

ARC-21W35

21.5" Intel Atom® x6413E Processor Fanless
Rugged Touch Panel PC with IET Expansion



Product Features

- Intel Atom® x6413E Processor
- One 260-pin SODIMM sockets supports up to 32GB DDR4 3200 SDRAM
- Dual Intel Gigabit LAN
- Support Wi-Fi / BT / 4G / 5G (by option)
- Available expansion for audio, USB, COM, HDMI, PCIe, GPIO, CAN bus
- With panel mount kits included
- Fanless operation from -10°C ~ 50°C (14°F ~ 122°F)
- Full flat front panel with projected capacitive touch supports multi touch
- 4 x USB3.2, 2 x COM
- 2 x M.2 slots (Key-B 2242/3042/3052, Key-E 2230)
- Wide voltage +12V ~ +24V input, ErP power
- IP65 compliant front panel, IP41 rear box
- TPM 2.0 function

Specification

System Information

Processor	Intel Atom® x6413E Processor, 1.5M Cache, up to 3.00 GHz
System Memory	1 x 260-pin DDR4 3200 MHz SO-DIMM socket, supports up to 32GB max (in-bend ECC supported)
I/O Chipset	EC ITE IT5571
Watchdog Timer	H/W reset, 1sec. ~ 65535min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring CPU & system temperature and voltage
TPM	Onboard NuvoTon NPCT754AABYX support TPM 2.0
SBC	ARC-EHL
CPU Cooler (Type)	Fanless heatsink
Other	7 x Knockouts for antenna mounting *5 from rear cover + 2 from IET bracket

Expansion

Expansion	1 x M.2 Key-B 2242/3042/3052 with SIM card slot Support SATA3 (BOM option for USB or PCIe for LTE(4/5G))
	1 x M.2 Key-E 2230 Support PCIe/USB Wi-Fi/BT module
	1 x 80-pin IET interface

Storage

Storage	1 x 2.5 Drive bay (7mm HDD restricted)
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Display

Graphic Chipset	Intel® Elkhart Lake SoC integrated graphics supports optional dual display
Spec. & Resolution	HDMI: Max. Resolution 4096x2160 @ 24Hz (optional by IET module)

Audio

Audio Codec	Realtek ALC888S
Speaker Output	2 x 2W

Ethernet

LAN Chipset	2 x Intel® I225-IT 2.5 Gigabit Ethernet
Ethernet Interface	10/100/1000/2.5G Base-Tx GbE compatible

Power Requirement

DC Input	+12V ~ +24V
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

Software Support

OS	Win10 / Win11 / Linux
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Certification

Certification Information	CE / FCC Class B / VCCI
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Panel

LCD Size	21.5", 16:9
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Display Type	Full HD
Resolution	1920 x 1080
Pixel pitch	247.95um(H) x 247.95um(V)
Luminance	500 cd/m²
Contrast ratio	1000
Viewing angle	89 (U), 89 (D), 89 (L), 89 (R)
Response time	14 ms
Backlight	LED
Touch Type	Projective capacitive multi-touch up to 10 points
Touch Light Transmission	89 %
Touch Controller	USB touch (EETI)

External I/O

USB	4 x USB 3.0
LAN Port	2 x RJ-45
COM Port	1 x RS-232/422/485 1 x RS-232

Internal I/O

SATA	1 x SATA III
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System Control

LED Indicator	HDD LED, power LED
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Mechanical & Environmental

Operating Temp.	-10°C ~ 50°C (14°F ~ 122°F)
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative humidity, non-condensing
Dimension (W x L x H)	538.05 x 341.05 x 64mm
Weight	7.3 Kg
Vibration Test	With SSD/M.2 SSD : 3Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 30mins/axis
Shock Test	Operating with SSD/M.2 : MIL-STD-810G, method 516.6, procedure I, functional shock=20G
Drop Test	ISTA 2A, IEC-60068-2-32 Test:Ed

IP Rating	Front panel IP65 Back cover IP41
Mounting Kit	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm Panel mount with mounting kits
Power Mode	AT/ATX (ATX is default)
System Fan	Fanless
Construction - Front	Die casting with cover lens
Construction - Rear	Black die casting

Component

Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 120W adapter (24V @ 5.0A adapter) AC-DC adapter
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Ordering Information

ARC-21W35-X13-B1R
21.5" 1920x1080 Industrial Touch Panel PC, ErP Design, PCAP Multi Touch(ALC888S)
Intel Atom SoC x6413E 1.50 GHz CPU/2GLAN/2COM/4USB/SPK/12~24V input/24V Adapter

Optional IET Module List:

ACC-ARC-USB-01R
4 x USB 3.0 IET Module for ARC-1535/38

ACC-ARC-AUDIO-01R
HDMI + 5.1 CH audio IET Module for ARC-1535/38

ACC-ARC-MPCIE-02R
HDMI + MPCIE w/SIM IET Module for ARC-1535/38

ACC-ARC-COM-01R
2 x Isolated RS-232 IET Module for ARC-1535/38

ACC-ARC-COM-02R
3 x RS-232 IET Module for ARC-1535/38

ACC-ARC-COM-03R
2 x RS-232 + USB IET Module for ARC-1535/38

ACC-ARC-COM-04R
2 x RS-232 + LAN IET Module for ARC-1535/38

ACC-ARC-GPIO-01R
12-bit GPIO + 2-pin CAN bus IET Module for ARC-1535/38

ACC-ARC-OBDII-01R
OBDII - CAN bus IET Module for ARC-1535/38 (OBDII/EOBD for small vehicle)

ACC-ARC-OBDII-02R
OBDII - CAN bus IET Module for ARC-1535/38 (J1939J1708 for large vehicle)

ACC-ARC-OBDII-03R
OBDII - CAN bus IET Module for ARC-1535/38 (ISO15765-4 for special large vehicle)

E1702031833R
USA Power Cord

E1702031000R
EU Power Cord

E1702031834R
Japan Power Cord

E1702031830R
UK Power Cord

E1702031831R
Australia Power Cord
