

Elkhart Lake IPC x6413E / x6211E / J6412

IPCBAX6413E / IPCBAX6211E / IPCBAJ6412



*) Front- & Back-kit Concept - User Manual

• Elkhart Lake x6413E Mainboard version (IPCBX6413E)

- Intel® Atom® x6413E Processor
- 4 cores with 3.00 GHz burst frequency
- 8GB RAM Memory & 120GB SSD Storage (customizable)
- High-performance, standard-cost & good cooling function (suggested for indoor & outdoor use)

• Elkhart Lake x6211E Mainboard version (IPCBX6211E)

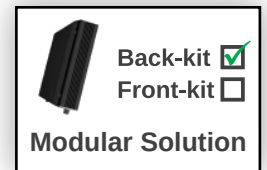
- Intel® Atom® x6211E Processor
- 2 cores with 3.00 GHz burst frequency
- 4GB RAM Memory & 120GB SSD Storage (customizable)
- Standard-performance, low-cost, low-heat & low-power consumption (suggested for outdoor)

• Elkhart Lake J6412 Mainboard version (IPCBJ6412)

- Intel® Celeron® J6412 Processor
- 4 cores with 2.60 GHz burst frequency
- 4GB RAM Memory & 120GB SSD Storage (customizable)
- High-performance, low-cost, high-heat & high-power consumption (suggested for indoors)

• Pre-installed Linux Ubuntu & Supports Windows 10/11

- Connectors - to mount on front-kit (screwable)
- VESA 100 mounting on back
- Integrated LAN & W-LAN
- 2 year guarantee (24/7 usage)



faytech's Intel-board IPC back-kits have a pre-installed Linux Ubuntu operating system, with Windows 10/11 available on request. All the IPCs have VESA 100 screw patterns on the back for easy mounting.

With this solution being a modular system, the back-kit can easily be connected to any of faytech front-kit models using various connectors and 4 screws. The IPCs are build for 24/7 operation and powered by one of the following 3 versions:

• x6413E Mainboard version

Intel® Atom® x6413E Processor, 4-core w/ 3.00 GHz burst - 8GB RAM & 120GB SSD Storage

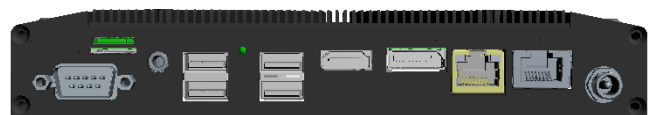
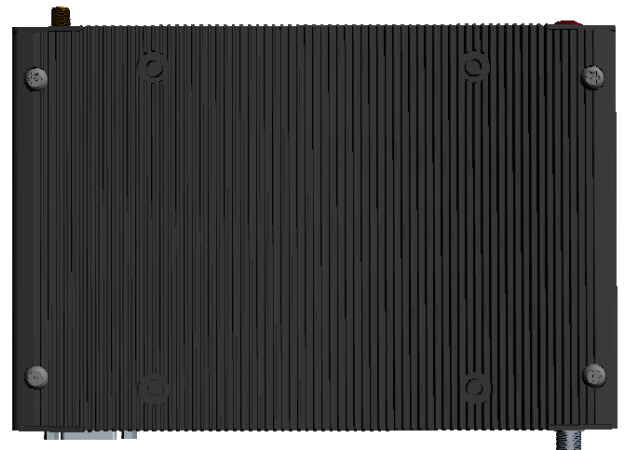
• x6211E Mainboard version

Intel® Atom® x6211E Processor, 2-core w/ 3.00 GHz burst - 4GB RAM & 120GB SSD Storage

• J6412 Mainboard version

Intel® Celeron® J6412 Processor, 4-core w/ 2.60 GHz burst - 4GB RAM & 120GB SSD Storage

It is the perfect choice for a wide variety of applications, including industrial automation, control panels, POS systems and digital signage, with easily switchable front-kits to ensure longevity.



