

# FLEX-BX200AI

2U AI Modular PC with 8th/9th Generation LGA 1151 Intel® Core™ i and Xeon® Processor



## Feature

- 2U AI Modular PC with 8th/9th Generation LGA 1151 Intel® Core™/ Xeon® processor with Intel® Q370/C246 chipset and DDR4 memory
- Four hot-swappable and accessible HDD drive bays, support RAID 0/1/5/10
- Support PCIe 3.0 by 4 and PCIe 3.0 by 8 slots
- M.2 2280 PCIe Gen 3.0 x4 NVMe™ SSD support
- Dual independent display with high resolution support
- Rich high-speed I/O interfaces on one side for easy installation
- Pre-installed and Pre-validated Ubuntu Operating System with pre-installed SDK's and Tools
- Support for optional Mustang-V100-MX8 PCIe Accelerator Card for offloading AI/DL workloads

## Specifications

Model		FLEX-BX200AI Series	
System	CPU	Intel® Xeon® E-2278GEL 2.0GHz (Up to 3.9GHz, 8 Core, TDP 35W) Intel® 9th Generation Core™ i7-9700TE 1.8GHz (Up to 3.8GHz, 8 Core, TDP 35W) Intel® 9th Generation Core™ i5-9500TE 2.2GHz (Up to 3.6GHz, 6 Core, TDP 35W) Intel® 8th Generation Core™ i5-8500 3.0GHz (Up to 4.1GHz, 6-core, TDP 65W)	
	Chipset	Intel® C240 Series Chipsets C246 (Coffee Lake) Intel® 300 Series Chipsets Q370 (Coffee Lake)	
	Memory	2 x 288-pin 2666/2400 MHz dual-channel DDR4 unbuffered DIMM supporting up to 64GB	
	Graphics Engine	Intel® HD Graphics Gen 9 Engines with Low power 16 execution unit, supports DX2015, OpenGL 5.X and OpenCL2.x, ES 2.0	
	Ethernet	LAN1: Intel® I219LM with Intel® AMT 11.0 supported LAN2: Intel® I210 PCIe controller	
Storage	4 x accessible 2.5" HDD/SSD SATA 6 Gb/s bay (with RAID 0/1/5/10 support) with LED indicator 1 x NGFF M.2(2280) M Key socket (support NVMe SSD)		
Wireless Communication	WLAN	802.11ac ,2.4/5Ghz (by M.2 2230)	
	Bluetooth	Bluetooth V5.1	
	WWAN and GNSS	M.2 3042 LTE (optional)	
I/O Ports and Switches	2 x HDMI output		1 x AC Inlet
	2 x GbE LAN (1x i219 support vPro, 1x i210)		4 x SMA
	6 x USB 3.2 Gen1 Type-A		Power button with power LED (power on=Blue)
	2 x RS-232 DB-9 type		AT/ATX mode switch
	1 x Mic in		Reset button
	1 x Line out		
TPM	TPM 2.0		
Expansion Slots	2 x PCIe 3.0x8 1 x PCIe 3.0x4 1 x M.2 B-Key (2242 for 3G, LTE with SIM slot, support PCIe 3.0x1, USB 3.2 Gen1) 1 x M.2 M-Key (2280) socket (support PCIe 3.0x4)		
Thermal Solution	System Fan x3, CPU Cooler x1		
Power supply	AC input ATX power supply - 350W Power supply - Input: 90VAC~264VAC, 50/60Hz - Output (max.): 3.3V@14A, 5V@16A, 12V@29A, -12V@0.3A		
Watchdog Timer	Software Programmable support 1~255 sec. System reset		
Construction	Chassis Construction	Metal Housing	
	Mounting	Wall and Rack Mount	
	Color	Black	
	Dimensions (LxDxH) (mm)	357 x 230 x 88	
	Net Weight	4 Kg	
Environmental	Operating Temperature	-10°C ~ 50°C	
	Storage Temperature	-20°C ~ 60°C	
	Operating Humidity	5% ~95%, non-condensing	
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak	
	shock	10G acceleration part to part (11ms)	

