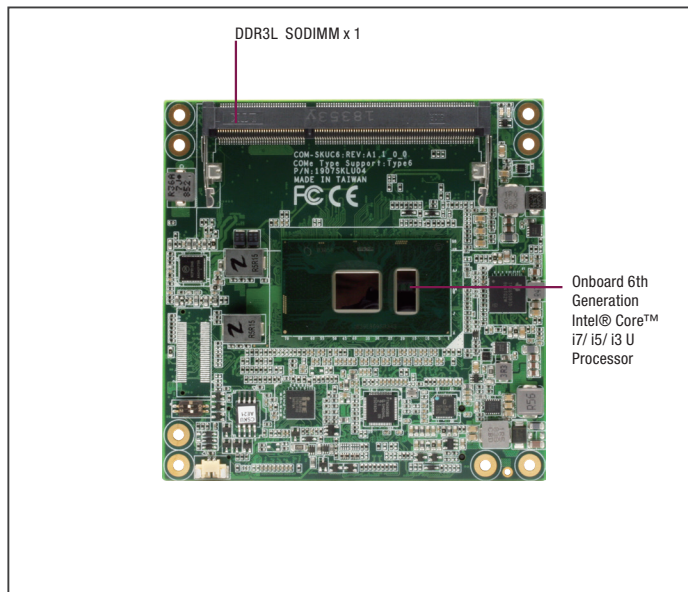


## COM Express Type 6 Compact Size with 6th/7th Gen Core U-series Processor



## Specifications

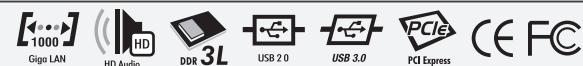
System	
Form Factor	COM Express Compact Size, Typ6
CPU	Onboard 6th/7th Generation Intel® Core™ U-series Processor, BGA type
CPU Frequency	Up to i7-7600U 2C/ 2.8 GHz
Chipset	Onboard 6th/7th Generation Intel® Core™ U-series Processor
Memory Type	DDR3L 1600, SO-DIMM x 1
Max. Memory Capacity	8 GB
BIOS	AMI BIOS, Legacy Free
Wake on LAN	Yes
Watchdog Timer	255 levels
Power Requirement	Standard: +12V
Power Supply Type	AT/ATX Selection
Power Consumption (Typical)	i7-7600U, 8GB DDR3L, full loading 1.32A@12V during 100% loading burn in test
Dimension (L x W)	3.75in x 3.75in (95mm x 95mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	10% ~80% relative humidity, non-condensing
MTBF (Hours)	182,306
Certification	CE/FCC Class A
Display	
VGA/LCD Controller	Onboard 6th Gen Intel® Core U-Series Processor, GT2-520/510 Onboard 7th Gen Intel® Core U-Series Processor, GT2-620/610
Video Output	VGA, LVDS/eDP, DDI x 1 (up to 2)
I/O	
Ethernet	Intel® PHY i219LM Giga LAN (support Intel® AMT 12.0) x 1
Audio	HD Audio
USB Port	USB 2.0 x 8, USB 3.0 x 4
Serial Port	2-Wire UART (Tx/Rx) x 2
HDD Interface	SATAII x 2 ; i5 & i7 up to 3
Onboard SSD	—
Expansion Slot	PCI-Express Lanes x 8, I2C, LPC, SMBus
GPIO	GPIO 8-bit
TPM	Optional

## Packing List

- M2.5 Screw x 4
- COM-SKUC6 or COM-KBUC6

## Features

- Intel® Core™ i3/i5/i7 U-series SoC
- DDR3L SODIMM x 1, up to 8 GB, non-ECC only
- Gigabit Ethernet x 1
- 18/24-bit Dual-Channel LVDS LCD / eDP, VGA , DDI up to 2, High Definition Audio Interface
- SATA x 3 (SATA Port 3 for i5 i7 sku only)
- USB 2.0 x 8, USB 3.0 x 4, GPIO 8-bit, PCI-Express Lanes x 8
- COM Express Type 6 Compact Size 95mm x 95mm



## Optional Accessories

- **ECB-920A-A10-0001**  
COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **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

