

Features

- 21.5" Industrial Compact Size Panel PC
- Intel Celeron J6412 Processor
- 1 x 260-pin SO-DIMM DDR4 slot, up to 32GB 3200MHz
- Flat Front Panel Touch Screen with IP66 Front Bezel
- Support Expansion via Full-size Mini-PCIe and M.2 slots
- Support TPM2.0 Hardware Security
- DC 9~36V Wide Range Power Input
- High Brightness 1,000 nits for option

Specifications

System	
CPU	Intel Celeron J6412 Processor (1.8GHz, 1.5MB L2 cache)
System Chipset	SoC
Memory	1 x 260-pin SO-DIMM up to 32GB DDR4 3200MHz

I/O Port	
USB	2 x USB 3.2 Gen2 type A 2 x USB 2.0 type A
Serial / Parallel	1 x RS-232/422/485 (Default RS-232; select via BIOS)
Audio	1 x Audio Line Out
LAN	2 x 2.5GbE LAN RJ-45
DP	1 x DP, support DP++
Power	1 x 3-pin Terminal Block Connector 1 x 2-pin Power Switch Connector

Option	
	VESA Stand
	4G LTE
	4 x USB 2.0 type A (TB-528U4)
	4 x USB 2.0 type A + 1 x Mini-PCIe + 1 x SIM slot (TB-528U4ME1)
	2 x COM (RS-232) (TB-528C2)
	1 x COM (RS-232) + 2 x USB 2.0 (TB-528C1U2)
	1 x COM (RS-232) + 2 x USB 2.0 + 1 x Power Button (TB-528C1U2P1)
	2 x COM (RS-232) + 1 x Mini-PCIe slot + 1 x SIM slot (TB-528C2ME1)
	2 x COM (RS-422/485, isolated) (TB-528C2I)
	2 x CAN (TB-528CAN2)
	1 x LAN + 2 x USB 2.0 type A (TB-528E1U2)
	1 x 2W Speaker
	1 x Auto Dimming

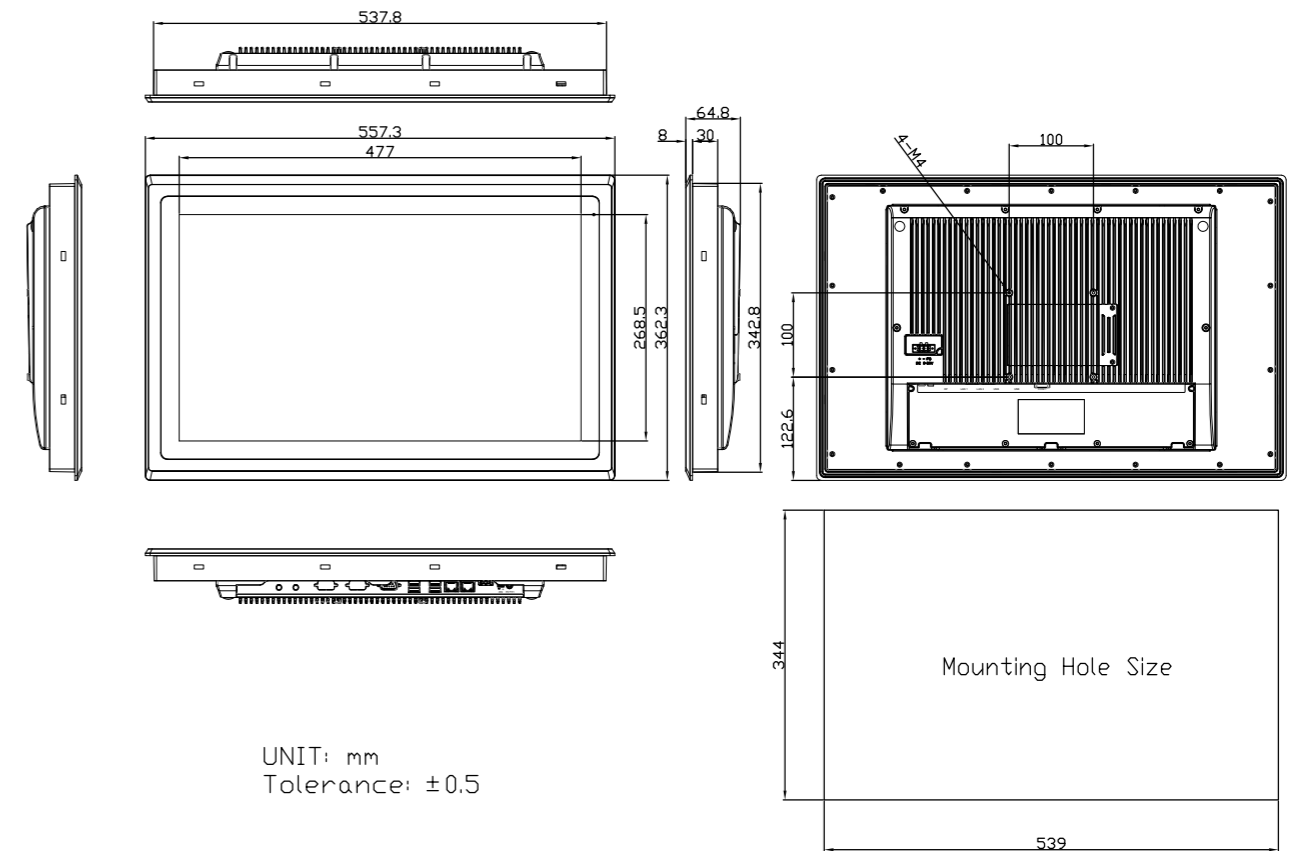
Storage Space	
Storage	1 x M.2 B-Key slot (Support SATA3 2242/2280, Default 2242)

