

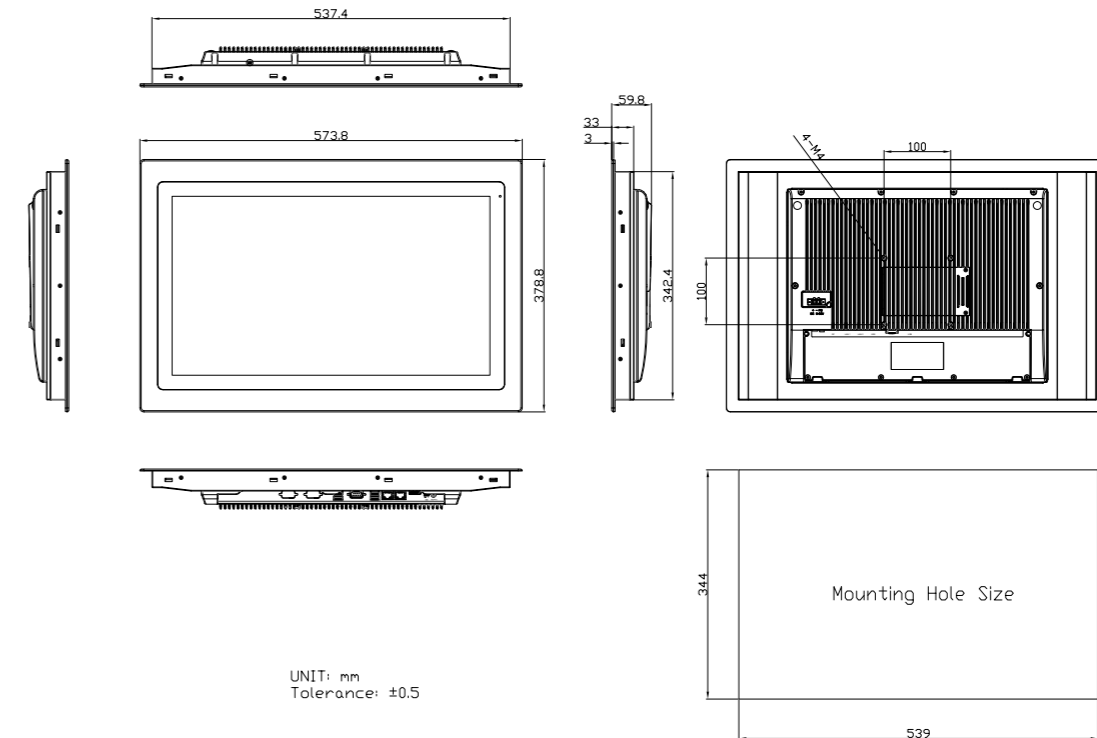
Features

- 21.5" Food Industrial 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/IP69K Front Bezel
- SUS304 Stainless Steel (option SUS316L)
- DC 9~36V Wide Range Power Input
- Support TPM2.0 Hardware Security

Specifications

System		
CPU	Intel Celeron J6412 Processor (2.0 GHz, 1.5MB L2 cache)	
System Chipset	SoC	
Memory	1 x 260-pin SO-DIMM up to 32GB DDR4 3200MHz	
TPM	TPM 2.0	
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 / WiFi 4/5/6+ / BT 4 x USB 2.0 type A (TB-528U4) 4 x USB 2.0 type A + 1 x Mini-PCle + 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-PCle 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-PCle slot (full size) 1 x M.2 E-key 1 x Nano SIM Card Holder	
Display		
	Standard	Optional High Brightness
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	30,000 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



Power	
Power Input	DC 9~36V
Power Consumption	TBD
Mechanical	
Construction	SUS304 Stainless Steel Front Bezel (default) / SUS316L Stainless Steel Front Bezel (for option) / Aluminum Die-casting Back Cover
Mounting	Panel Mount, VESA Mount 100 x 100
IP Rating	IP66/IP69K Compliant Front Bezel
Dimensions	573.8 x 378.8 x 59.8 mm
Net Weight	TBD
Environmental	
Operating Temperature	0~50°C
Storage Temperature	-30~70°C
Humidity	10 to 95%@ 40°C, non-condensing
Certificate	CE/FCC Class A / EN 1672-2 Compliant for P Model (optional)
Operating System Support	
Windows	Windows 10 IoT, Windows 11
Ordering Information	
FABS-821BR	21.5" FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Resistive touch screen, 9~36VDC input with adapter, Stainless front bezel and Aluminum chassis.
FABS-821BP	21.5" FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Projected Capacitive touch, 9~36VDC input with adapter, Stainless front bezel and Aluminum chassis.
FABS-821BR(H)	21.5" High brightness FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Resistive touch screen, 9~36VDC input with adapter, Stainless front bezel and Aluminum chassis.
FABS-821BP(H)	21.5" High brightness FHD fanless HMI barebone with Intel Celeron J6412 processor, 1 x DDR4 slot, Projected Capacitive touch, 9~36VDC input with adapter, Stainless front bezel and Aluminum chassis.