## Ordering Information

Part No.	Description
FLEX-BX200AI-XER/32G-R10	2U AI Modular BOX PC, 9th Gen Intel® Xeon® E-2278GEL 2.0GHz (Up to 3.9GHz, 8-core, TDP 35W), 32GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, R10
FLEX-BX200AI-XER/32G/V-R10	2U AI Modular BOX PC, 9th Gen Intel® Xeon® E-2278GEL 2.0GHz (Up to 3.9GHz, 8-core, TDP 35W), 32GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, with Mustang-V100-MX8, R10
FLEX-BX200AI-i7R/16G-R10	2U AI Modular BOX PC, 9th Gen Intel® Core™ i7-9700TE 1.8GHz (Up to 3.8GHz, 8-core, TDP 35W), 16GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, R10
FLEX-BX200AI-i7R/16G/V-R10	2U AI Modular BOX PC, 9th Gen Intel® Core™ i7-9700TE 1.8GHz (Up to 3.8GHz, 8-core, TDP 35W), 16GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, with Mustang-V100-MX8, R10
FLEX-BX200AI-i5R/8G-R10	2U AI Modular BOX PC, 9th Gen Intel® Core™ i5-9500TE 2.2GHz (Up to 3.6GHz, 6-core, TDP 35W), 8GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, R10
FLEX-BX200AI-i5R/8G/V-R10	2U AI Modular BOX PC, 9th Gen Intel® Core™ i5-9500TE 2.2GHz (Up to 3.6GHz, 6-core, TDP 35W), 8GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, with Mustang-V100-MX8, R10
FLEX-BX200AI-i5/8G-R10	2U AI Modular BOX PC, 8th Gen Intel® Core™ i5-8500 3.0GHz (Up to 4.1GHz, 6-core, TDP 65W), 8GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, R10
FLEX-BX200AI-i5/8G/V-R10	2U AI Modular BOX PC, 8th Gen Intel® Core™ i5-8500 3.0GHz (Up to 4.1GHz, 6-core, TDP 65W), 8GB DDR4, 2.5" 1TB HDD , TPM 2.0, 350W PSU, with Mustang-V100-MX8, R10

