



## ARC-21W38

21.5" 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
- > Full Flat Front Panel with Projected Capacitive Touch Supports Multi Touch
- > 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, MPCle, GPIO, CAN Bus
- > IP65 Compliant Front Panel, IP41 Rear Box
- > With Panel Mount kits included
- > 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<br>Intel® Core™ i7- 1185G7E (15W, 12M Cache, up to 2.80 GHz), ST<br>Intel® Core™ i5- 1145G7E (15W, 8M Cache, up to 2.60 GHz), ST<br>Intel® Core™ i3- 1115G4E (15W, 6M Cache, up to 3.00 GHz), ST |
| <b>System Memory</b>             | 1 x 260-Pin DDR4 3200MHz SO-DIMM up to 32 GB  |
| <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<br>Support SATA3 / PCIe & USB for LTE(4/5G) / NVMe(BOM option for PCIe x2)<br><br>1 x M.2 Key-E 2230<br>Support PCIe/USB/CNVi Wi-Fi/BT module<br><br>1 x 80-pin IET interface                 |
| Storage                          |   |
| <b>Storage</b>                   | 1 x 2.5" Drive Bay (7mm HDD Restricted)   |
| Panel                            |   |
| <b>LCD Size</b>                  | 21.5", 16:9   |
| <b>Display Type</b>              | Full HD   |
| <b>Resolution</b>                | 1920 x 1080   |
| <b>Pixel pitch</b>               | 247.95um(H) x 247.95um(V)   |
| <b>Luminance</b>                 | 500 cd/m <sup>2</sup>   |
| <b>Contrast ratio</b>            | 1000  |
| <b>Viewing angle</b>             | 89 (U), 89 (D), 89 (L), 89 (R)  |
| <b>Response time</b>             | 14 ms   |
| <b>Backlight</b>                 | LED   |
| <b>Touch Type</b>                | Projective Capacitive Multi-Touch up to 10 points   |
| <b>Touch Light Transmission</b>  | 89 %  |
| <b>Touch Controller</b>          | USB touch (EETI)  |
| I/O                              |   |
| <b>USB Port</b>                  | 4 x USB 3.0   |
| <b>COM Port</b>                  | 1 x RS-232/422/485<br>1 x RS-232  |
| <b>SATA</b>                      | 1 x SATA III  |
| <b>Other</b>                     | 7 x Knockouts for Antenna Mounting<br>*5 from rear cover + 2 from IET bracket   |
| Display                          |   |
| <b>Graphic Chipset</b>           | Intel® Tiger Lake UP3 SoC integrated Graphics<br>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<br>FCC Class B   |
| Ethernet                         |   |



|                                       |  |
|---------------------------------------|--|
| <b>LAN Chipset</b>                    | 1 x Intel® I225LM 2.5 Gigabit Ethernet<br>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: 120W Adapter (24V @ 5.0A 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>                         | 7.3 Kgs  |
| <b>Vibration Test</b>                 | With SSD/M.2 SSD : 3Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30mins/axis   |
| <b>Shock Test</b>                     | Operating with SSD/M.2 : MIL-STD-810G, Method 516.6, Procedure I, functional shock=20G   |
| <b>IP Rating</b>                      | Front IP65<br>Rear IP41  |
| <b>Mounting Kit</b>                   | Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm<br>Panel Mount with mounting kits   |
| <b>Power Mode</b>                     | AT/ATX (ATX is default setting)  |
| <b>System Fan</b>                     | Fanless  |
| <b>Construction - Front</b>           | Die Casting with Cover lens  |
| <b>Construction - Rear</b>            | Black Die Casting  |
| <b>Dimension</b>                      | 538.05 x 341.05 x 63.55mm  |
| <b>Software Support</b>               |  |
| <b>OS Information</b>                 | Win10 / Linux  |
| <b>Ordering Information</b>           |  |
| <b>Ordering Information</b>           | <p>ARC-21W38-57E-B1R<br/>21.5" 1920x1080 Industrial Touch Panel PC, ErP Design, PCAP Multi Touch(ALC888S)<br/>11th Gen Intel Core i5-1145G7E 1.50 GHz CPU/2GLAN/2COM/4USB/SPK/12~24V input/24V Adapter</p> <p>Optional IET Module list:</p> <p>ACC-ARC-USB-01R<br/>4 x USB 3.0 IET module for ARC-1535/38</p> <p>ACC-ARC-AUDIO-01R<br/>HDMI + 5.1 CH audio IET module for ARC-1535/38</p> <p>ACC-ARC-MPCIE-02R<br/>HDMI + MPCIE w/SIM IET module for ARC-1535/38</p> <p>ACC-ARC-COM-01R<br/>2 x Isolated RS-232 IET module for ARC-1535/38</p> <p>ACC-ARC-COM-02R<br/>3 x RS-232 IET module for ARC-1535/38</p> <p>ACC-ARC-COM-03R<br/>2 x RS-232 + USB IET module for ARC-1535/38</p> <p>ACC-ARC-COM-04R<br/>2 x RS-232 + LAN IET module for ARC-1535/38</p> <p>ACC-ARC-GPIO-01R<br/>12-bit GPIO + 2-pin CAN bus IET module for ARC-1535/38</p> <p>ACC-ARC-OBDI-01R<br/>OBDI - CAN bus IET module for ARC-1535/38 (OBDI/EOBD for small vehicle)</p> <p>ACC-ARC-OBDI-02R<br/>OBDI - CAN bus IET module for ARC-1535/38 (J1939/J1708 for large vehicle)</p> <p>ACC-ARC-OBDI-03R<br/>OBDI - CAN bus IET module for ARC-1535/38 (ISO15765-4 for special large vehicle)</p> <p>E1702031833R USA Power Cord<br/>E1702031000R EU Power Cord<br/>E1702031834R Japan Power Cord<br/>E1702031830R UK Power Cord<br/>E1702031831R Australia Power Cord</p> |