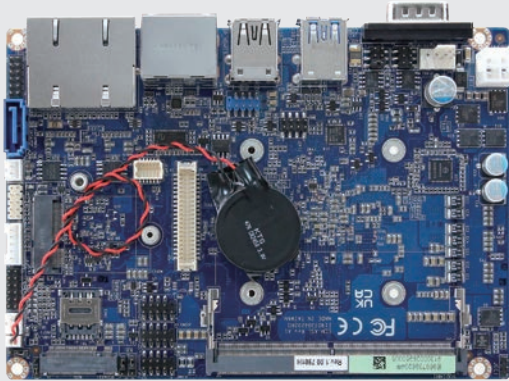




Features

- Onboard Intel® Processor N97, and Intel® Core™ i3-N305 Processor, Intel Atom® x7000RE series processors
- Bottom Layer Soldered Processor
- Triple Display, DP 1.4a, HDMI 2.0b, 1 x 2CH LVDS/eDP
- Dual Intel® Gigabit Ethernet, 2.5GbE
- Dual Expansion Slot, M.2 Key-B, M.2 Key-E
- DC in +9V ~ +36V



HDMI



DP



DDR5
SO-DIMM



USB 3.2



RS232/422/485

Specifications

System Information

Processor	Onboard Intel® Processor N97, and Intel® Core™ i3-N305 Processor, Intel Atom® x7000RE series processors
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM socket, supports up to 16GB Max.
I/O Chipset	EC ITE IT5782VG
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec and 1sec. or 1min./step
BIOS	AMI BIOS, 256Mbit SPI Flash ROM
H/W Status Monitor	CPU temperature monitoring Voltages monitoring CPU fan speed control
TPM	Onboard NuvoTon_NPCT750AABYX (for standard temp) & NPCT754AABYX (for extend temp) supports TPM 2.0
Board	3.5"

Expansion

Expansion	1 x M.2 Type B slot for 3042/3052/2242 size (PCIe x1+USB 3.2 GEN1 + USB 2.0) 1 x M.2 Type E 2230 support CNVi WiFi module (1 x PCI-e x1 & USB 2.0 Signal)
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Storage

Storage	1 x M.2 (Type B) 1 x SATA III
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Display

Graphic Chipset	Intel® UHD Graphics
Spec. & Resolution	HDMI 2.0b Max resolution 4096 x 2160 @ 60Hz DP 1.4a Max resolution 4096 x 2160 @ 60Hz LVDS 1920 x 1080 Dual channel 18/24-bits or eDP 1920 x 1080 @ 60Hz (2 Lanes)
Multiple Display	Triple Display
LVDS	1 x LVDS: 1920 x 1080 Dual channel 18/24-bits LVDS

Audio

Audio Codec	Realtek ALC888S HD Audio Decoding Controller
Audio Interface	Line-in, Mic-in, Line-out

Ethernet

LAN Chipset	2 x Intel® I226LM/I226IT
Ethernet Interface	10/100/1000/2.5G Base-Tx GbE compatible
LAN Port	2 x RJ-45

Power Requirement

Power Mode	AT/ATX (Default Setting: AT)
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Software Support

OS	Windows 11, Linux
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Certification

Certification Information	CE, FCC Class, RoHS Compliant
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I/O

USB	3 x USB 3.2 Gen2, 1 x USB 2.0 at IO 2 x USB2.0 by Pin header
COM Port	3 x RS-232 1 x RS-232/422/485
SATA	1 x SATA III
DIO	1 x 8-bit GPIO
MIO	1 x eSPI 1 x SIM Card Slot

Mechanical & Environmental

Operating Temp.	Standard Temperature: 0°C ~ 60°C (-4 ~ 140°F) with 0.5m/s Air Flow Extend Temperature: -40°C ~ 80°C (-40°F ~ 176°F) with 0.5m/s Air Flow for Wide Temp. CPU SKU
Storage Temp.	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.44lbs (0.2kg)
Power Requirement	DC in +9V ~ +36V
Dimension (L x W)	5.7" x 4" (146mm x 101mm)