## Packing List

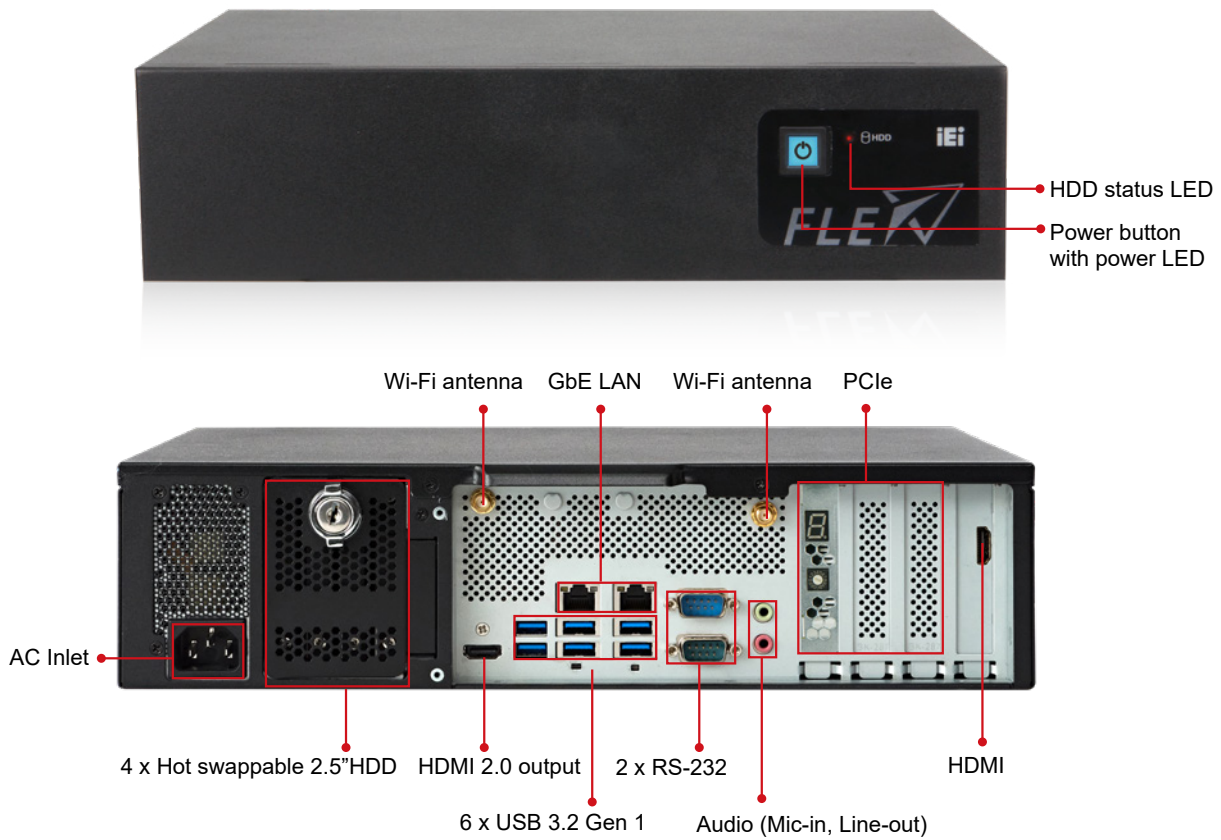
Item	Q'ty	Remark
32702-000200-100-RS	1	European power cord, 1830mm
41020-0521C2-00-RS	2	wall mount kit, black
44035-040062-RS	4	M4*6 oval head screw for wall mount kit, black
	1	Key for HDD cover

