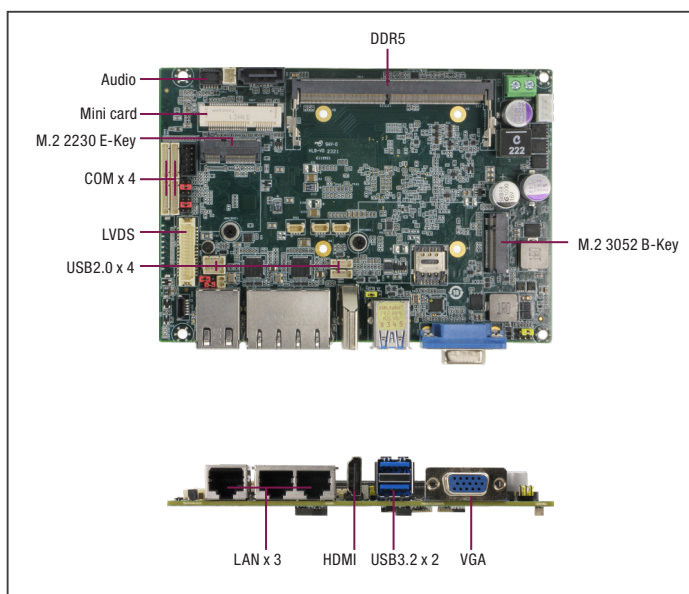


GENE-ASL6

3.5" SubCompact Board with Intel Atom® Processors x7000RE Series Processors



Specifications

System	
Form Factor	3.5" SubCompact Board
CPU	Intel Atom® Processors x7000RE Series Processors: x7213RE (2C, 2.0 GHz, 9W) x7433RE (4C, 1.5 GHz, 9W) x7835RE (8C, 1.3 GHz, 12W)
Chipset	Integrated with Intel® SoC
Memory Type	DDR5 4800, Single Channel SODIMM x 1, Max.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	5.75" x 4" (146mm x 101.7mm), 0.94 lbs (0.43 kg)
OS Support	Windows 10 (64bit) Ubuntu 22.04 / Kernel 5.15.0-25-generic
Power	
Power Requirement	+12V (Optional: +9V~36V)
Power Supply Type	AT/ATX
Connector	Phoenix 2-pin Connector
Power Consumption	Intel® Atom x7835RE, DDR5 16GB x1, 3.20A@ +12V (TYPICAL) Intel® Atom x7835RE, DDR5 16GB x1, 4.80A@ +12V (MAX)
Display	
Controller	Intel® UHD Graphics
LVDS/eDP	LVDS x 1, Dual Channel 18/24bit, up to 1920 x1080
Display Interface	HDMI 1.4 x 1, up to 3840 x2160 @30Hz VGA x 1, up to 1920 x1080
Multiple Display	Up to 3 Simultaneous Displays
Audio	
Codec	Realtek ALC897
Audio Interface	Line-In / Line-Out / Mic (Audio function not available for WITAS SKU)
Speaker	—
External I/O	
Ethernet	Intel® I226 2.5G, RJ-45 x 3
USB	USB3.2 Gen 2 x 2
Serial Port	—
Video	HDMI 1.4 x 1, VGA x 1
Internal I/O	
USB	USB 2.0 x 4
Serial Port	COM1 , COM2 (RS232/422/485, supports 5V/12V/RI) COM3 , COM4 (RS232)
Video	LVDS x 1 Inverter x 1 (12V/2A)

Features

- Intel Atom® Processors x7000RE Series Processors
- DDR5 4800 MHz, SODIMM x 1, Up to 16GB
- HDMI 1.4, VGA, LVDS x 1
- Intel 2.5GbE x 3, SATA 6.0 Gb/s x 1, GPIO x 8bit
- USB3.2 Gen2 x 2, USB2.0 x 4, RS-232/422/485 x 2, RS-232 x 2
- Mini PCIe card x 1, M.2 E-Key 2230 x 1, M.2 B-Key 3052 x 1