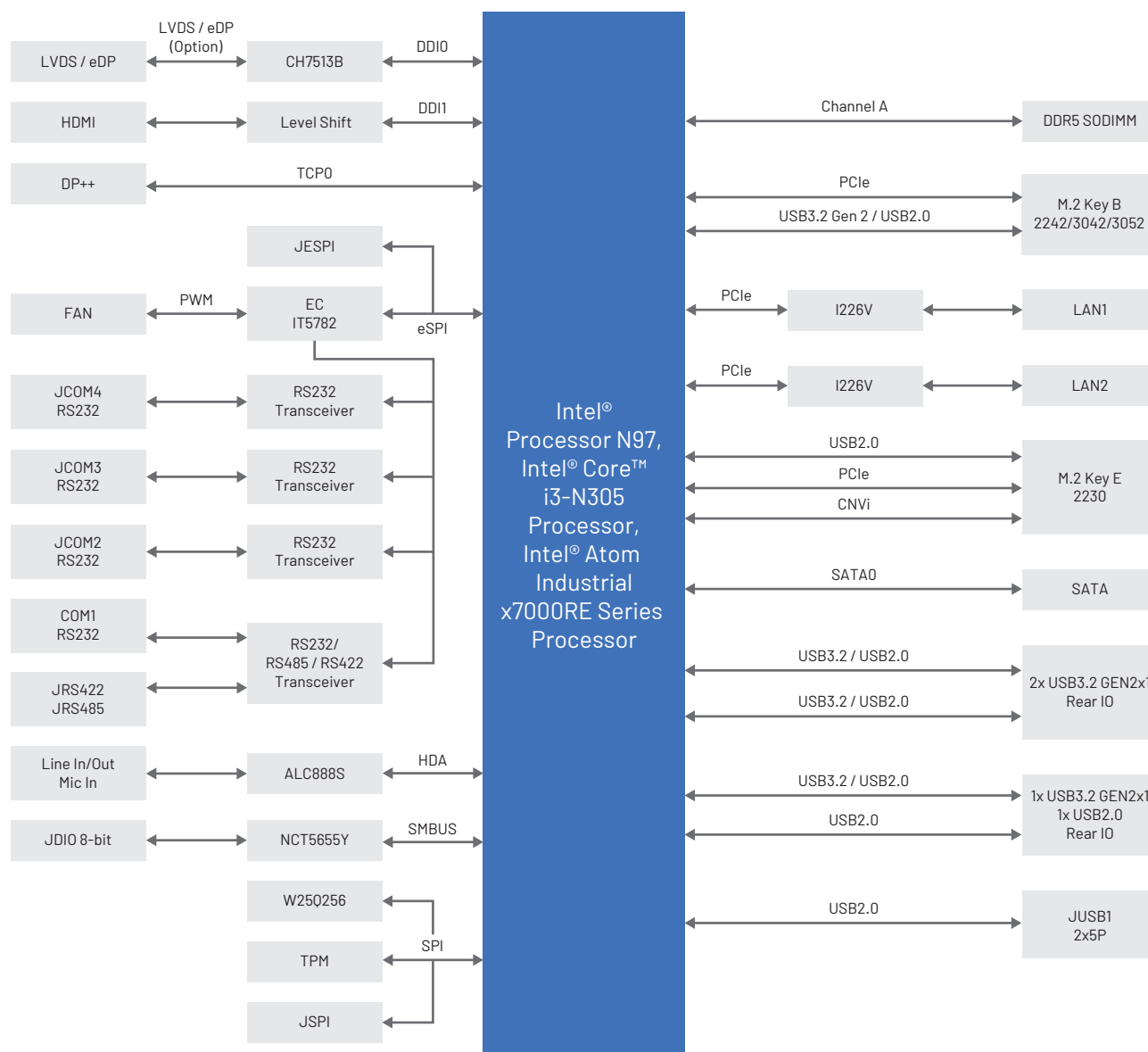
Technical drawing of the rear view of the 15.6 inch laptop chassis. The drawing shows the chassis with various ports and components. Dimensions are provided in millimeters (mm) and inches (in). Key dimensions include:

