



ARC-1238

**12.1" 11th Gen. Intel® Core™ Processor i7/
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** DI
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 22
Wide Voltage +12V ~ +24V Input, ErP Power
Available Expansion for Audio, USB, COM, HDM
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 ~ 12



Spec

System Information-

Processor

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

System Memory

1 x 260-pin SODIMM socket Max. up to 32GB DDR4 3200MT/s

I/O Chipset

EC ITE IT8528E

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-TGL

Expansion

Expansion

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/CNVi Wi-Fi/BT module

1 x 80-pin IET interface

Storage

Storage

1 x 2.5" Drive Bay (7mm HDD Restricted)

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

Onboard 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

Other

7 x Knockouts for Antenna Mounting
*5 from rear cover + 2 from IET bracket

Display

Graphic Chipset

Intel® Tiger Lake UP3 SoC integrated Graphics
Supports optional dual display

Spec. & Resolution HDMI: Max. resolution 4096x2160 @ 24Hz (Optional by IET module)

.Audio

Audio Codec Realtek ALC888S(co-layout 897)

Speaker Output 2 x 2W

.Certifications

Certification Information CE/ FCC class B

.Ethernet

W



LAN Chipset 1 x Intel® I225LM 2.5 Gigabit Ethernet
1 x Intel® I219LM Gigabit Ethernet PHY

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: 72W Adapter (19V @ 3.78A Adapter) AC-DC Adapter

.Mechanical & Environmental

Operating Temperature -10°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

Weight 2.4Kgs

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-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-OBDDII-01R
OBDDII - CAN bus IET module for ARC-1535/1538 (OBDDII/EOBD for small vehicle)

ACC-ARC-OBDDII-02R
OBDDII - CAN bus IET module for ARC-1535/1538 (J1939J1708 for large vehicle)

- E1702031835R USA Power Cord
- E170203183DR EU Power Cord
- E170203183BR Japan Power Cord
- E170203183ER UK Power Cord
- E1702031800R Australia Power Cord

