

GENESYS-KBU6

3.5" SubCompact Board System with 7th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC

SubCompact Board System



Features

- 7th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC
- DDR4 1866/2133, SODIMM x 1
- DVI x 1, DP x 1
- SATA 6.0 Gb/s x 1 & mSATA
- USB 2.0 x 2, USB 3.2 Gen 1 x 4
- COM x 2 (RS-232 x 1, RS-232/422/485 x 1)
- Mini-Card Slot x 2, TPM, SIM
- Wide DC Support 9~36V, +12V Only (Optional)
- Solder Design for System Assembly and Thermal



INTERNAL I/O	
USB	USB 2.0 x 2
SERIAL PORT	COM1(RS232) COM2,(RS232/422/485, support 5V/12V/RI)
VIDEO	—
SATA	SATA III x 1 +5V SATA Power Connector x 1
AUDIO	—
DIO/GPIO	—
SMBus/I2C	SMBus x1
Touch	—
FAN	Fanless
SIM	Micro SIM x 1 (Optional)
Front Panel	HDD LED, PWR LED, Power Button
Others	—
EXPANSION	
Mini PCI-E/mSATA	Full-size mPCIe x 1 Half size mSATA/mPCIe x 1(Default mSATA, select by BIOS)
M.2	—
Others	—
ENVIRONMENT & CERTIFICATION	
OPERATING TEMP	32°F ~ 122°F (0°C ~ 50°C)
STORAGE TEMP	-40°F ~ 185°F (-40°C ~ 85°C)
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing
MTBF (HOURS)	123,000
EMC	CE/FCC Class A

Specifications

SYSTEM	
FORM FACTOR	3.5" SubCompact Board System
CPU	Intel® 7th Generation Core™ /Celeron Processor: Intel® i7-7600U (2C/4T, 2.80GHz, up to 3.90GHz, TDP-up 25W) Intel® i5-7300U (2C/4T, 2.60GHz, up to 3.50GHz, TDP-up 25W) Intel® i3-7100U (2C/4T, 2.40GHz, TDP-up 25W) Intel® Celeron 3965U (2C/2T, 2.20GHz, TDP-up 15W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR4 up to 2133MHz, SODIMM x 1, up to 16GB, Non-ECC
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	6.69" x 5.39" x 1.91" (170mm x 137mm x 48.5mm)
OS Support	Windows 10 (64bit) Linux Ubuntu 21.04.0/Kernel 5.10
POWER	
POWER REQUIREMENT	+9~36V (Optional: +12V)
POWER SUPPLY TYPE	ATX
CONNECTOR	DC Jack Connector
POWER CONSUMPTION	Intel® i7-7600U, DDR4 2400MHz 16GB, 1.85A@ +12V(Typical)
DISPLAY	
CONTROLLER	Intel® HD Graphics 610/620
LVDS/eDP	—
Display Interface	DP1.2 x 1 + DVI-D x 1
Multiple Display	Up to 2 Simultaneous Displays
AUDIO	
CODEC	—
AUDIO INTERFACE	—
Speaker	—
EXTERNAL I/O	
ETHERNET	Intel® i210/i211, 10/100/1000Base-TX, RJ-45 x 2
USB	USB 3.2 Gen 1 x 4
SERIAL PORT	—
VIDEO	DP1.2 x 1 DVI-D x 1