SATA	SATA 6.0 Gb/s x 1 +5V SATA Power Connector x 1
Audio	Audio Header x 1 (Optional, Audio function not available for WITAS SKU)
DIO/GPIO	GPIO 8-bit
SMBus/I2C	SMBus / I2C x 1 (Default: SMBus)
Touch	—
Fan	4pins Smart Fan x 1
Sim	Nano SIM x 1
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
Expansion	
Mini PCIe/mSATA	Full-size mSATA / mPCIe x 1 (Default: mSATA, select by BIOS)
M.2	M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB2.0) M.2 3052 B-Key x 1 (USB3.2 Gen2 + USB2.0)
Others	—
Environment & Certification	
Operating Temp.	WITAS 2: -40°F ~ 185°F (-40°C ~ 85°C)
Storage Temp.	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	333,008
EMC	CE/FCC Class A

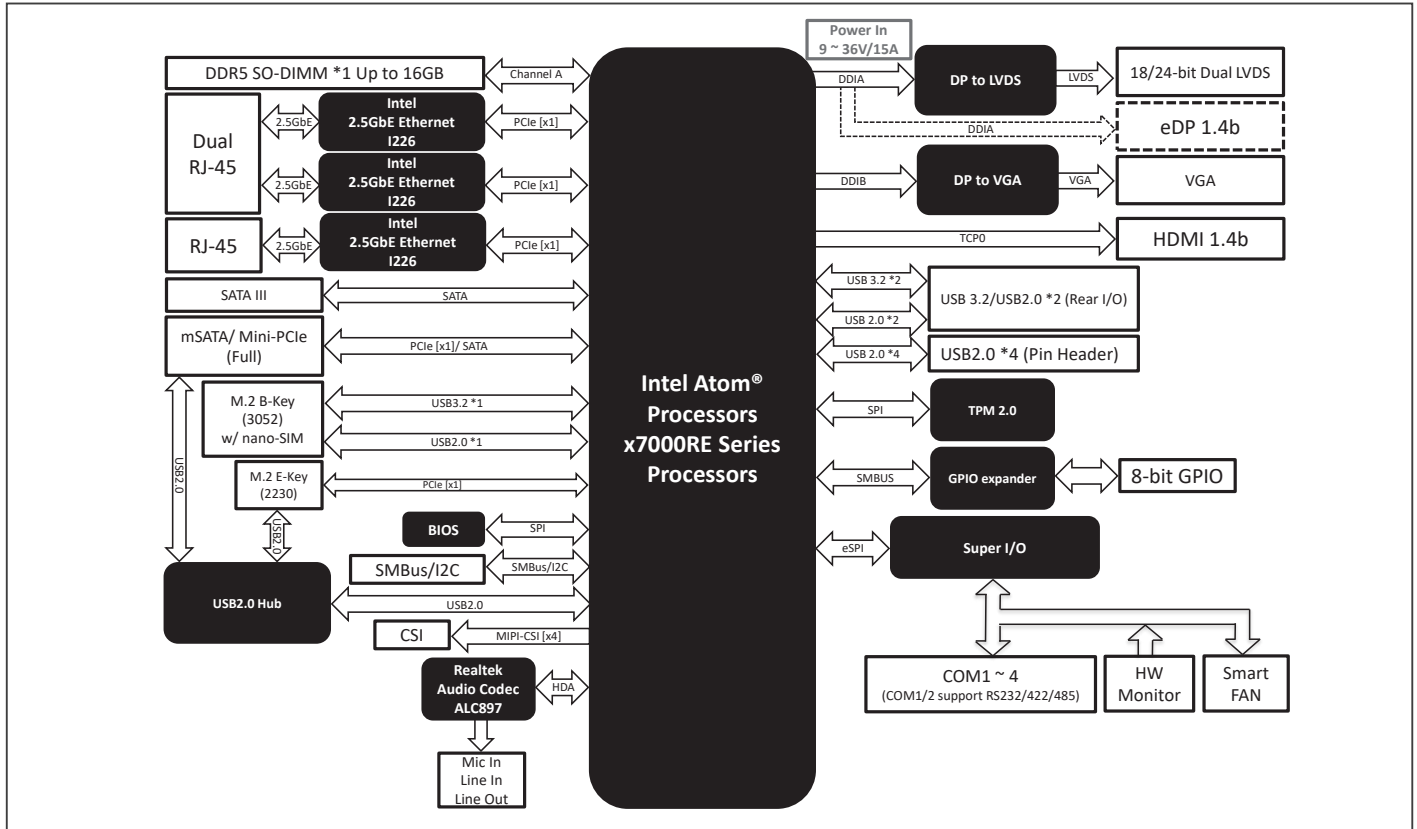
Packing List

Part Number	Description	QTY
GENE-ASL6	GENE-ASL6 MB	1

Optional Accessories

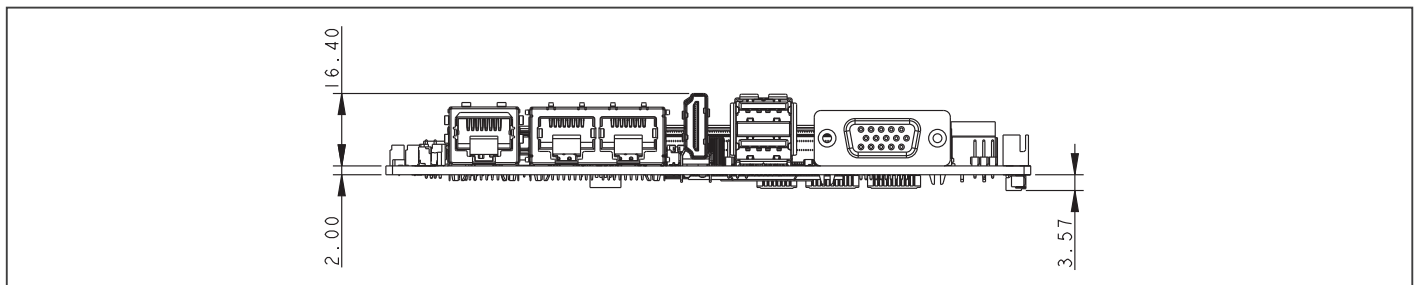
Part Number	Description	QTY
GENE-ADN6-HSP01	Heat Spreader.100*72*8mm	1
GENE-ADN6-HSK01	Heat Sink.100*72*15.5mm.used with HSP	1
GENE-ADN6-HSK02	Heat Sink.146*78.6*18mm	1
