

GENESYS-BT05 **PRELIMINARY**

3.5" SubCompact Board System with Intel® Atom™ and Celeron® Processor SoC

SubCompact Board System



Features

- Onboard Intel® Atom™ and Celeron® Processor SoC
- DDR3L up to 1333 MHz SODIMM x 1, Up to 8 GB
- Gigabit Ethernet x 2, RJ-45 x 2
- CRT, HDMI
- Mini-Card x 2, SATA III x 1, CFast™ x 1 (Optional)
- USB 3.2 Gen 1 x 1, USB2.0 x 3, COM x 3
- Onboard Trusted Platform Module (Optional)
- DC 12V, ATX Mode



SERIAL PORT	COM1 (RS232)
VIDEO	VGA x 1 HDMI 1.4a x 1
INTERNAL I/O	
USB	USB2.0 x 2
SERIAL PORT	COM2, COM3 (RS232/422/485, supports 5V/12V/RI)(Optional)
VIDEO	—
SATA	SATA III x 1 +5V SATA Power Connector x 1
AUDIO	—
DIO/GPIO	—
SMBus/I2C	I2C/SMBus x1 (Optional)
Touch	—
FAN	Heatsink x 1 (Optional: DC Fan)
SIM	SIM X1
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
EXPANSION	
Mini PCI-E/mSATA	Full-Size mPCIe x 1 Half-Size mSATA/ mPCIe x 1
M.2	—
Others	CFast™(Optional)
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)	344,859
EMC	CE/FCC Class A

Specifications

SYSTEM	
FORM FACTOR	3.5" SubCompact Board System
CPU	Intel® Atom™/ Celeron® Processor: Celeron® J1900 (4C/4T, 2.00GHz, up to 2.42GHz, TDP 10W) Celeron® N2930 (4C/4T, 1.83GHz, up to 2.16GHz, TDP 7.5W) Celeron® N2807 (2C/2T, 1.58GHz, up to 2.16GHz, TDP 4.3W) Atom™ E3845 (4C/4T, 1.91 GHz, TDP 10W) Atom™ E3825 (2C/2T, 1.33 GHz, TDP 6W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR3L up to 1333MHz, SODIMM x 1, up to 8GB, Non-ECC
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM 1.2(Optional)
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	7.00" x 5.28" x 1.69" (178mm x 134.1mm x 43mm)
OS Support	Windows 7/10 (64bit) Linux Ubuntu 20.04.3/Kernel 5.11
POWER	
POWER REQUIREMENT	+12V Only
POWER SUPPLY TYPE	ATX
CONNECTOR	DC Jack Connector
POWER CONSUMPTION	Intel® J1900, DDR3L 1600MHz 8GB, 1.73A @ +12V(TYPICAL) Intel® J1900, DDR3L 1600MHz 8GB, 1.88A @ +12V(MAX)
DISPLAY	
CONTROLLER	Intel® HD Graphics for Intel Atom® Processor Z3700 Series
LVDS/eDP	—
Display Interface	HDMI 1.4a x 1 VGA x 1
Multiple Display	Up to 2 Simultaneous Displays
AUDIO	
CODEC	—
AUDIO INTERFACE	—
Speaker	—
EXTERNAL I/O	
ETHERNET	Intel® i210, 10/100/1000Base, RJ-45 x 2
USB	USB 3.2 Gen 1 x 1 USB 2.0 x 1