Packing List

- GENESYS-KBU6

Optional Accessories

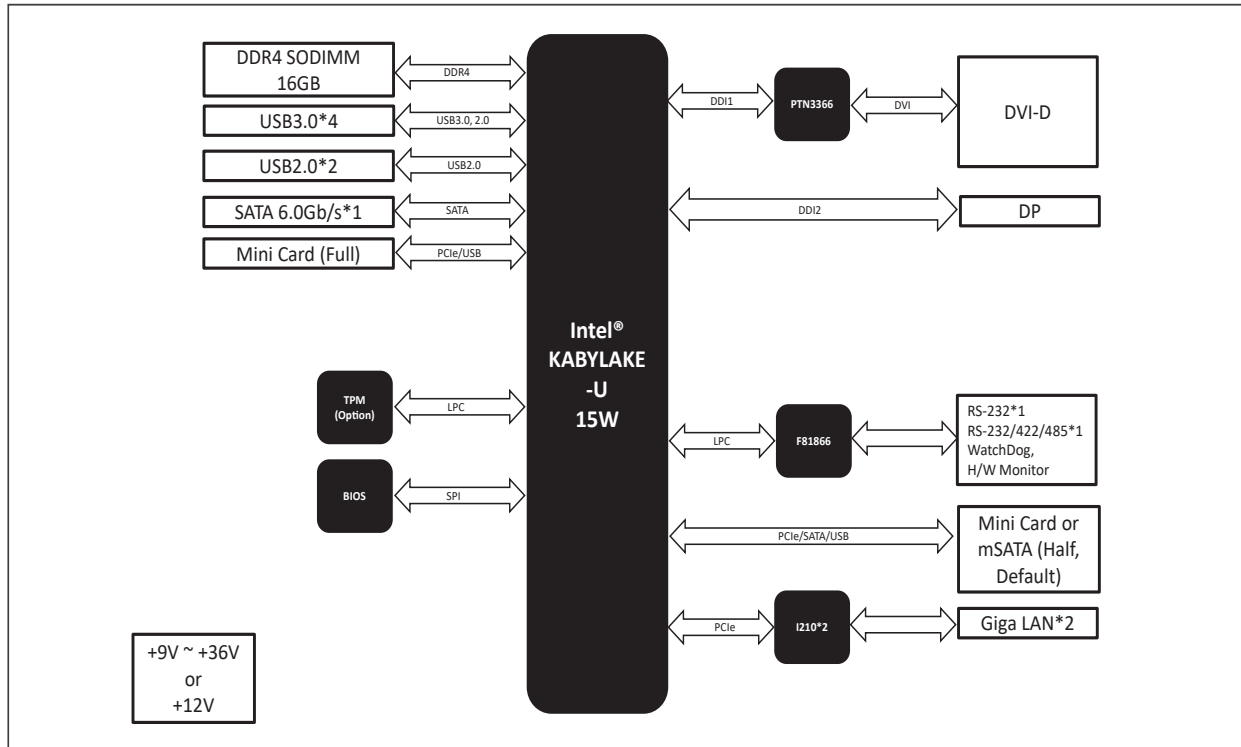
Part Number	Description	QTY
968D4008GB	(TF)8GB, DDR4 2133MHz, SODIMM 260Pin 512M*8.0~85C Non ECC, Transcend.TS9AAESD00AA	1
968D4004G0	(TF)4GB, DDR4 2133, SODIMM 260Pin, 512M*8, Samsung K4A4G085WX.0~85 deg C, Transcend.TS8AAESD00AA	1
968C032G3P	(TF)Half size mSATA, 32GB MLC, 3ME3 15nm, 0~70 deg C, InnoDisk, DEMSM-32GD09BC1DC-26	1
968C064G3D	(TF)Half size mSATA, 64GB MLC, 3ME3, 15nm, 0~70 deg C, InnoDisk, DEMSM-64GD09BC1DC-26	1
968C128G1Q	(TF)Half size mSATA, 128GB, MLC, -40 ~ 85 C, Transcend.TS128GMSM360I	1
968C256G22	2.5" SATA3 SSD, 256GB, MLC, -10~80C, Transcend.TS256GSSD420K-AA	1
968C512G06	2.5" SATA3 SSD, 512GB, MLC, -10~80C, Transcend.TS512GSSD420K-AA	1
125530060Z	Power Adapter, 12V, 5A, 60W, FSP060-DHAN3	1
1255300960	Power Adapter, 12V, 5A, 96W, FSP096-DHAN3	1
1702031802	Power Cord (US)	1
1702031803	Power Cord (Europe)	1
170203180E	Power Cord (Japan)	1
GENESYS-KBU6-HDD1	HDD Kit. For GENESYS-KBU6	1
GENESYS-KBU6-WMT1	Wall Mount Kit. For GENESYS-KBU6	1
GENESYS-KBU6-VESA1	VESA Mount Kit. For GENESYS-KBU6	1

GENESYS-KBU6

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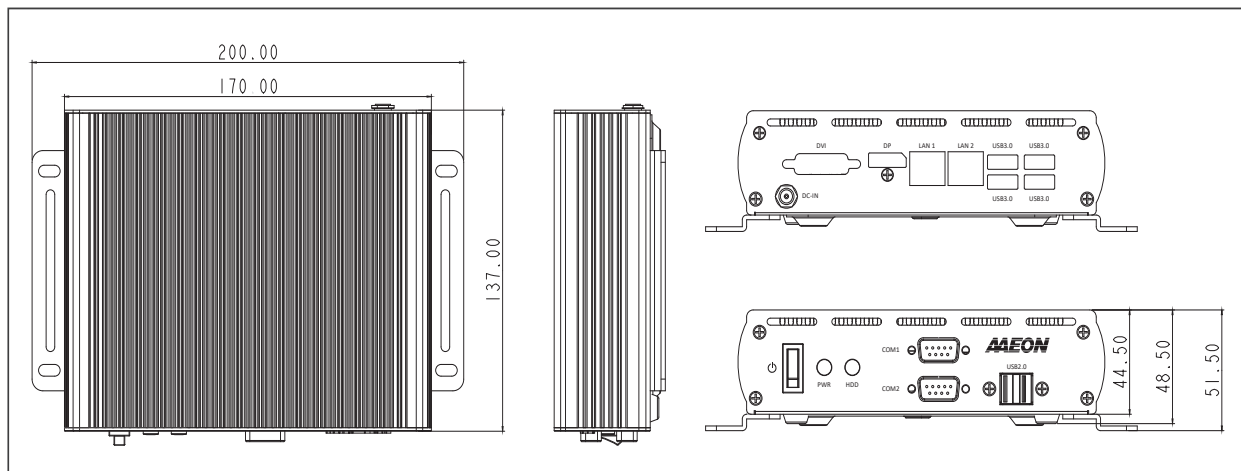
SubCompact Board System

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Fan/Fanless	Display	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
GENESYS-KBU6-A10-0001	i7-7600U	Fanless	DP x 1 DVI x 1	SATA x 1 mSATA x 1 (Half-size)	GbE x 2	USB 3.2 Gen 1 x 4, USB 2.0 x 2	1	1	MiniCard x 1 (Full)	9~36V	0°C ~ 50°C	—
GENESYS-KBU6-A10-0002	i5-7300U	Fanless	DP x 1 DVI x 1	SATA x 1 mSATA x 1 (Half-size)	GbE x 2	USB 3.2 Gen 1 x 4, USB 2.0 x 2	1	1	MiniCard x 1 (Full)	9~36V	0°C ~ 50°C	—
GENESYS-KBU6-A10-0003	i3-7100U	Fanless	DP x 1 DVI x 1	SATA x 1 mSATA x 1 (Half-size)	GbE x 2	USB 3.2 Gen 1 x 4, USB 2.0 x 2	1	1	MiniCard x 1 (Full)	9~36V	0°C ~ 50°C	—

Note: All specifications are subject to change without notice.

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