Expansion	
Onboard Expansion Bus	1 x Mini-PCIe slot (full size) 1 x M.2 E-key 1 x Nano SIM Card Holder

Display	Standard	High Brightness Optional
Display Type	21.5" TFT-LCD	21.5" TFT-LCD
Max. Resolution	1920 x 1080	1920 x 1080
Max. Color	16.7M	16.7M
Luminance (cd/m ²)	250	1000
View Angle	178(H) / 178(V)	178(H) / 178(V)
Contrast	1000:1	3000:1
Backlight Lifetime	50,000 hrs	50,000 hrs

Touch Screen	
Type	Resistive Touch (for BR Model) Projected Capacitive Touch (for BP Model)
Interface	USB
Light Transmission(%)	Resistive Touch: 80% Projected Capacitive Touch: 90%

Dimensions



UNIT: mm
Tolerance: ±0.5

Power	
Power Input	DC 9~36V
Power Consumption	TBD

Mechanical	
Construction	Aluminum Die-casting Chassis
Mounting	Panel Mount, VESA 100 x 100
Dimensions (WxHxD)	557.3 x 362.3 x 64.8 mm
IP Rating	IP66 Compliant Front Bezel
Net Weight	TBD

Environmental	
Operating Temperature	0~50°C
Storage Temperature	-30~70°C
Humidity	10 to 95%@ 40°C, non-condensing
Certificate	Meet CE/FCC class A

Operating System Support	
	Windows 10 IoT, Windows 11

Ordering Information	
ARCHMI-821BR	21.5" FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Resistive touch screen, 9~36V DC input with adapter, Aluminum chassis.
ARCHMI-821BP	21.5" FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Projected Capacitive touch, 9~36V DC input with adapter, Aluminum chassis.
ARCHMI-821BR(H)	21.5" High brightness FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Resistive touch screen, 9~36V DC input with adapter, Aluminum chassis.
ARCHMI-821BP(H)	21.5" High brightness FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Projected Capacitive touch, 9~36V DC input with adapter, Aluminum chassis.