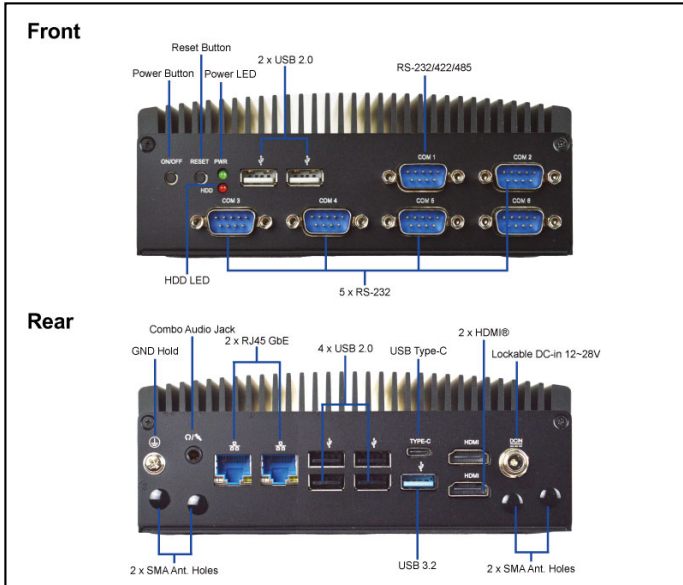


6 x COM + 8 x USB Fanless Embedded System by Intel® Atom® x7433RE/x7425E SoC processor, Wide Range DC-in Support (12-28V)



## Features

- **Powered by Intel® x7425E(Formerly Alder Lake-N, TDP 12W)/x7433RE(Formerly Amston Lake, TDP 9W)**
- **High-Performance Memory: 1 x DDR5 4800MHz SO-DIMM, up to 32GB**
- **Comprehensive I/O: 6 x COM, 8 x USB**
- **Dual 2.5GE LAN for high-speed networking**
- **Flexible storage and expansion option: 1 x SATA III, 1 x M.2 M-key, 1 x M.2 B-key, 1 x M.2 E-key**
- **Triple Display support: 2 x 4K HDMI®, 1 x 4K USB Type-C DP**
- **Advanced Power Protection: Supports RVP, OCP, and OVP**
- **Wide Power Input: DC-in 12-28V for greater power flexibility**

## Packing List

PART NUMBER	DESCRIPTION	QTY
BFLFASL1	BFLFASL1 Barebone	1
HCSFBMWM01B-F	Wallmount Kit	2
L01AS052-F	Lockable Adapter 12V/5A 60W	1
LCSCHBJC3XX-F	Screw Pack	1
Change according to shipping area	Power Cord (Region Specific)	1
G01-SATA7-15-200-F	SATA Cable	1
HCS501HS3-1F	DRAM Thermal Pads	2