1702150155	SATA HDD Power Cable, 15cm	1
170X000398	Power Cable, DC JACK, 30cm	1
170204010R	Power Cable, Double 4P, 10cm	1
170X000156	Audio Cable, 25cm	1
170X000287	Front Panel Cable, 10cm	1
1701090150	COM Port Cable, 15cm	4
1700050207	USB 2.0 Cable, 20cm	4

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Display	LAN	USB	RS-232	RS-232/422/485	Storage	Expansion Slot	TPM	Power	Temp	Others
GENE-ASL6W2-A10-0001	x7433RE	HDMI x1 VGA x1 LVDS x1	2.5GbE x 3	USB 3.2 Gen 2 x 2 USB 2.0 x 4	2	2	SATA x 1	M.2 3052 B-Key x 1 M.2 2230 E-Key x 1 MiniCard x 1	2.0	12V	-40°C ~ 85°C	Nano SIM, GPIO x 8, SMBUS
GENE-ASL6W2-A10-0002	x7213RE	HDMI x1 VGA x1 LVDS x1	2.5GbE x 3	USB 3.2 Gen 2 x 2 USB 2.0 x 4	2	2	SATA x 1	M.2 3052 B-Key x 1 M.2 2230 E-Key x 1 MiniCard x 1	2.0	12V	-40°C ~ 85°C	Nano SIM, GPIO x 8, SMBUS
GENE-ASL6W2-A10-0003	x7835RE	HDMI x1 VGA x1 LVDS x1	2.5GbE x 3	USB 3.2 Gen 2 x 2 USB 2.0 x 4	2	2	SATA x 1	M.2 3052 B-Key x 1 M.2 2230 E-Key x 1 MiniCard x 1	2.0	12V	-40°C ~ 85°C	Nano SIM, GPIO x 8, SMBUS