1.1
- **COM-FAN02**  
CPU Cooler, 95 x 95 x 26.5mm, Silver, use with HSP
- **COM-KBUC6-HSP01**  
Heatspreader, For COM-KBUC6/SKUC6, Onboard CPU

## HSIO Configurable Options

PICMG PCIe No.*	Config 1 (Default)	Config 2 (Custom BIOS need)
PCIe#0	PCIe[x1]	PCIe[x4]
PCIe#1	PCIe[x1]	—
PCIe#2	PCIe[x1]	—
PCIe#3	PCIe[x1]	—
PCIe#4	PCIe[x1]	PCIe[x1]
PCIe#5	x	PCIe[x1]
PCIe#6	x	PCIe[x1]
PCIe#7	x	PCIe[x1]
GbE***	GbE	GbE
SATA#0	SATA#0	SATA#0
SATA#1	SATA#1	SATA#1
SATA#2**	SATA#2	SATA#2
Remark	6 PCIe Devices 9 PCIe Lanes	6 PCIe Devices 12 PCIe Lanes

\*Only a maximum of 6 PCIe port or (Devices) or 12 PCIe Lanes can be enabled at any time

\*\*SATA#2 default disable, SATA#2 support by i7, i5 CPU only

\*\*\*5 PCIe port + GbE support as default

## CPU Support Chart

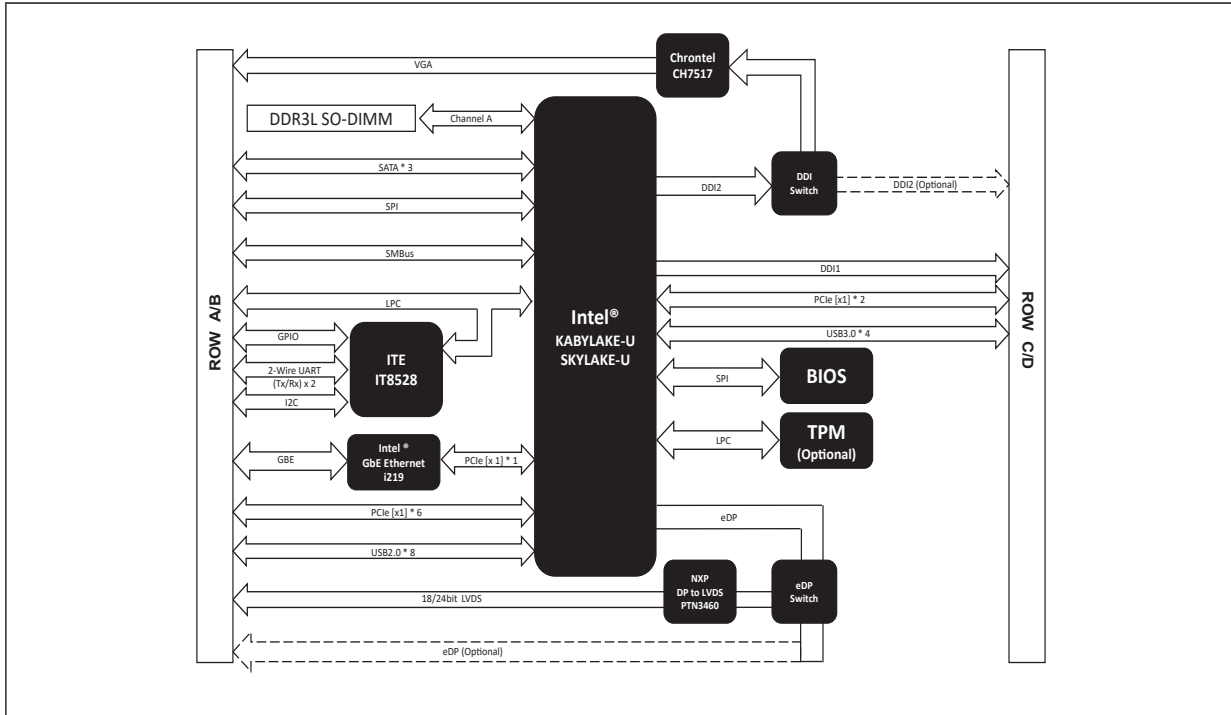
CPU	Core/Thread	Base Frequency/Turbo	TDP	Graphic	Graphic
i7-7600U	2C/4T	2.8 GHz / 3.9 GHz	15W	Intel® HD Graphics 620	GT2-620
i5-7300U	2C/4T	2.6 GHz / 3.5 GHz	15W	Intel® HD Graphics 620	GT2-620
i3-7100U	2C/4T	2.4 GHz	15W	Intel® HD Graphics 620	GT2-620
Celeron 3965U	2C/2T	2.2 GHz	15W	Intel® HD Graphics 610	GT2-610
i7-6600U	2C/4T	2.6 GHz / 3.4 GHz	15W	Intel® HD Graphics 520	GT2-520
i5-6300U	2C/4T	2.4 GHz / 3.0 GHz	15W	Intel® HD Graphics 520	GT2-520
i3-6100U	2C/4T	2.3 GHz	15W	Intel® HD Graphics 520	GT2-520
Celeron 3955U	2C/2T	2.0 GHz	15W	Intel® HD Graphics 510	GT2-510