## Options

Part No.	Description
FLEX-BXRK-R10	Rack mount kit

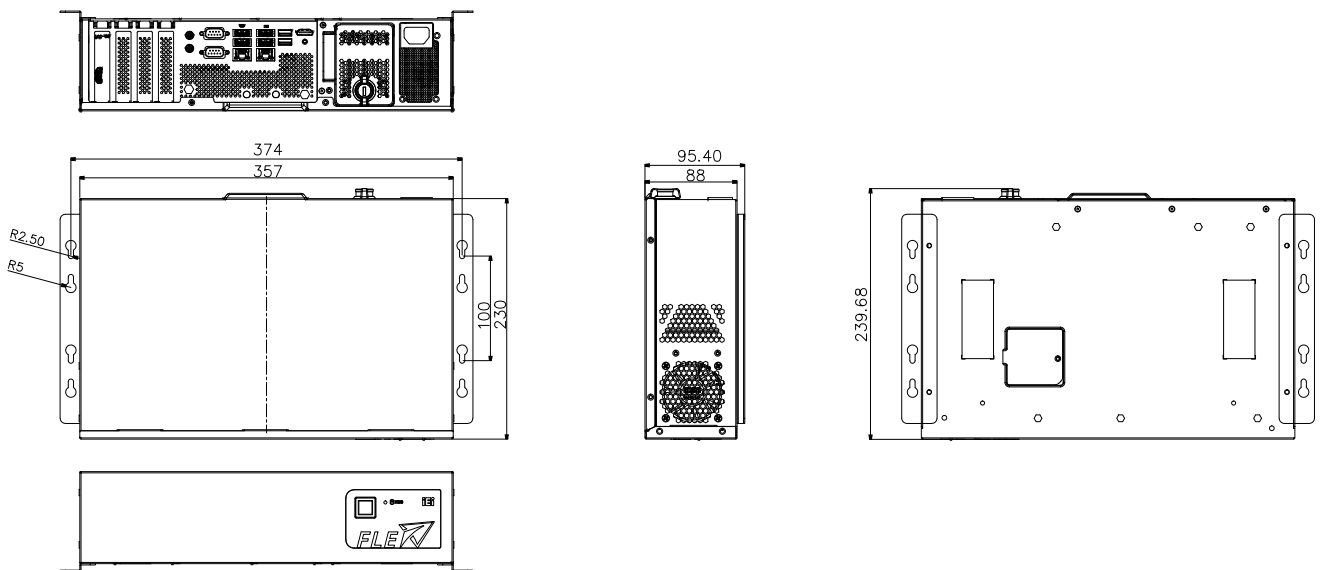


# I/O Interface



## FLEX-BX200AI

### Dimensions (Unit: mm)



# Configurable Systems

## Panel Kit Modules



### Specifications

Model		FLEX-PLKIT-F15	FLEX-PLKIT-F17	FLEX-PLKIT-FW15	FLEX-PLKIT-FW19	FLEX-PLKIT-FW22	FLEX-PLKIT-FW24
TFT LCD	LCD Size	15"	17"	15.6"	18.5"	21.5"	23.8"
	Max. Resolution	1024x768	1280x1024	1366x768	1366x768	1920x1080	1920x1080
	Brightness (cd/m <sup>2</sup> )	450	350	400	400	250	250
	Contrast Ratio	800:1	1000:1	500:1	1000:1	1000:1	3000:1
	LCD Color	16.2M	16.7M	16.2M	16.7M	16.7M	16.7M
	Viewing Angle (H/V)	160°/150°	170°/160°	170°/160°	170°/160°	170°/160°	178°/178°
	Backlight MTBF (Hrs)	70,000	50,000	50,000	50,000	30,000	30,000
Touch Screen	PCAP touch with 10-point multitouch and anti-glare coating						
Video Interface	LVDS						
IP Rating	IP66-rated front panel						
Other	Support FLEX-BX200-Q370 only						

### Ordering Information

Part No.	Description
FLEX-PLKIT-F15/PC-R10	15" 450cd/m <sup>2</sup> 1024 x 768 FLEX modular resistive touch window/LCD kit, R10
FLEX-PLKIT-F17/PC-R10	17" 350cd/m <sup>2</sup> 1280 x 1024 FLEX modular PCAP touch window/LCD kit, R10
FLEX-PLKIT-FW15/PC-R10	15.6" 400cd/m <sup>2</sup> 1366 x 768 FLEX modular PCAP touch window/LCD kit, R10
FLEX-PLKIT-FW19/PC-R10	18.5" 400cd/m <sup>2</sup> 1366 x 768 FLEX modular PCAP touch window/LCD kit, R10
FLEX-PLKIT-FW22/PC-R10	21.5" 250cd/m <sup>2</sup> 1920 x 1080 FLEX modular PCAP touch window/LCD kit, R10
FLEX-PLKIT-FW24/PC-R10	23.8" 250cd/m <sup>2</sup> 1920 x 1080 FLEX modular PCAP touch window/LCD kit, R10