Legend / Notes	
Applicable to version 1	(v1)
Applicable to version 2	(v2)
Applicable to all Versions	None



Product name				Elkhart Lake IPC (x6413E / x6211E / J6412)			
Model number / EAN number				IPCBAx6413E / TBD IPCBAx6211E / TBD IPCBAJ6412 / TBD			
Global Article Code	European Article Code	Release date (D/M/Y)	Version*	Global Article Code	European Article Code	Release date (D/M/Y)	Version*
30305012550	-	01/05/2023	v1 (x6413E)				
30305012548	-	01/05/2023	v1 (x6211E)				
30305012549	-	01/05/2023	v1 (J6412)				

PC System (3 available versions)			
Mainboard version	x6413E (PCBX6413E)	x6211E (PCBX6211E)	J6412 (PCBJ6412)
CPU	Intel® Atom® x6413E	Intel® Atom® x6211E	Intel® Celeron® J6412
Total Cores	4	2	4
Burst Frequency	3.00 GHz	3.00 GHz	2.60 GHz
Base Frequency	1.50 GHz	1.30 GHz	2.00 GHz
Cache	1.5MB L2	1.5MB L2	1.5MB L2
TDP (max. power consumption)	9 W	6 W	10 W
Graphic Burst Freq.	750 MHz	750 MHz	800 MHz
Graphic Base Freq.	500 MHz	350 MHz	400 MHz
Memory ¹⁾	8GB RAM	4GB RAM	4GB RAM
Storage ²⁾	120GB SSD	120GB SSD	120 GB SSD
GPU	Intel® UHD Graphics		
TPM	INFINEON 9672VU2.0 TPM 2.0		
Audio	Realtek® ALC897 Audio CODEC		
Network	10/100/1000Mbit Network; W-LAN		
Pre-installed OS	Linux Ubuntu		
Supported OS	Linux Ubuntu, Windows 10/11		

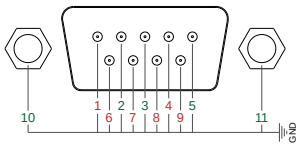
- 1) Memory adjustable upon request: range 4GB-32GB
- 2) Storage adjustable upon request

Operation / Mechanical	
Operating Temperature (°C)	-10 ~ +60
Humidity Range (RH)	10% - 90%
Net weight (kg)	2.10
Gross weight (kg)	2.90 (incl. cartontage)
Housing material	Aluminum case
Housing (mm) L × W × H	190.0 × 126.2 × 32.0
Mounting	VESA 100

IP Rating
IP40 (if combined with faytech front-kit)

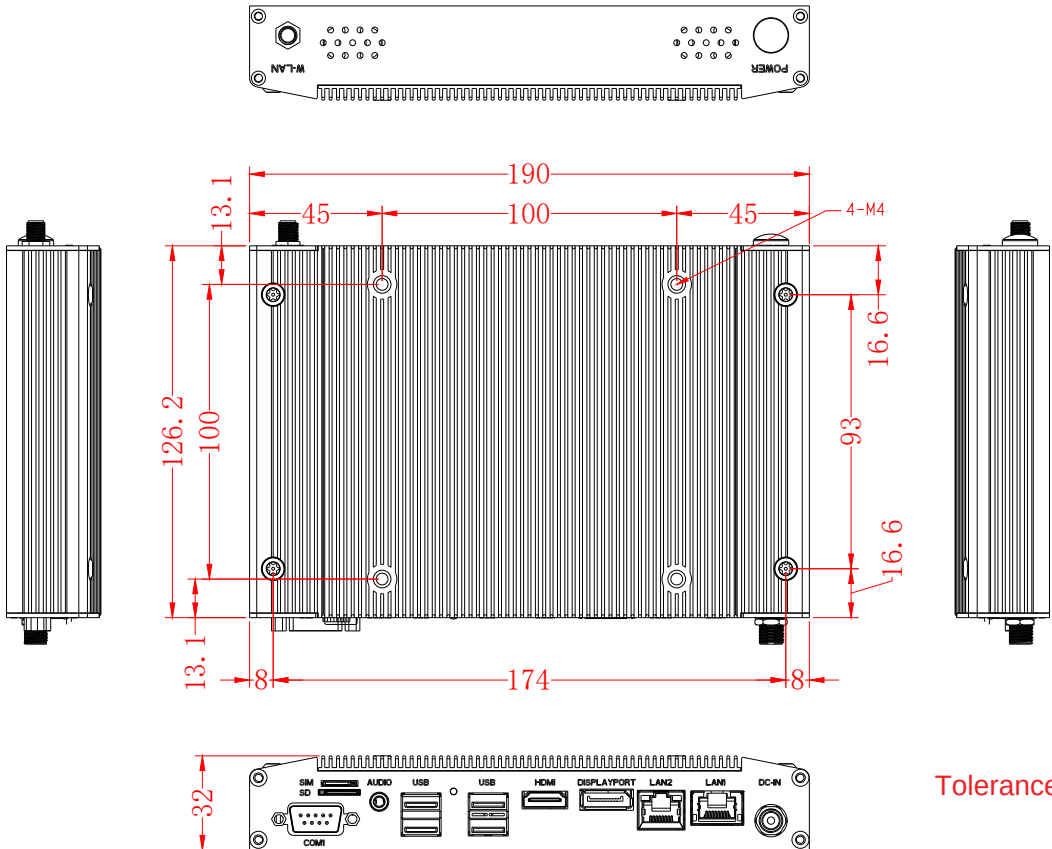
Power	
Power Indicator	Green LED
Power Supply	100-240V ACDC active switching; 12V DC-Out
Working Power (V)	12
Power Consumption (W)	TDP (see PC System)
Stand-By Consumption (W)	<1

