



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-	
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 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	
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 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
Other	3 x Knockouts for Antenna Mounting
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	



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-OBDII-1R OBDII - CAN Bus Kit for ARC Series (OBDII/EOBD for Small Vehicle) ACC-ARC-OBDII-2R OBDII - CAN Bus Kit for ARC Series (J1939/J1708 for Large Vehicle) ACC-ARC-OBDII-3R OBDII - 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