



## ARC-1238

12.1" 11th Gen. Intel® Core™ Processor i7/i5/i3  
Fanless Rugged Touch Panel PC with IET  
Expansion

- > Onboard 11th Gen. Intel®Core™ i7/i5/i3 BGA Processor
- > 1 x 260-pin SODIMM socket Max. up to **32GB** DDR4 3200MT/s
- > 4 x USB3.2, 2 x COM
- > Dual Intel Gigabit LAN
- > 2 x M.2 Slots (Key-B 2242/3042/3052, Key-E 2230)
- > Wide Voltage +12V ~ +24V Input, ErP Power
- > Available Expansion for Audio, USB, COM, HDMI, MPCle, GPIO
- > IP65 Compliant Front Panel, IP41 Rear Box
- > 5-wire Resistive Touch
- > TPM 2.0 Function
- > Fanless Operation from -10°C ~ 50°C (14°F ~ 122°F)

**Spec**

-System Information-	
<b>Processor</b>	11th Gen Intel® Core™ i7/i5/i3 BGA Processor Intel® Core™ i7- 1185G7E (15W, 12M Cache, up to 2.80 GHz), ST Intel® Core™ i5- 1145G7E (15W, 8M Cache, up to 2.60 GHz), ST Intel® Core™ i3- 1115G4E (15W, 6M Cache, up to 3.00 GHz), ST
<b>System Memory</b>	1 x 260-pin SODIMM socket Max. up to 32GB DDR4 3200MT/s
<b>I/O Chipset</b>	EC ITE IT8528E
<b>Watchdog Timer</b>	H/W Reset, 1sec. ~ 65535min. and 1sec. or 1min./step
<b>H/W Status Monitor</b>	Monitoring CPU & System Temperature and Voltage
<b>TPM</b>	Onboard NuvoTon NPCT754AABYX support TPM 2.0
<b>SBC</b>	ARC-TGL
Expansion	
<b>Expansion</b>	1 x M.2 Key-B 2242/3042/3052 with SIM card slot Support SATA3 / PCIe & USB for LTE(4/5G) / NVMe(BOM option for PCIe x2)  1 x M.2 Key-E 2230 Support PCIe/USB/CNV1 Wi-Fi/BT module  1 x 80-pin IET interface
Storage	
<b>Storage</b>	1 x 2.5" Drive Bay (7mm HDD Restricted)
Panel	
<b>LCD Size</b>	12.1", 4:3
<b>Display Type</b>	XGA
<b>Resolution</b>	1024 x 768
<b>Pixel pitch</b>	0.240 mm (H) x 0.240 mm (V)
<b>Luminance</b>	600 cd/m²
<b>Contrast ratio</b>	1000
<b>Viewing angle</b>	89 (U), 89 (D), 89 (L), 89 (R)
<b>Response time</b>	13 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>	4 x USB 3.2
<b>COM Port</b>	1 x RS-232/422/485 1 x RS-232
<b>SATA</b>	1 x SATA III
<b>Other</b>	7 x Knockouts for Antenna Mounting *5 from rear cover + 2 from IET bracket
Display	
<b>Graphic Chipset</b>	Intel® Tiger Lake UP3 SoC integrated Graphics Supports optional dual display
<b>Spec. &amp; Resolution</b>	HDMI: Max. resolution 4096x2160 @ 24Hz (Optional by IET module)
Audio	
<b>Audio Codec</b>	Realtek ALC888S(co-layout 897)
<b>Speaker Output</b>	2 x 2W
Certifications	
<b>Certification Information</b>	CE/ FCC class B
Ethernet	

<b>LAN Chipset</b>	1 x Intel® I225LM 2.5 Gigabit Ethernet 1 x Intel® I219LM Gigabit Ethernet PHY
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ-45
<b>Power Requirement</b>	
<b>DC Input</b>	+12V ~ +24V
<b>DC Input Connector</b>	Lockable DC Jack
<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>	-10°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>Weight</b>	2.4Kgs
<b>Vibration Test</b>	With SSD/mSATA : 3Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30 mins/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 IP65 Rear IP41
<b>Mounting Kit</b>	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm
<b>Power Mode</b>	AT/ATX (ATX is default setting)
<b>System Fan</b>	Fanless
<b>Construction - Front</b>	Silver Aluminum
<b>Construction - Rear</b>	Black Die Casting
<b>Dimension</b>	283 x 221.1 x 51.2 mm
<b>Software Support</b>	
<b>OS Information</b>	Win10 / 11/ Linux
<b>Ordering Information</b>	
<b>Ordering Information</b>	ARC-1238-57E-A1R 12.1" 1024x768 Industrial Touch Panel PC, ErP Design, (ALC888S) 11th Gen Intel Core i5-1145G7E 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-OBDI-01R OBDII - CAN bus IET module for ARC-1535/1538 (OBDII/EODB for small vehicle)  ACC-ARC-OBDI-02R OBDII - CAN bus IET module for ARC-1535/1538 (J1939J1708 for large vehicle)  ACC-ARC-OBDI-03R OBDII - 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

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### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660