



## OFF-21W38

**21.5" Full-HD PCAP Multi-Touch Fanless Open Frame Panel PC with Intel® Core™ SoC i7/i5/i3 & Celeron® BGA Processor**

- > 21.5" Full-HD Open frame panel PC with PCAP Touch
- > Onboard Intel® Core Soc i7/i5/i3 & Celeron® BGA Processor
- > 2 x 260-pin DDR4 3200 MHz SO-DIMM supports up to 64GB
- > 1 x M.2 Type B 3042/3052/2242/2260/2280 (with 1 x PCI-e x1 (default) or SATA, USB 3.0 with 1 x SIMcard slot, support WWAN+GNSS or NVMe SSD
- > 2x GbE LAN, 4 x USB 3.0, Line-out, Mic-in, 1 x COM, DP++, HDMI/DP
- > Option for 4 x COM, 3 x USB2.0
- > 16bit GPIO
- > TPM 2.0
- > Slim & Strength Design
- > Fanless Operation from 0° ~ 45°C
- > Wide Voltage Input +12 ~ 24V DC
- > Option for Wi-Fi & BT function

### + Spec

#### System Information

<b>Processor</b>	Onboard Tiger Lake U 11th Intel® Core™ SoC i7/i5/i3 & Celeron® BGA Processor
<b>System Memory</b>	Default with 4GB DDR4 Memory Option supports up to 64GB DDR4 3200MHz SO-DIMM
<b>I/O Chipset</b>	EC iTE IT8528
<b>BIOS Information</b>	AMI uEFI BIOS, 256Mbit SPI Flash ROM
<b>Watchdog Timer</b>	H/W Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step
<b>H/W Status Monitor</b>	Monitoring System Temperature and Voltage with Auto Throttling Control
<b>CPU Cooler (Type)</b>	Fanless Heatsink
<b>Board</b>	EMX-TGLP

#### Expansion

<b>Expansion</b>	1 x M.2 (2230) E-Key support WiFi module
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#### Storage

<b>Storage</b>	Default with 128GB M.2 SATA Other Storage Device Reserve space for 1 x 2.5" SSD (by option)
<b>Other Storage Device</b>	Reserve space for 1 x 2.5" SSD (by option)

#### Panel

<b>LCD Size</b>	21.5", 16:9
<b>Display Type</b>	Full HD
<b>B/L Inverter/Converter</b>	LCD built in
<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 supports up to 10 points
<b>Touch Light Transmission</b>	89 %
<b>Touch Controller</b>	EETI

#### I/O

<b>USB Port</b>	4 x USB 3.0 2 x USB 2.0 (option)
<b>COM Port</b>	1 x RS232(default)/RS422/485, 4 x RS232(option, pin9 without power)
<b>GPIO</b>	16bit GPIO
<b>Expansion</b>	1 x M.2 (2230) E-Key support WiFi module
<b>Other</b>	6 x Antenna Mounting with Dust Cover (Reserve)

#### DC In/Out Characteristics

<b>Power Type</b>	AT/ATX
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#### Display

<b>Graphic Chipset</b>	Intel® HD Graphics 500
<b>Spec. &amp; Resolution</b>	2 x DP++: 1920 x 1080@60 Hz

#### Audio

<b>Audio Codec</b>	Realtek ALC897
<b>Audio Interface</b>	Mic-in, Line-out
<b>Audio Amplifier</b>	2 x Stereo Class-D 3W Audio Amplifier

#### Certifications

<b>Certification Information</b>	CE / FCC Class A
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#### Ethernet

<b>LAN Chipset</b>	1 x Intel® I219LM Gigabit Ethernet PHY (LAN1) 1 x Intel® I225LM 2.5 Gigabit Ethernet (LAN2)
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<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ45
<b>Mechanical &amp; Environmental</b>	
<b>Operating Temperature</b>	0°C ~ 45°C
<b>Storage Temperature</b>	-20°C ~ 60°C
<b>Operating Humidity</b>	0% ~ 90% Relative Humidity, Non-condensing
<b>Dimension (W x L x H)</b>	502 x 294 x 54 mm
<b>Weight</b>	5.0 Kgs
<b>Vibration Test</b>	With M.2 SATA : 1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 0.5hr/axis
<b>Shock Test</b>	Operating with M.2 SATA : IEC 60068-2-27 testing procedures, 10G for operation mode
<b>Mounting Kit</b>	Panel / Wall Mount with mounting kits, VESA 100mm x 100mm
<b>Power Requirement</b>	+12V~24V DC in 3 pins Phoenix connector and Power Din DC Jack Extend Power Connector for Reset
<b>Power Mode</b>	AT/ATX
<b>System Fan</b>	Fanless
<b>Relative Humidity</b>	0~90% Relative Humidity, Non-condensing
<b>Fanless</b>	Yes
<b>Drop</b>	ISTA 2A, IEC-60068-2-32 Test:Ed
<b>Software Support</b>	
<b>OS Information</b>	Windows 10 IoT, Linux, Windows 11 (by option)
<b>Ordering Information</b>	
<b>Ordering Information</b>	<p>OFP-21W38-630-A1R 21.5" Full-HD Multi Touch Open Frame Panel PC / Intel Celeron 6305E, 4GR, 128GB M.2 SATA, 4xUSB3, COM, 2xLAN, 2xDP++ without adapter</p> <p>OFP-21W38-111-A1R 21.5" Full-HD Multi Touch Open Frame Panel PC / Intel Core i3, 4GR, 128GB mSATA, 4xUSB3, COM, 2xLAN, 2xDP++ without adapter</p> <p>OFP-21W38-114-A1R 21.5" Full-HD Multi Touch Open Frame Panel PC / Intel Core i5, 4GR, 128GB mSATA, 4xUSB3, COM, 2xLAN, 2xDP++ without adapter</p> <p>OFP-21W38-118-A1R 21.5" Full-HD Multi Touch Open Frame Panel PC / Intel Core i7, 4GR, 128GB mSATA, 4xUSB3, COM, 2xLAN, 2xDP++ without adapter</p>