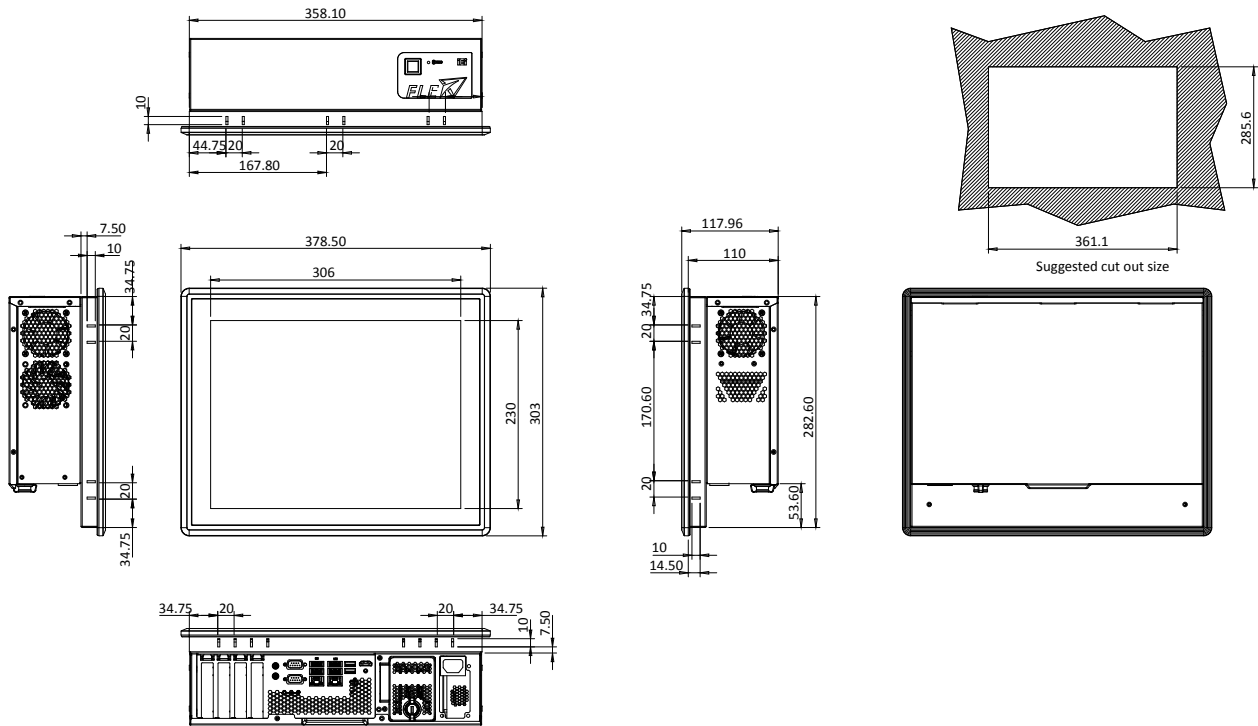
### Options

Item	FLEX-PLKIT-F15	FLEX-PLKIT-FW15	FLEX-PLKIT-F17	FLEX-PLKIT-FW19	FLEX-PLKIT-FW22	FLEX-PLKIT-FW24
Panel Mount Kit	FPK-12-R10	FPK-14-R10	FPK-13-R10	FPK-13-R10	FPK-13-R10	FPK-14-R10
Rack Mount Kit	FRK15C-R10	FRKW15C-R10	FRK17C-R10	FRKW19C-R10	N.A.	N.A.

