

# iTC-1170R-EXP

Fanless Panel PC w/ Intel® Elkhart Lake Processor & SuperCAP Power Backup module



## Features

- Intel® Celeron® Processor J6413 (1.5M Cache, up to 3.00 GHz)
- 17" 1280 x 1024 SXGA LCD display
- Fanless design w/ Aluminum Front bezel
- Flush front panel w/ IP65 waterproof compliant
- Support 2.5GbE LAN and USB 3.2 Gen1 (5Gbps)
- Rich I/O: 6 x COM/ 2 x LAN/ 4 x USB3.2(5Gbps)/ 8-bit DI/O & dual video output: DisplayPort and DVI-D
- Easy-accessible expansion for storage and wireless module.
- 9~36V wide-range DC input with reverse protection
- Support PCIe x 1 (half-length) and PCI 32-bit expansion
- Support SuperCAP Power Backup module

| System               |   |
|----------------------|---|
| CPU                  | Intel® Celeron® J6413 Quad-Core™ Processor 1.80GHz  |
| Memory               | 1 x 260 pin DDR4 SO-DIMM socket, supporting 3200MHz SDRAM up to 32GB (4GB DDR4 SO-DIMM pre-installed) |
| LAN                  | 1 x Intel® 225LM controller<br>1 x Intel® i210 / i211AT controller                                    |
| Watchdog Timer       | 1~255 levels reset  |
| TPM                  | Support TPM 2.0   |
| Storage              |   |
| 1st Device           | 1 x M.2 M-key 2242/ 2280 (SATAIII only)   |
| 2nd Device           | 1 x 2.5" SSD/ HDD tray*<br>*Not available when SuperCAP module is installed                           |
| Audio                |   |
| Type                 | 1 x Mic-in / 1 x Line out   |
| Speaker              | 2 x 1.5W speakers (optional)  |
| LCD Display          |   |
| Size/Type            | 17" TFT LCD Panel   |
| Max. Resolution      | 1280 x 1024, SXGA   |
| Max. Colors          | 16.7M   |
| Luminance            | 350 cd/m <sup>2</sup>   |
| Touch Screen         | Flat 5-wire Analog Resistive  |
| View Angle (U/D/R/L) | 60°/80°/80°/80°   |
| Button & Indicator   |   |
| Buttons              | Power on & Reset  |
| LED Indicator        | Power-on status/ HDD status/ RTC battery status   |
| Power System         |   |
| Power Input          | DC 9~36V<br>DC 12~28V (when SuperCAP module is installed)   |
| Power Consumption    | Typical 40W (w/o I/O cards)*when SuperCAP module is installed, min. 75W adapter is required.          |
| Power Backup time    | 50 seconds w/ SuperCAP module (800 farads)  |

|                |  |
|----------------|--|
| Remote Control | 1x3-pin terminal block for remote control and PWR LED output |
|----------------|--|

| Qualification |   |
|---------------|---|
| Certification | CE, FCC Class A   |
| Expansion     |   |
| Expansion Bus | 1 x Mini PCIe (PCIe x1+ USB2.0, Full size) w/ 1 x SIM card slot (for Wireless connection)<br>1 x PCIe x1 (for half-length) or 1 x PCI 32-bit slot (both Riser Cards are included in Standard Accessories)<br>*when SuperCAP module is installed, PCIe x1 and PCI slot are not available |

