



## ARC-1037

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

- > 10.4" XGA LCD with 5-wire Resistive Touch
- > Onboard Intel® Alder Lake-N Processor (N97/x7425E)
- > 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(Gen2x1, 10Gbps, 5V/3A output), Display Function)
- > Available Expansion for Audio, USB, COM, HDMI, PCIe, GPIO, CAN Bus
- > 2 x M.2 Slots (Key-B 2242/3042/3052 with SIM Slot1, Key-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-	
<b>Processor</b>	Onboard Intel® Alder Lake-N SoC BGA Processor (Alder Lake-N Platform N97/x7425E CPU)
<b>System Memory</b>	262-pin DDR5 4800MHz SO-DIMM socket, supports up to 16GB Max (non ECC only)
<b>Watchdog Timer</b>	H/W Reset, 1sec. ~ 65535sec
<b>H/W Status Monitor</b>	CPU & system temperature monitoring and Voltages monitoring
<b>TPM</b>	TPM 2.0 (by default)
<b>CPU Cooler (Type)</b>	Fanless Heatsink
Expansion	
<b>Expansion</b>	1 x M.2 (Key-B, 2242/3042/3052, SATAIII, USB3.2 Gen1x1(default, 5Gbp/s)) or PCIe1x1(via OEM BIOS request), USB2.0, SIM Slot for LTE Cards (*Not support PCIe2 device) 1 x M.2 (Key-E, 2230, PCIe1, USB2.0) 1 x 80-pin IET interface
Storage	
<b>Storage</b>	1 x 2.5" Drive Bay(7mm HDD Restricted)
<b>HDD/ SSD</b>	1 x SATA3
<b>Other Storage Device</b>	1 x M.2 Key-B 2242/3042/3052 for M.2 SATAIII SSD
Panel	
<b>LCD Size</b>	10.4" 4:3
<b>Display Type</b>	XGA
<b>B/L Inverter/Converter</b>	LCD built in
<b>Resolution</b>	1024x768
<b>Pixel pitch</b>	0.0685mm(H) x 0.2055mm(V)
<b>Luminance</b>	500 cd/m2
<b>Contrast ratio</b>	1200
<b>Viewing angle</b>	88 (U), 88 (D), 88 (L), 88 (R)
<b>Response time</b>	25 ms
<b>Backlight</b>	LED
<b>Touch Type</b>	5 Wires resistive
<b>Touch Light Transmission</b>	80 %
<b>Touch Controller</b>	Onboard USB touch (PenMount)
I/O	
<b>USB Port</b>	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)
<b>COM Port</b>	1 x RS-232/422/485, selectable by by BIOS & JUPMER, RS-485 supports Auto Flow, Pin-9 selected by Ring/+5V/+12V) 1 x RS-232
<b>DIO</b>	12-bit GPIO + 2-pin CAN Bus (by ARC-BYT DB-E)
<b>Expansion</b>	1 x M.2 (Key-B, 2242/3042/3052, SATAIII, USB3.2 Gen1x1(default, 5Gbp/s)) or PCIe1x1(via OEM BIOS request), USB2.0, SIM Slot for LTE Cards (*Not support PCIe2 device) 1 x M.2 (Key-E, 2230, PCIe1, USB2.0) 1 x 80-pin IET interface
<b>Other</b>	3 x Knockouts for Antenna Mounting
System Control	
<b>LED Indicator</b>	HDD LED, Power LED
DC In/Out Characteristics	
<b>Power Type</b>	AT/ATX
Audio	
<b>Audio Codec</b>	Realtek ALC888S
<b>Audio Interface</b>	speaker out
<b>Speaker Output</b>	2 x 2W
Certifications	



<b>Certification Information</b>	CE / FCC Class B, UKCA, VCCI
<b>Ethernet</b>	
<b>LAN Port</b>	2 x Intel® I226IT 2.5 Gigabit Ethernet
<b>Power Requirement</b>	
<b>DC Input</b>	DC +12V ~ +24V, wide voltage single power input TVS component for surge protection Reverse current/voltage protection
<b>DC Input Connector</b>	Lockable DC Jack (Default) optional for phoenix connector
<b>ACPI</b>	Single power ATX Support S0, S3, S4, S5 and ACPI 3.0 Compliant
<b>Power Mode</b>	AT/ATX
<b>Adapter</b>	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter) AC-DC Adapter
<b>Mechanical &amp; Environmental</b>	
<b>Operating Temperature</b>	0°C ~ 50°C (-14°F ~ 122°F)
<b>Storage Temperature</b>	-20°C ~ 60°C (-4°F ~ 140°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Dimension (W x L x H)</b>	259.6 x 195.8 x 46mm
<b>Weight</b>	2.3Kgs
<b>Vibration Test</b>	With SSD/mSATA : 2.24Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 1hr/axis
<b>Shock Test</b>	Operating with SSD/CFast/mSATA : MIL-STD-810G, Method 516.6, Procedure I, functional shock=20G
<b>IP Rating</b>	Front Panel IP65 back cover IP41
<b>Power Requirement</b>	DC +12V ~ +24V, wide voltage single power input TVS component for surge protection Reverse current/voltage protection
<b>Power Mode</b>	AT/ATX
<b>System Fan</b>	Fanless
<b>Construction - Front</b>	Silver Aluminum
<b>Construction - Rear</b>	Black Die Casting
<b>Relative Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Fanless</b>	Yes
<b>Drop</b>	ISTA 2A, IEC-60068-2-32 Test:Ed
<b>Software Support</b>	
<b>OS Information</b>	Linux, Windows 10/11
<b>Ordering Information</b>	
<b>Ordering Information</b>	<p>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</p> <p>ACC-ARC-USB-1R 4 x USB 3.0 Kit for ARC Series</p> <p>ACC-ARC-AUDIO-1R HDMI + 5.1 CH Audio Kit for ARC Series</p> <p>ACC-ARC-MPCIE-1R HDMI + MPCIE w/SIM Kit for ARC Series</p> <p>ACC-ARC-COM-1R 2 x Isolated RS-232 Kit for ARC Series</p> <p>ACC-ARC-COM-2R 3 x RS-232 Kit for ARC Series</p> <p>ACC-ARC-COM-3R 2 x RS-232 + USB Kit for ARC Series</p> <p>ACC-ARC-COM-4R 2 x RS-232 + LAN Kit for ARC Series</p> <p>ACC-ARC-GPIO-1R 12-bit GPIO + 2-pin CAN Bus Kit for ARC Series</p> <p>ACC-ARC-OBDDI-1R OBDDI - CAN Bus Kit for ARC Series (OBDDI/EODD for Small Vehicle)</p> <p>ACC-ARC-OBDDI-2R OBDDI - CAN Bus Kit for ARC Series (J1939J1708 for Large Vehicle)</p> <p>ACC-ARC-OBDDI-3R OBDDI - CAN Bus Kit for ARC Series (ISO15765-4 for Special Large Vehicle)</p> <p>E1702031835R USA Power Cord</p> <p>E170203183DR EU Power Cord</p> <p>E170203183BR Japan Power Cord</p> <p>E170203183ER UK Power Cord</p> <p>E1702031800R Australia Power Cord</p>