



ARC-1037

10.4" Intel® Alder Lake-N Fanless Rugged 10.4" Panel PC with IET Expansion

10.4" XGA LCD with 5-wire Resistive Touch
 Onboard Intel® Alder Lake-N Processor (N97/x7425E CPU)
 1 x 262-pin DDR5 4800MHz SO-DIMM Socket, supports up to 16GB Max (non ECC only)
 2 x LAN (2.5GbE), 2 x COM, 2 x USB3.2
 1 x USB Type C (w/ PD(20V/3A Input), USB3.2(10Gbps, 5V/3A output), Display Function)
 Available Expansion for Audio, USB, COM, HDM, GPIO, CAN Bus
 2 x M.2 Slots (Key-B 2242/3042/3052 with SIM E 2230)
 Wi-Fi / BT / 4G / 5G (by Option)
 Rugged Design for Vibration & Shock Protection
 Fanless Operation
 Wide Range DC Power Input +12 ~ 24Vdc
 Service Window for Storage and Memory Module
 IP65 Compliant Front Panel, IP41 Rear Box
 TPM2.0



Spec

System Information

Processor

Onboard Intel® Alder Lake-N SoC BGA Processor
 (Alder Lake-N Platform N97/x7425E CPU)

System Memory

262-pin DDR5 4800MHz SO-DIMM socket, supports up to 16GB Max (non ECC only)

Watchdog Timer

H/W Reset, 1sec. ~ 65535sec

H/W Status Monitor

CPU & system temperature monitoring and Voltages monitoring

TPM

TPM 2.0 (by default)

CPU Cooler (Type)

Fanless Heatsink

Expansion

Expansion

1 x M.2 (Key-B, 2242/3042/3052, SATAIII, USB3.2 Gen1x1(default, 5Gbp/s)) or PCIe1(via OEM BIOS request), USE Cards
 (*Not support PCIe2 device)
 1 x M.2 (Key-E, 2230, PCIe1, USB2.0)
 1 x 80-pin IET interface

Storage

Storage

1 x 2.5" Drive Bay(7mm HDD Restricted)

HDD/ SSD

1 x SATA3

Other Storage Device

1 x M.2 Key-B 2242/3042/3052 for M.2 SATAIII SSD

Panel

LCD Size

10.4" 4:3

Display Type

XGA

B/L Inverter/Converter

LCD built in

Resolution

1024x768

Pixel pitch

0.0685mm(H) x 0.2055mm(V)

Luminance

500 cd/m2

Contrast ratio

1200

Viewing angle

88 (U), 88 (D), 88 (L), 88 (R)

Response time

25 ms

Backlight

LED

Touch Type

5 Wires resistive

Touch Light Transmission

80 %

Touch Controller

Onboard USB touch (PenMount)

I/O

USB Port

2 x USB3.2 (1 x Double deck, Type A)
 1 x USB Type C (w/ PD(20V/3A Input), USB3.2(Gen2x1, 10Gbps, 5V/3A output), Display function)

COM Port

1 x RS-232/422/485, selectable by BIOS & JUPMER, RS-485 supports Auto Flow, Pin-9 selected by Ring/+5V/+12V
 1 x RS-232

DIO

12-bit GPIO + 2-pin CAN Bus (by ARC-BYT DB-E)

Expansion

1 x M.2 (Key-B, 2242/3042/3052, SATAIII, USB3.2 Gen1x1(default, 5Gbp/s)) or PCIe1(via OEM BIOS request), USE Cards

(*Not support PCIe2 device)
 1 x M.2 (Key-E, 2230, PCIe1, USB2.0)
 1 x 80-pin IET interface
 3 x Knockouts for Antenna Mounting

Other**.System Control****LED Indicator**

HDD LED, Power LED

.DC In/Out Characteristics**Power Type**

AT/ATX

.Audio**Audio Codec**

Realtek ALC888S

Audio Interface

speaker out

Speaker Output

2 x 2W

.Certifications

W

**Certification Information**

CE / FCC Class B, UKCA, VCCI

.Ethernet**LAN Port**

2 x Intel® I226IT 2.5 Gigabit Ethernet

.Power Requirement**DC Input**

DC +12V ~ +24V, wide voltage single power input
 TVS component for surge protection
 Reverse current/voltage protection

DC Input Connector

Lockable DC Jack (Default)
 optional for phoenix connector

ACPI

Single power ATX Support S0, S3, S4, S5 and ACPI 3.0 Compliant

Power Mode

AT/ATX

Adapter

Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter) AC-DC Adapter

.Mechanical & Environmental**Operating Temperature**

0°C ~ 50°C (-14°F ~ 122°F)

Storage Temperature

-20°C ~ 60°C (-4°F ~ 140°F)

Operating Humidity

40°C @ 95% Relative Humidity, Non-condensing

Dimension (W x L x H)

259.6 x 195.8 x 46mm

Weight

2.3Kgs

Vibration Test

With SSD/mSATA : 2.24Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 1hr/axis

Shock Test

Operating with SSD/CFast/mSATA : MIL-STD-810G, Method 516.6, Procedure I, functional shock=20G

IP Rating

Front Panel IP65
 back cover IP41

Power Requirement

DC +12V ~ +24V, wide voltage single power input
 TVS component for surge protection
 Reverse current/voltage protection

Power Mode

AT/ATX

System Fan

Fanless

Construction - Front

Silver Aluminum

Construction - Rear

Black Die Casting

Relative Humidity

40°C @ 95% Relative Humidity, Non-condensing

Fanless

Yes

Drop

ISTA 2A, IEC-60068-2-32 Test:Ed

.Software Support**OS Information**

Linux, Windows 10/11

.Ordering Information**Ordering Information**

ARC-1037-N97-A1R
 10.4" 1024x768 500nits Industrial Touch Panel PC, ErP Design
 Intel Processor N97 3.6GHz CPU/8GDDR5/2GLAN/2COM/2USB3/USB typeC/SPK/12~24V input/72W Adapter

ACC-ARC-USB-1R
 4 x USB 3.0 Kit for ARC Series

ACC-ARC-AUDIO-1R
 HDMI + 5.1 CH Audio Kit for ARC Series

ACC-ARC-MPCIE-1R
 HDMI + MPCIE w/SIM Kit for ARC Series

ACC-ARC-COM-1R
 2 x Isolated RS-232 Kit for ARC Series

ACC-ARC-COM-2R
 3 x RS-232 Kit for ARC Series

ACC-ARC-COM-3R
2 x RS-232 + USB Kit for ARC Series

ACC-ARC-COM-4R
2 x RS-232 + LAN Kit for ARC Series

ACC-ARC-GPIO-1R
12-bit GPIO + 2-pin CAN Bus Kit for ARC Series

ACC-ARC-OBDDII-1R
OBDDII - CAN Bus Kit for ARC Series (OBDDII/EOBD for Small Vehicle)

ACC-ARC-OBDDII-2R
OBDDII - CAN Bus Kit for ARC Series (J1939J1708 for Large Vehicle)

ACC-ARC-OBDDII-3R
OBDDII - CAN Bus Kit for ARC Series (ISO15765-4 for Special Large Vehicle)

E1702031835R USA Power Cord

E170203183DR EU Power Cord

E170203183BR Japan Power Cord

E170203183ER UK Power Cord

E1702031800R Australia Power Cord

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