# COM-SKUC6/KBUC6

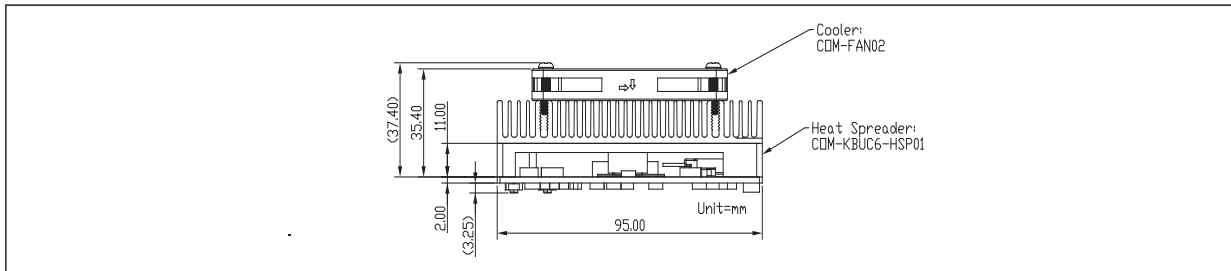
04

COM Express CPU Modules

**Block Diagram** Unit: mm



**Dimension** Unit: mm



## Ordering Information

PART NUMBER	COM EXPRESS TYPE	CPU	MEMORY	DISPLAY	LVDS	STORAGE	LAN	USB	UART	EXPANSION	POWER	TEMPERATURE	OTHERS
COM-KBUC6-A11-0001	Type 6 (COM.0 Rev. 2.1)	i7-7600U	DDR3L SODIMM x1, up to 8GB	LVDS/eDP, VGA x 1, DDI x1	18/24b 2CH LVDS	SATA3 x 2 (up to 3)	GbE x 1	USB 3.2 Gen 1 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x 5	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-KBUC6-A11-0003	Type 6 (COM.0 Rev. 2.1)	i3-7100U	DDR3L SODIMM x1, up to 8GB	LVDS/eDP, VGA x 1, DDI x1	18/24b 2CH LVDS	SATA3 x 2	GbE x 1	USB 3.2 Gen 1 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x 5	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-SKUC6-A11-0001	Type 6 (COM.0 Rev. 2.1)	i7-6600U	DDR3L SODIMM x1, up to 8GB	LVDS/eDP, VGA x 1, DDI x1	18/24b 2CH LVDS	SATA3 x 2 (up to 3)	GbE x 1	USB 3.2 Gen 1 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x 5	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-SKUC6-A11-0003	Type 6 (COM.0 Rev. 2.1)	i3-6100U	DDR3L SODIMM x1, up to 8GB	LVDS/eDP, VGA x 1, DDI x1	18/24b 2CH LVDS	SATA3 x 2	GbE x 1	USB 3.2 Gen 1 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x 5	+12V	0°C ~ 60°C	LPC, SMBus, I2C

Note: All specifications are subject to change without notice.

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660