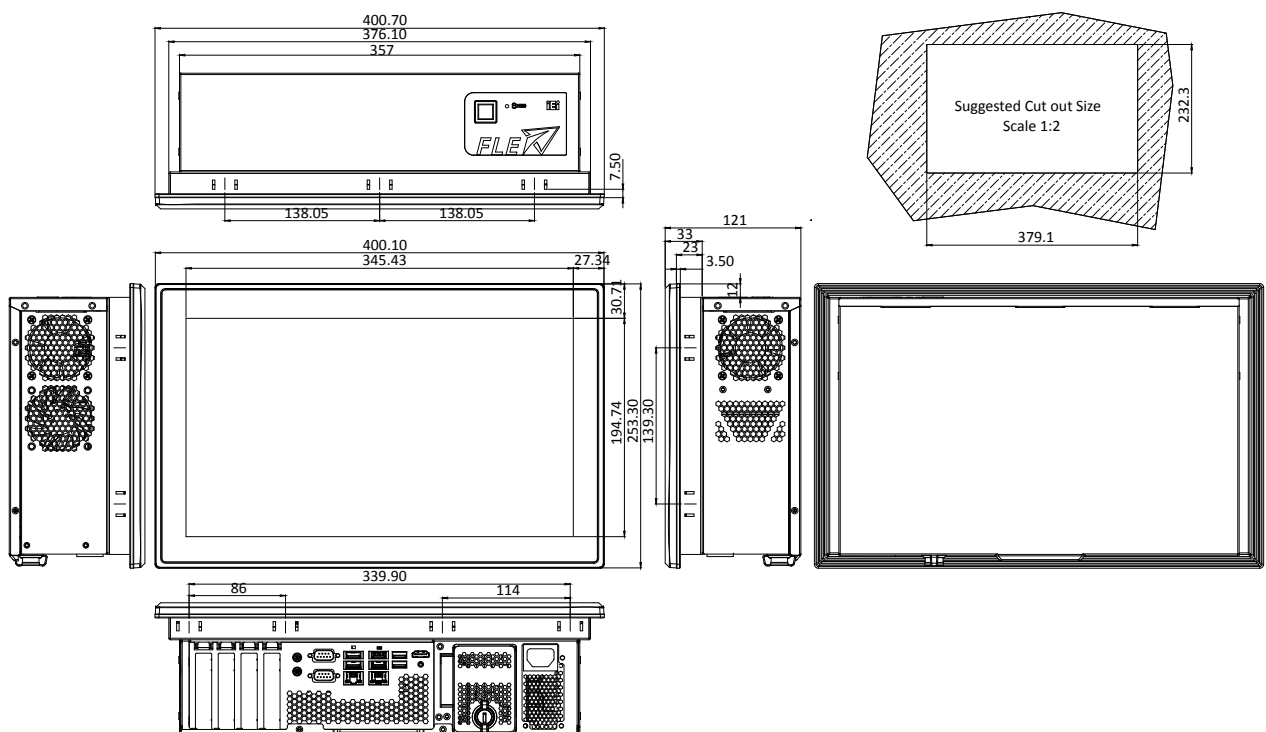


# Configurable Systems

## FLEX-PLKIT-F15 Dimensions (Unit: mm)

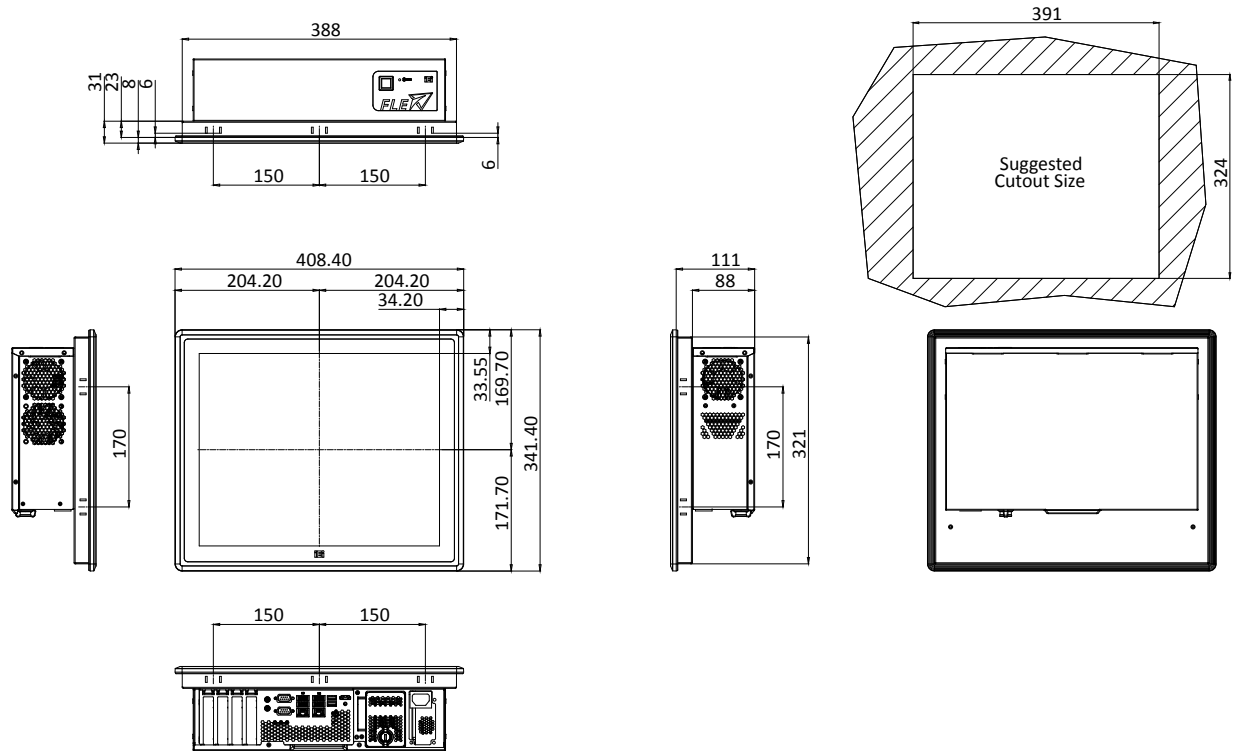