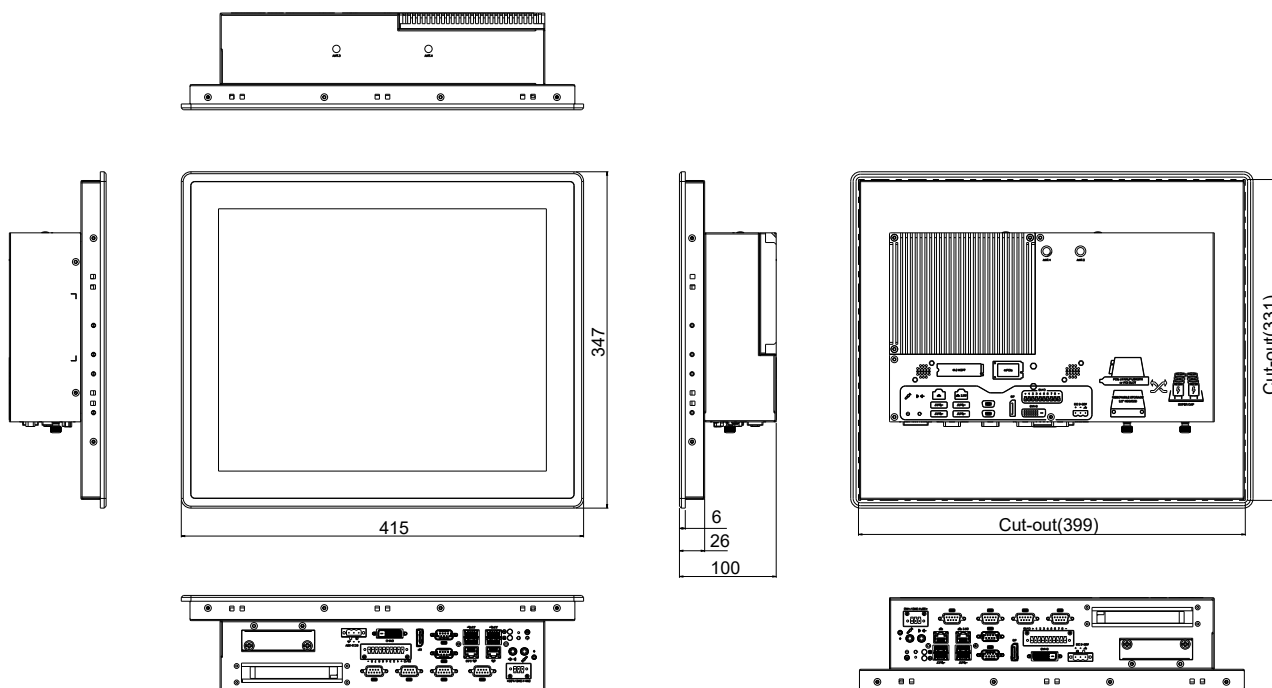
| External I/O |   |
|--------------|---|
| Serial Ports | 2 x DB-9 connectors for RS232/422/485<br>4 x DB-9 connectors for RS232                                |
| USB Ports    | 4 x Type-A USB 3.2 Gen 1 (5Gbps)  |
| LAN          | 1 x RJ-45 ports for GbE LAN<br>1 x RJ-45 ports for 2.5 GbE LAN  |
| Video Ports  | 1 x DVI-D connector, supporting Full HD resolution<br>1 x DisplayPort 1.4, supporting 4K2K resolution |
| Digital I/O  | 8 bit Digital I/O   |

| Mechanical            |  |
|-----------------------|--|
| Mounting Type         | Panel mount / VESA-75/100 mount (optional)   |
| Chassis               | Aluminum front bezel and steel-metal chassis |
| Dimension (W x H x D) | 415 x 347 x 100 mm                           |
| Weight (Net)          | 6.3 kg (w/o I/O cards and SuperCAP module)   |

| Environmental      |   |
|--------------------|---|
| Operating Temp.    | -10 ~ 55°C                                |
| Storage Temp.      | -20 ~ 70°C                                |
| Operating Humidity | 10 ~ 95% RH @ 55°C (non-condensing)       |
| Vibration          | 5 ~ 500Hz, 1Grms X,Y,Z axis (with SSD)    |
| Shock              | Operating 10G, 11ms X,Y,Z axis (with SSD) |

| OS Support                             |  |
|--|--|
| Windows®10 (64bit), Windows®11 (64bit) |  |

# Dimensions



## Optional Accessories

PAC-60W6A-FSP-ES 12V/5A 60W AC/DC power adapter kit

PAC-120W6B-FSP-ES 19V/6.3A 120W AC/DC power adapter kit  
(Note: Recommend for SuperCAP Module)

VMB-1170-EXP ITC-1170R-EXP VESA-mount bracket kit, w/ 75 x 75 mm & 100 x 100 mm VESA supports

64/128/256GB SSD 2.5" SSD MLC 64/128/256GB

64GB M.2 SSD M.2 M-key 2242/2280, 64GB, SATA3.0

WiFi-AT4550 Atheros, QCNFA324 Wi-Fi module w/ 2\*30cm internal wiring

ANT-D11 1 x Wi-Fi Dual-band 2.4G/5G antenna

ADK-11X ITC-11xx series audio kit

SCK-722C Assembly kit for SiP-41B/42B  
(Note: SCK-722C can only be installed with VMB-1170-EXP Mounting Bracket)

SiPB-1690B-HMI SiPB-1690B-HMI (Built-in SuperCAP Module)  
(Note: Visit the ARBOR website's Download Center to access the driver and SiP Management Utility files.)