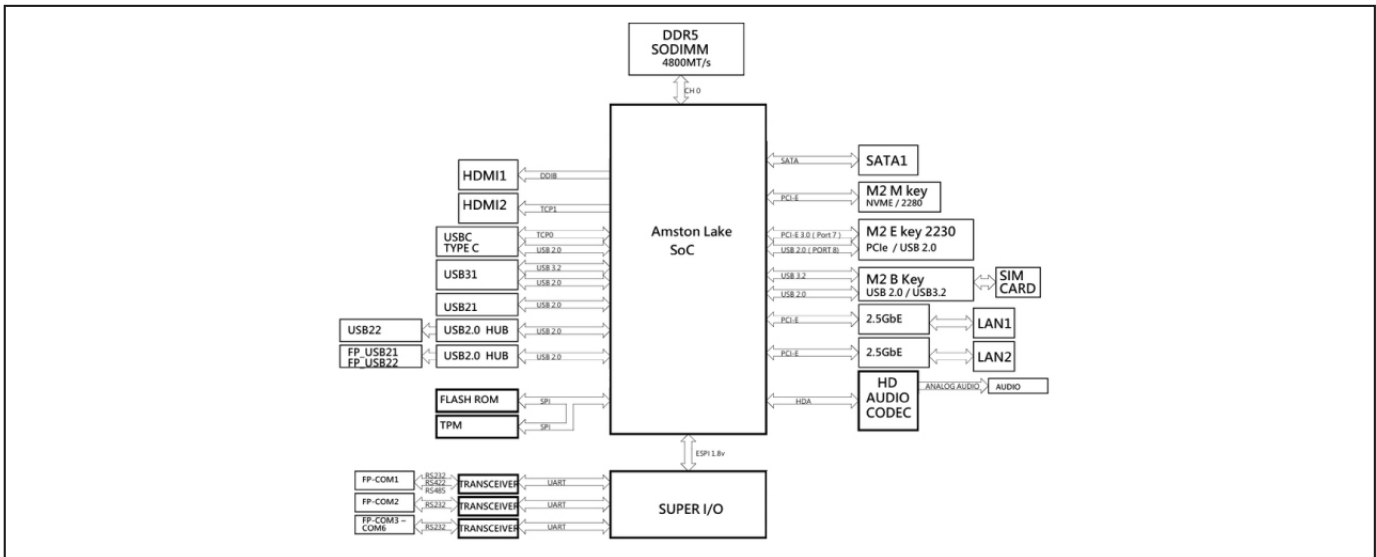
## Optional Accessory

PART NUMBER	DESCRIPTION	QTY
HCS3XXDINRAILPS-F	DIN Rail Clips	2
LCS306M06B-F	Screws for DIN Rail Clips	6