## FLEX-PLKIT-FW15 Dimensions (Unit: mm)

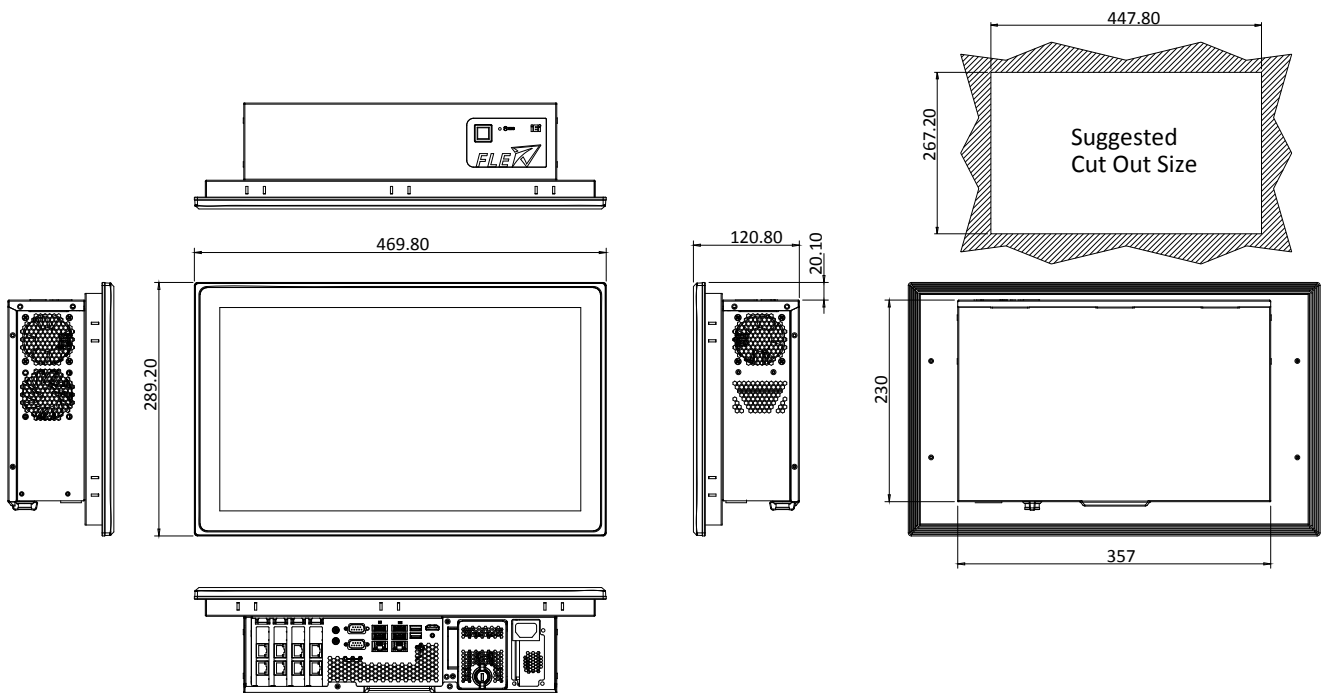


# Configurable Systems

**FLEX-PLKIT-F17 Dimensions (Unit: mm)**

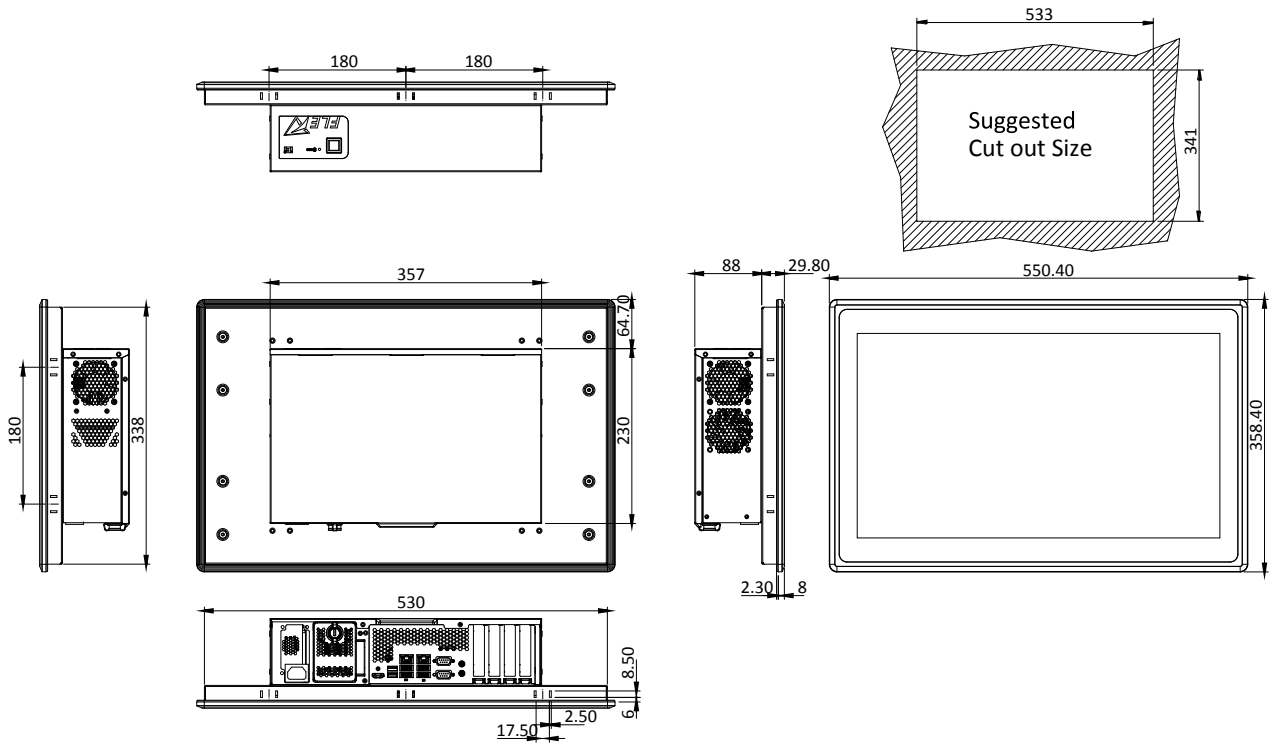


**FLEX-PLKIT-F19 Dimensions (Unit: mm)**



# Configurable Systems

**FLEX-PLKIT-FW22 Dimensions (Unit: mm)**



**FLEX-PLKIT-FW24 Dimensions (Unit: mm)**

