



ARC-1235

**12.1" Intel® Atom™ SoC Processor
x6211E/x6413E/x6425E Fanless Rugged Touch
Panel PC with IET Expansion**

- > Onboard Intel® Atom™ Elkhart Lake x6211E/x6413E/x6425E Processor
- > One 260-pin SODIMM sockets supports up to 32GB DDR4 3200 SDRAM
- > 4 x USB3.2, 2 x COM
- > Dual Intel Gigabit LAN
- > 2 x M.2 Slots (Key-B 2242/3042/3052, Key-E 2230)
- > Support Wi-Fi / BT / 4G / 5G (by option)
- > Wide Voltage +12V ~ +24V Input, ErP Power
- > Available Expansion for Audio, USB, COM, HDMI, GPIO
- > IP65 Compliant Front Panel, IP41 Rear Box
- > 5-wire Resistive Touch
- > TPM2.0 Function
- > Fanless Operation Wide temp. from -20°C ~ 60°C (-4°F ~ 131°F)

+ Spec

-System Information-

Processor	Onboard Intel® Elkhart Lake Processor Intel Atom® x6211E Processor (6W, 1.5M Cache, up to 3.00 GHz) Intel Atom® x6413E Processor (9W, 1.5M Cache, up to 3.00 GHz) Intel Atom® x6425E Processor (12W, 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-BEED ECC supported)
I/O Chipset	EC ITE IT5571
Watchdog Timer	HW 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

Expansion

Expansion	1 x M.2 Key-B 2242/3042/3052 with SIM card slot, support SATA III 1 x M.2 Key-E 2230, support PCIe1, USB2.0 1 x 80-pin IET interface
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Storage

Storage	1 x 2.5" Drive Bay
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Panel

LCD Size	12.1", 4:3
Display Type	XGA
Resolution	1024 x 768
Pixel pitch	0.240 mm (H) x 0.240 mm (V)
Luminance	600 cd/m²
Contrast ratio	1000
Viewing angle	89 (U), 89 (D), 89 (L), 89 (R)
Response time	13 ms
Backlight	LED
Touch Type	5 Wires resistive
Touch Light Transmission	80 %
Touch Controller	USB touch (Penmount)

I/O

USB Port	4 x USB 3.2
COM Port	1 x RS-232/422/485 1 x RS-232
SATA	1 x SATA III

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 (897 co-layout)
Speaker Output	2 x 2W

Certifications

Certification Information	CE/ FCC class B
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Ethernet

LAN Chipset	2 x Intel® I225-IT 2.5 Gigabit Ethernet
Ethernet Interface	10/100/1000 Base-Tx GbE compatible
LAN Port	2 x RJ-45

Power Requirement



DC Input	+12V ~ +24V
DC Input Connector	Lockable DC Jack
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter
Mechanical & Environmental	
Operating Temperature	Wide temp.-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	Wide temp.-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	2.4 Kgs
Vibration Test	With SSD/mSATA : 3Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30 mins/axis
Shock Test	Operating with SSD/CFast/mSATA : MIL-STD-810G, Method 516.6, Procedure I, functional shock=20G
IP Rating	Front IP65 Rear IP41
Mounting Kit	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm
Power Mode	AT/ATX (ATX is default setting)
System Fan	Fanless
Construction - Front	Silver Aluminum
Construction - Rear	Black Die Casting
Dimension	283 x 221.1 x 51.2 mm
Software Support	
OS Information	Win10 /11/ Linux
Ordering Information	
Ordering Information	ARC-1235-X13-A1R 12.1" 1024x768 Industrial Touch Panel PC, ErP Design, (ALC888S) Intel Atom SoC x6413E 1.50 GHz CPU/4G DDR4/2GLAN/2COM/4USB/SPK/12~24V input/19V Adapter Optional IET Module list: ACC-ARC-USB-01R 4 x USB 3.0 IET module for ARC-1535/1538 ACC-ARC-AUDIO-01R HDMI + 5.1 CH audio IET module for ARC-1535/1538 ACC-ARC-MPCIE-02R HDMI + MPCIE w/SIM IET module for ARC-1535/1538 ACC-ARC-COM-01R 2 x Isolated RS-232 IET module for ARC-1535/1538 ACC-ARC-COM-02R 3 x RS-232 IET module for ARC-1535/1538 ACC-ARC-COM-03R 2 x RS-232 + USB IET module for ARC-1535/1538 ACC-ARC-COM-04R 2 x RS-232 + LAN IET module for ARC-1535/1538 ACC-ARC-GPIO-01R 12-bit GPIO + 2-pin CAN bus IET module for ARC-1535/1538 ACC-ARC-OBDDI-01R OBDDI - CAN bus IET module for ARC-1535/1538 (OBDDI/EObd for small vehicle) ACC-ARC-OBDDI-02R OBDDI - CAN bus IET module for ARC-1535/1538 (J1939J1708 for large vehicle) ACC-ARC-OBDDI-03R OBDDI - CAN bus IET module for ARC-1535/1538 (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