External Connectors	
1x 12V DC-In (screwable)	1x HDMI
1x DisplayPort	2x 10/100/1000Mbit RJ45 Ports (LAN1 PoE)
2x USB 3.0	2x USB 2.0
1x Audio Jack	1x Wi-Fi Antenna (screwable)
1x Micro SD-card slot	1x SIM-card slot
1x COM (RS232) + 1x internal RS485 & 1x internal RS232	

COM (RS232) Pin Definition	
	2 RXD1
	3 TXD1
	5 GND
	10 GND
	11 GND

Connector - front-kit assembly
Various pin connectors with converter for front- / back-kit assembly (see separate pdf sheet)

Included in the Delivery
Power Supply (see Power section)
W-LAN Antenna (RP-SMA female)
Short Installation Manual



Tolerance: ISO 2768-1c

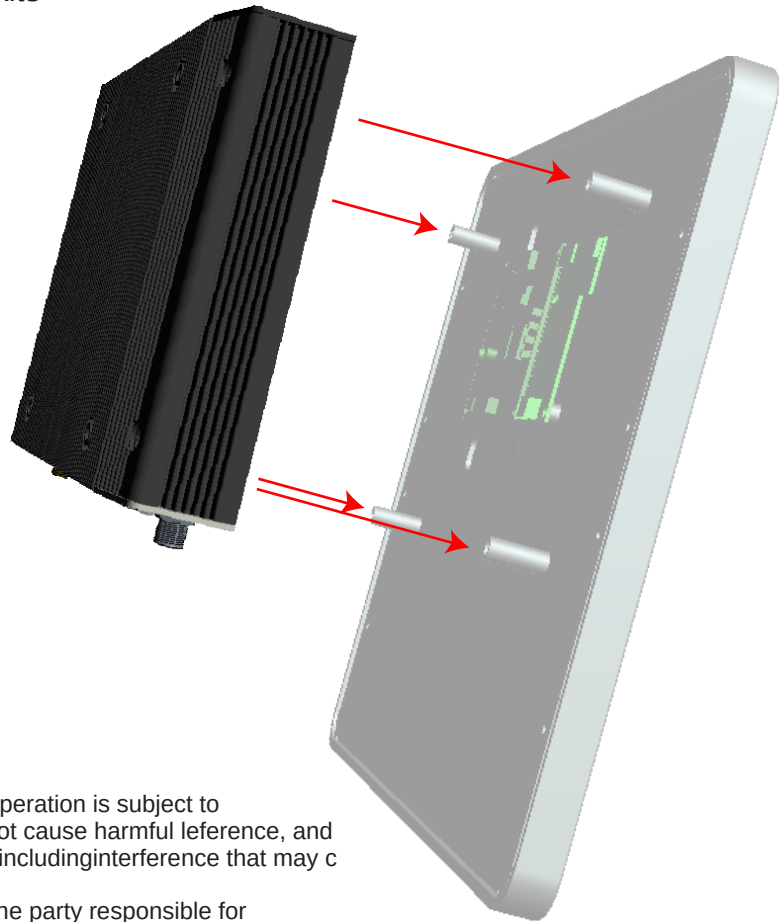
Front- & Back-kit concept:

Pre-assembled (together) or separately packaged available

Easily replace or switch back- or front-kits

Connected through various connectors

Assembly to be done by a professional



Update Notes:

Version:

v1

Changes:

- First version

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of

or more of the following measures:

Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.

FCC RF Exposure Warning Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.

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