- Overall width: 354.4 mm (13.95 in)
- Overall height: 238.4 mm (9.39 in)
- Port dimensions: 143.09 mm (5.63 in), 128.37 mm (5.05 in), 123.95 mm (4.88 in), 116.19 mm (4.57 in), 108.11 mm (4.25 in), 94.36 mm (3.71 in), 74.9 mm (2.95 in), 72.58 mm (2.86 in), 44.44 mm (1.75 in), 10.02 mm (0.39 in), 3.8 mm (0.15 in), 2.52 mm (0.1 in), 0.95 mm (0.04 in), 0 mm.
- Internal dimensions: 11.02 mm (0.43 in), 9.23 mm (0.36 in), 3.6 mm (0.14 in), 11.24 mm (0.44 in), 21.23 mm (0.84 in), 27.19 mm (1.07 in), 86.19 mm (3.39 in), 41.94 mm (1.65 in), 39.6 mm (1.56 in), 43.9 mm (1.73 in), 21.27 mm (0.84 in), 15.91 mm (0.63 in), 15.53 mm (0.61 in), 11.27 mm (0.44 in), 9.35 mm (0.37 in), 0 mm.
- Mounting points: 143.89 mm (5.66 in), 99.54 mm (3.92 in), 93.74 mm (3.7 in), 76.44 mm (3 in), 35.44 mm (1.39 in), 112.19 mm (4.41 in), 99.16 mm (3.9 in), 71.19 mm (2.8 in), 61.74 mm (2.43 in), 40.13 mm (1.58 in), 36.79 mm (1.45 in), 34.25 mm (1.35 in), 30.97 mm (1.22 in), 27.72 mm (1.09 in), 25.72 mm (1.01 in), 20.06 mm (0.79 in), 18.53 mm (0.73 in), 14.29 mm (0.56 in), 14.1 mm (0.55 in), 99.46 mm (3.91 in), 93.96 mm (3.7 in), 93.44 mm (3.68 in), 89.81 mm (3.53 in), 89.58 mm (3.52 in), 85.96 mm (3.38 in), 81.65 mm (3.21 in), 78.35 mm (3.08 in), 70.6 mm (2.78 in), 68.94 mm (2.71 in), 66.23 mm (2.61 in), 59.69 mm (2.35 in), 54.31 mm (2.14 in), 44.67 mm (1.76 in), 42.28 mm (1.66 in), 21.27 mm (0.84 in), 15.91 mm (0.63 in), 15.53 mm (0.61 in), 11.27 mm (0.44 in), 9.35 mm (0.37 in), 0 mm.
- Other dimensions: 16.34 mm (0.64 in), 10.55 mm (0.42 in), 25.25 mm (0.99 in), 13.45 mm (0.53 in), 0 mm, 16 mm (0.63 in), 3.6 mm (0.14 in).

P/N	Processor	Chipset	LAN	USB	COM	PCIe Slot	Power Input	Temp.
ECM-ASL-N97-A1R	Intel® Processor N97	NA	2	6	4	0	+9-36V DC	0°C ~ 60°C (32°F ~ 140°F)
ECM-ASL-N305-A1R	Intel® Core™ i3-N305 Processor	NA	2	6	4	0	+9-36V DC	0°C ~ 60°C (32°F ~ 140°F)
ECM-ASL-7433-A1R	Intel Atom® Processor x7433RE	NA	2	6	4	0	+9-36V DC	-40°C ~ 80°C (-40°F ~ 176°F)
ECM-ASL-7835-A1R	Intel Atom® Processor x7835RE	NA	2	6	4	0	+9-36V DC	-40°C ~ 80°C (-40°F ~ 176°F)

Item	P/N	Quantity
Serial ATA cable (7-pin, standard)	-	1
Wire SATA power cable (15-pin, 2P/2.0mm)	-	1
Flat cable 9P (M)-PHD 10P/2.0mm)	-	1
CPU Heatsink	-	1

Block Diagram



I/O Overview

