

GENESYS-KBU6

GENE System with 7th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC



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 PCIe/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
Dimensions	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

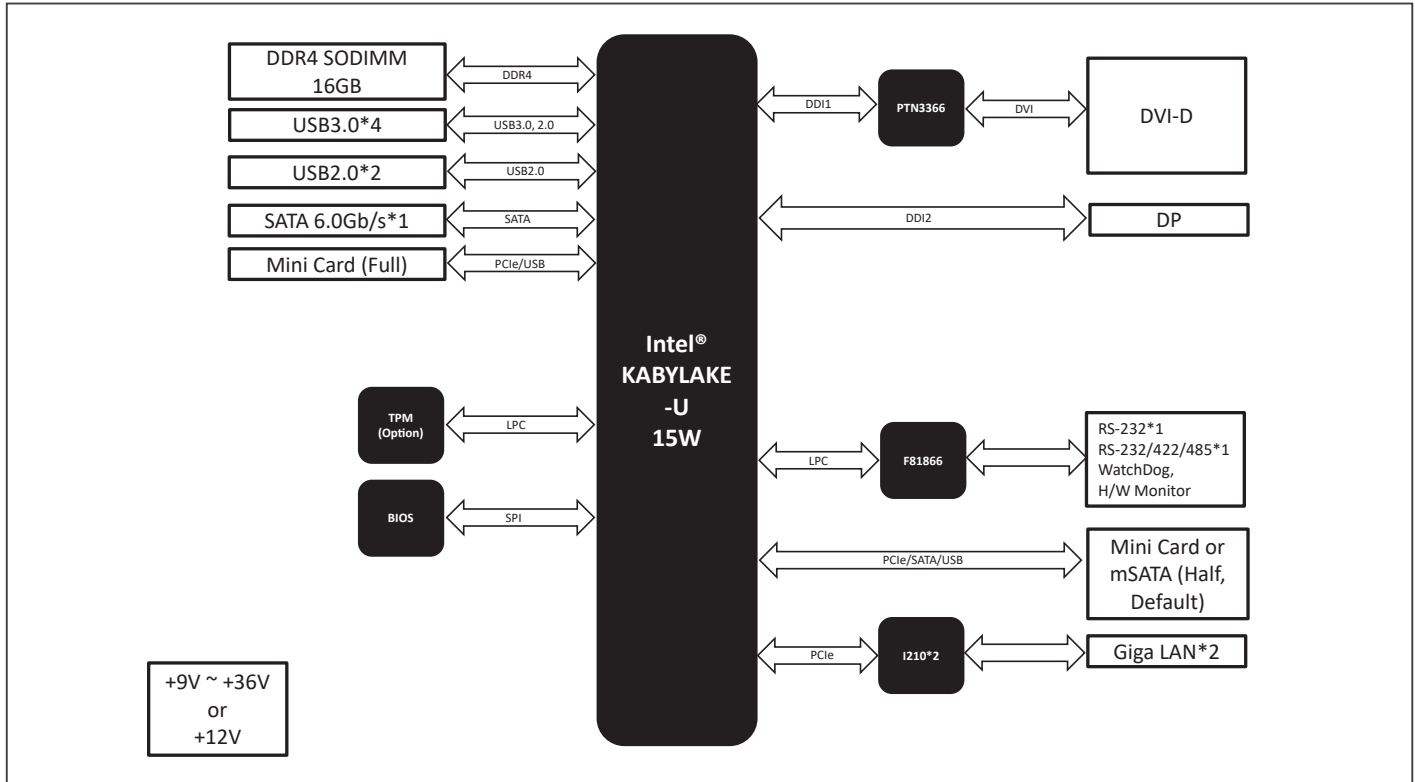
Part Number	Description	QTY
GENESYS-KBU6	GENESYS-KBU6 GENE System	1

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
GENESYSM-ALL-WMT1	Wall Mount Kit. For GENESYS-KBU6	1
GENESYSM-ALL-VESA1	VESA Mount Kit. For GENESYS-KBU6	1

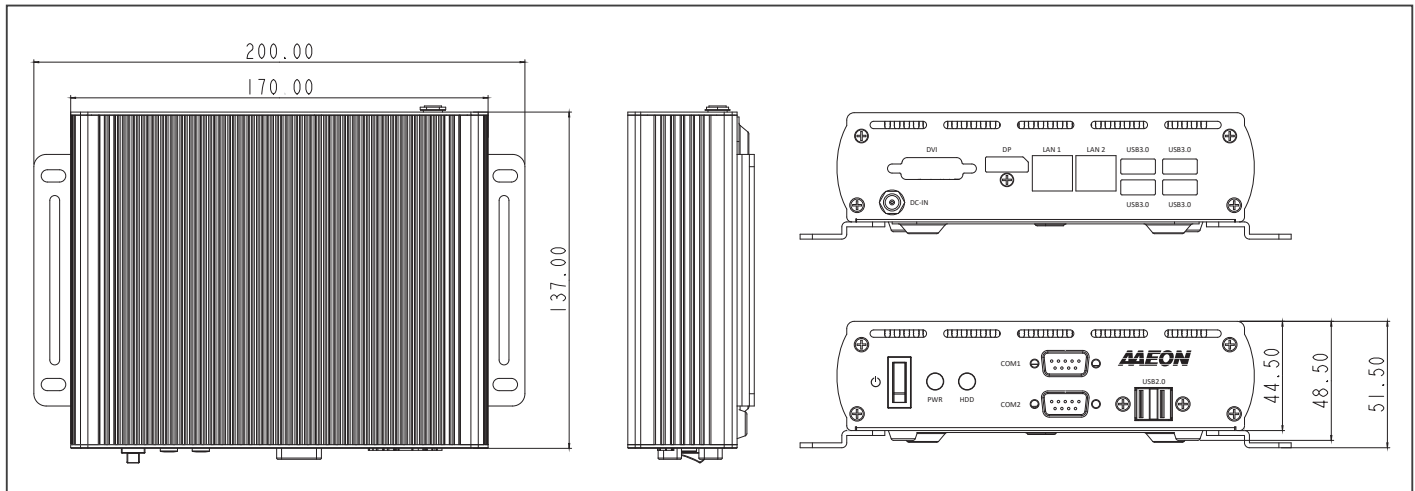
Note: All specifications are subject to change without notice.

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	—