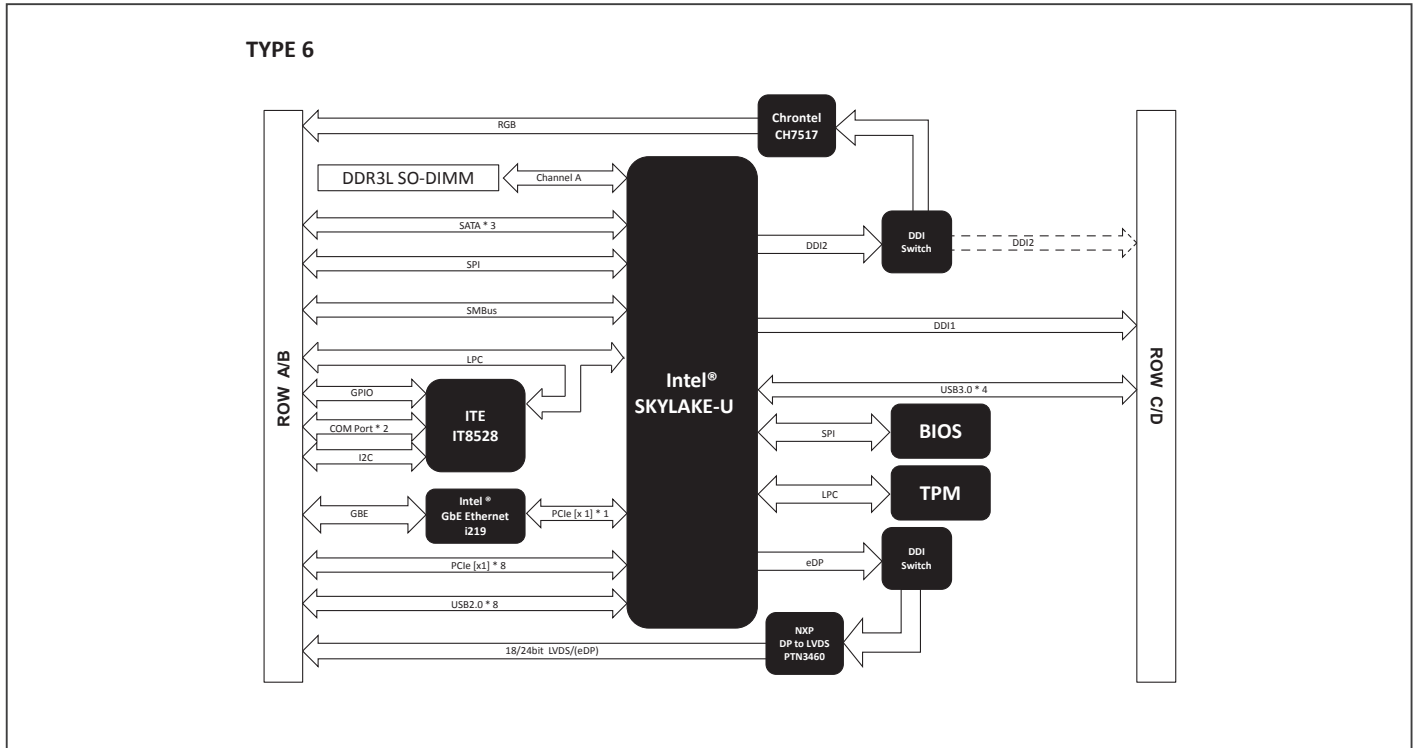
\*\*SATA#2 default disable, SATA#2 support by i7, i5 CPU only

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

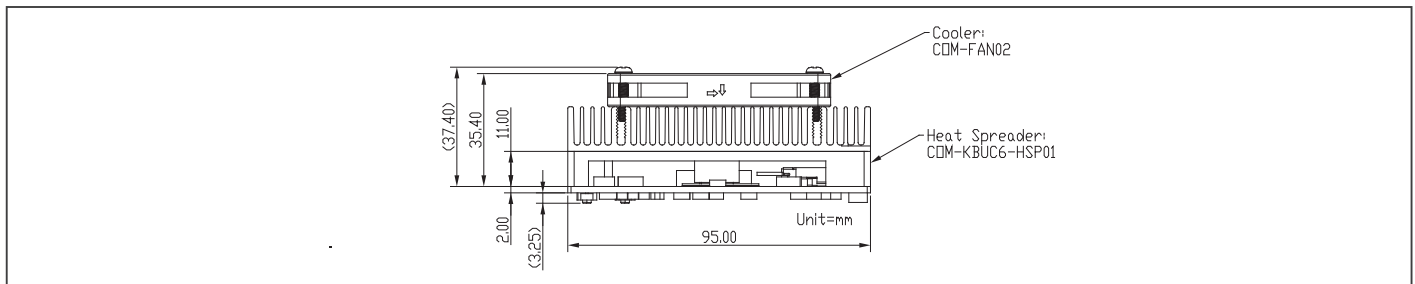
## CPU Supports Chart

CPU	Base Frequency/ Turbo Boost GHz	Core/ Thread	Last level Cache	TDP	Graphic
i7-7600U	2.8 GHz / 3.9 GHz	2/4	4M	15W	GT2-620
i5-7300U	2.6 GHz / 3.5 GHz	2/4	3M	15W	GT2-620
i3-7100U	2.4 GHz	2/4	3M	15W	GT2-620
C-3965U	2.2 GHz	2/2	2M	15W	GT2-610
i7-6600U	2.6 GHz / 3.4 GHz	2/4	4M	15W	GT2-520
i5-6300U	2.4 GHz / 3.0 GHz	2/4	3M	15W	GT2-520
i3-6100U	2.3 GHz	2/4	3M	15W	GT2-520
C-3955U	2.0 GHz	2/2	2M	15W	GT2-510

## Block Diagram Unit: mm



## Dimension Unit: mm



## Ordering Information

Part Number	Form Factor	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion	Power	Temperature	Other
COM-KBUC6-A11-0001	COM Express Type 6	i7-7600U, 2.8 GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 (up to 3)	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-KBUC6-A11-0002	COM Express Type 6	i5-7300U, 2.6 GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 (up to 3)	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-KBUC6-A11-0003	COM Express Type 6	i3-7100U, 2.4 GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 (up to 3)	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-KBUC6-A11-0004	COM Express Type 6	Celeron® 3965U, 2GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 only	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-SKUC6-A11-0001	COM Express Type 6	i7-6600U, 2.6 GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 (up to 3)	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-SKUC6-A11-0002	COM Express Type 6	i5-6300U, 2.4 GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 (up to 3)	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-SKUC6-A11-0003	COM Express Type 6	i3-6100U, 2.3 GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 (up to 3)	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"
COM-SKUC6-A11-0004	COM Express Type 6	Celeron® 3955U, 2GHz	DDR3L up to 8 GB, SO-DIMM x1	CRT, LVDS/eDP, DDI x1	24bit, 2CH	SATA x 2 only	GbE x1	USB 3.0 x 4, USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe Lanes x 8	+12V (ATX)	0°C ~ 60°C	"LPC, GPIO 8 bit, HDA, I2C, SMBus"