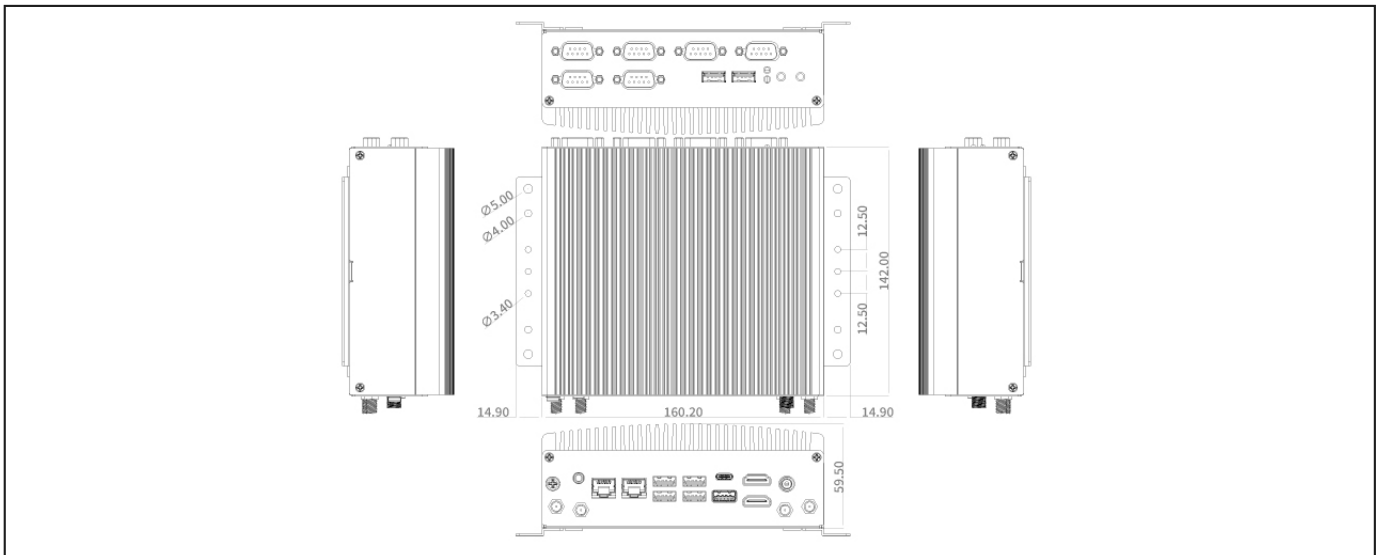
## Specifications

SYSTEM	
MB FORM FACTOR	Compact
CPU	Onboard Intel Atom® x7433RE Processor (Formerly Amston Lake, TDP 9W) Onboard Intel Atom® x7425E Processor (Formerly Alder Lake-N, TDP 12W) For additional compatible CPUs, please contact regional sales
CHIPSET	Intel® SoC
MEMORY	1 x DDR5 4800MT/s, Single Channel SO-DIMM, up to 32GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	Intel® PTT (Integrated fTPM) Default & TPM 2.0 (dTPM)
RTC BATTERY	Lithium Battery
OS SUPPORT	Windows® 11 (64bit), Windows® 10 (64bit), Linux
POWER	
POWER REQUIREMENT	DC-in 12-28V 60W Adapter: AC100-240V, DC12V/5.0A
POWER ON MODE	AT / ATX (Default) Mode
DISPLAY	
GPU	Intel® UHD Graphics
Type-C DP	1 x Type-C DP1.4a (Max Resolution: 4096 x 2304@60Hz)
HDMI®	1 x HDMI® 2.0b (Max Resolution: 4096 x 2160@60Hz), 1 x HDMI® 1.4 (Max Resolution: 4096 x 2160@30Hz)
MULTIPLE DISPLAY	Support 3 Displays
AUDIO	
CODEC	Realtek Audio Codec
AMPLIFIER	3W
LAN	
ETHERNET	2 x RJ45 for Intel® I226-V 2.5GbE
SYSTEM I/O	
REAR PANEL I/O	4 x USB 2.0 1 x USB 3.2 Gen 2x1 Type-C (10Gbps) Support DP ALT Mode 1 x USB 3.2 Gen 2x1 (10Gbps, Formerly USB 3.1 Gen 2) 2 x HDMI® 1 x DC-in (Lockable) 2 x RJ45 4 x Antenna Holes 1 x Audio (Line out, MIC) 1 x GND Hold
FRONT PANEL I/O	1 x RS-232/422/485 5 x RS-232 2 x USB 2.0 1 x Power Button 1 x Reset Button 1 x Power LED 1 x HDD LED
STORAGE	
SATA	1 x 2.5" SATA III 6Gb/s internal drive bay
eMMC	Onboard 64GB eMMC 5.1 (optional)
EXPANSION	
M.2	1 x B-Key 3042/3052 (USB 3.2/USB 2.0) for 4G/5G Module 1 x E-Key 2230 (USB 2.0/PCIe 3.0 x1) 1 x M-Key 2280 (PCIe 3.0 x2) Support NVMe
SIM	1 x Nano SIM Card Slot
MECHANICAL	
MOUNTING	Desktop, Wallmount, Din Rail
DIMENSIONS (W x H x D)	160.2 (W) x 142.0 (D) x 59.5 (H) mm
NET WEIGHT	1.4 kg
CONSTRUCTION	Aluminum Heatsink + Metal Chassis
ENVIRONMENT & CERTIFICATION	
SHOCK	15G, 11ms duration
VIBRATION	1 Grms/ 5- 500Hz/ Operation
OPERATING TEMPERATURE	-40°C ~ 60°C (-40°F ~ 140°F)
STORAGE TEMPERATURE	-40°C ~ 85°C (-40°F ~ 185°F)
OPERATING HUMIDITY	10 ~ 90% Relative Humidity, Non-condensing
CERTIFICATION	CE/FCC Class A

## Block Diagram



## Dimension Unit: mm



## Ordering Information

PART NUMBER	BFLFASL1-A111	BFLFASL1-A211	BFLFASL1-A311	BFLFASL1-A411
CPU	Intel® Atom® x7433RE Processor	Intel® Atom® x7433RE Processor	Intel® Atom® x7425E Processor	Intel® Atom® x7425E Processor
SECURITY	Intel® PT (fTPM)	TPM 2.0 (dTPM)	Intel® PTT (fTPM)	TPM 2.0 (dTPM)