Packing List

Description	QTY
GENESYS-BT05	1

Optional Accessories

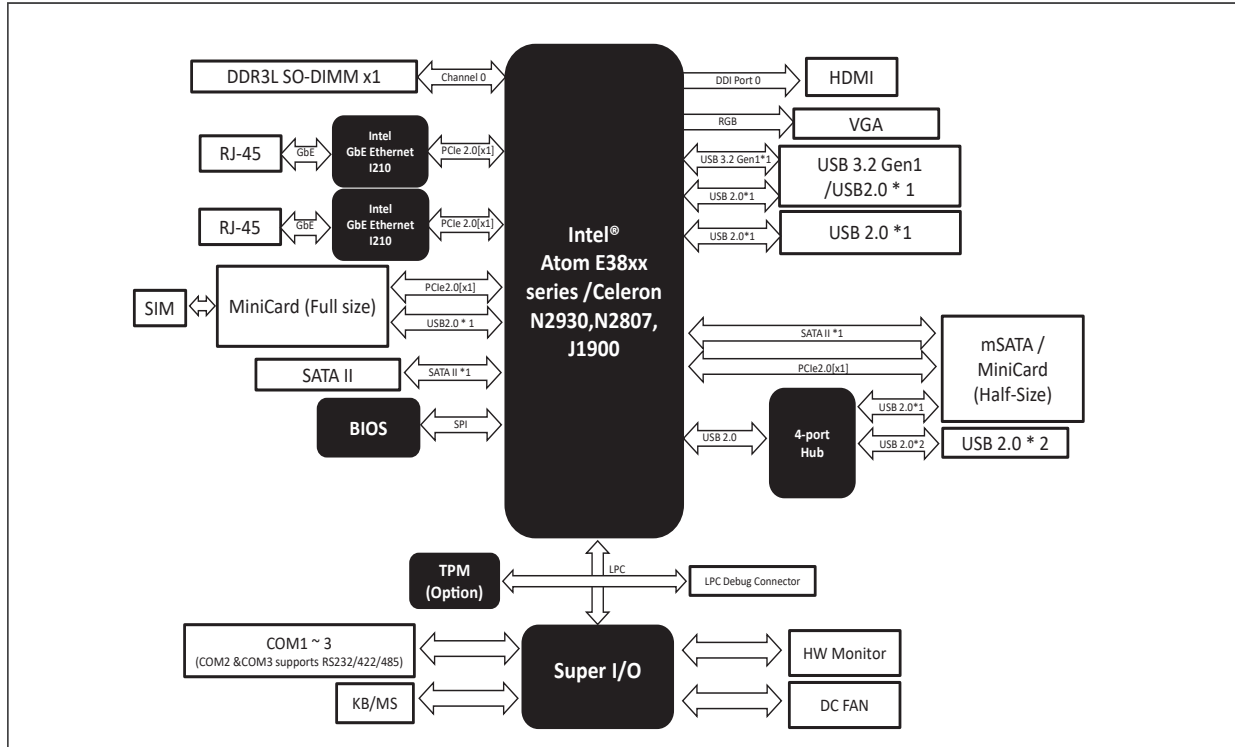
Part Number	Description	QTY
125530060Z	Power Adapter. 12V.5A.60W. FSP060-DHAN3	1
1255300960	Power Adapter. 12V.5A.96W. FSP096-DHAN3	1
1702031802	Power Cord (US)	1
1702031803	Power Cord (Europe)	1
170203180E	Power Cord (Japan)	1
GENESYS-BT05-WMT1	Wall Mount Kit. For GENESYS-BT05	1
GENESYS-BT05-VESA1	VESA Mount Kit. For GENESYS-BT05	1
GENESYS-BT05-HDD1	HDD Kit. For GENESYS-BT05	1
GENESYS-BT05-COM1	COM Extension Kit. w/ 1 Cable. For GENESYS-BT05	1

GENESYS-BT05

02

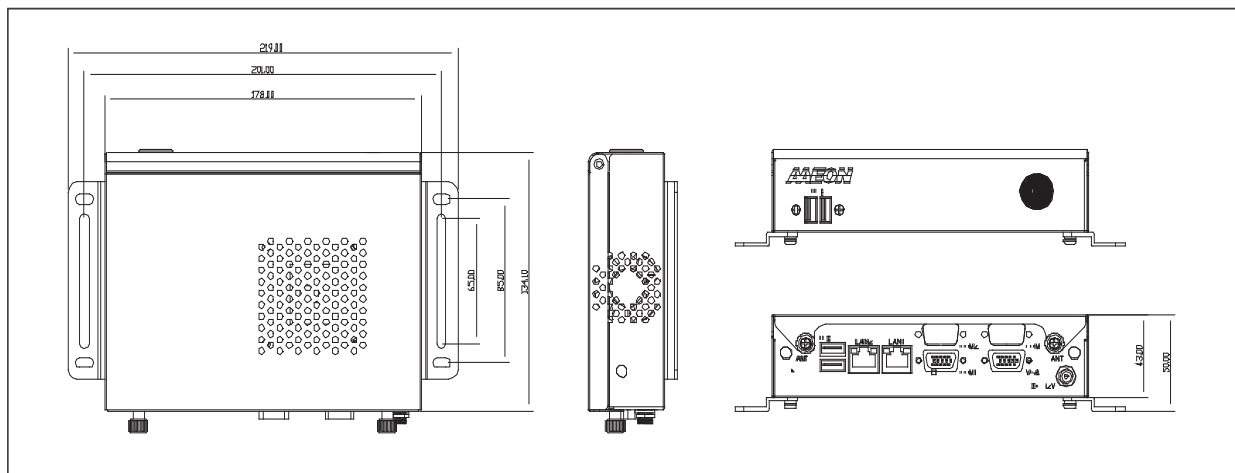
SubCompact Board System

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Display	LAN	USB	RS-232	Storage	Expansion Slot	Power	Operating Temp	Others
GENESYS-BT05-A12-0002	N2807	VGA	Gbe x 2	USB3.2 x 1 USB2.0 x 1	1	SATA x 1 mSATA x 1 (Half Size)	Mini Card x 1 (Full-Size)	+12V, ATX	0°C ~ 50°C	—
GENESYS-BT05-A12-0004	J1900	VGA	Gbe x 2	USB3.2 x 1 USB2.0 x 1	1	SATA x 1 mSATA x 1 (Half Size)	Mini Card x 1 (Full-Size)	+12V, ATX	0°C ~ 50°C	—

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