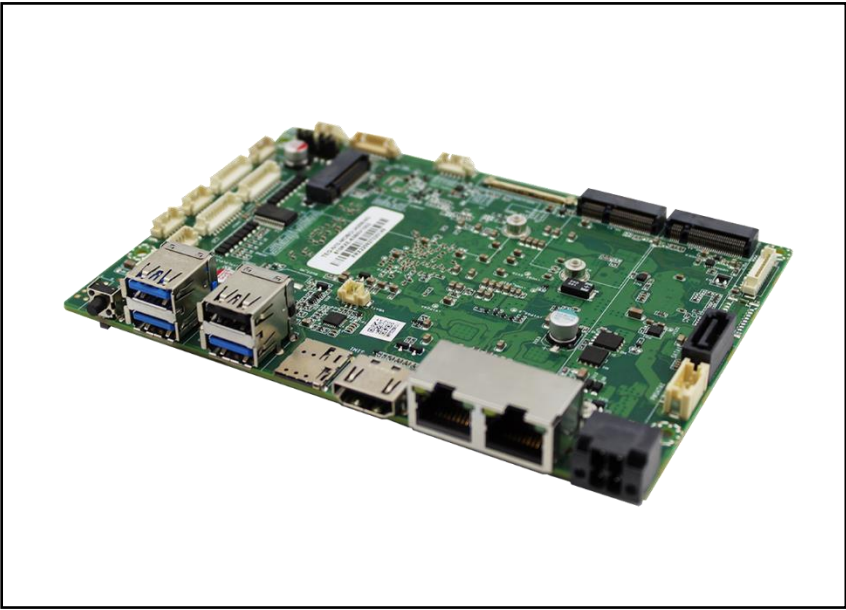


IEM-3160 Single Board PC



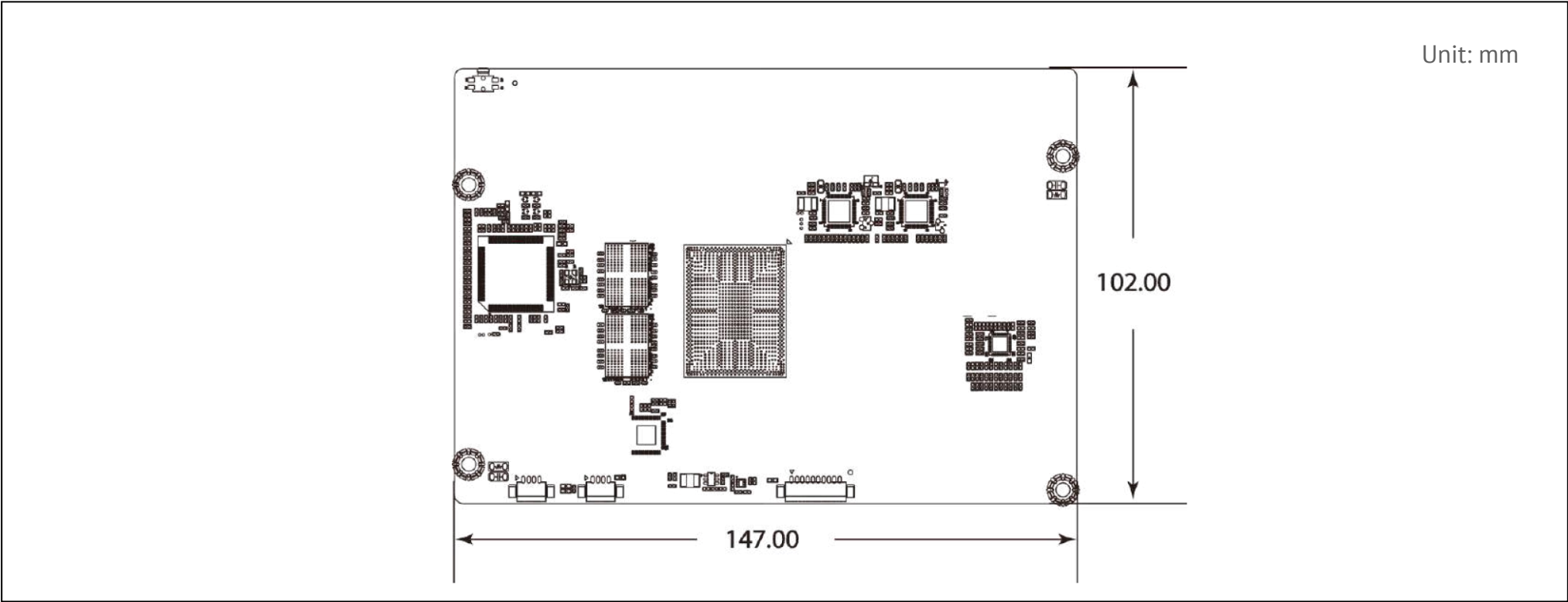
Features

- Intel® Apollo platform Pentium J4205 / Celeron J3455
- LPDDR4 up to 8GB
- 3 independent displays via DP, VGA, eDP/ LVDS
- 2 LAN (2 x Intel i225-V)
- Support 4G or 5G, WiFi6, UPS, PCIe X1/USB2.0/GPIO/TTL/HAD via board to board connector expansion
- 6 USB, 8 GPIO, 2 COM, 4TTL
- DC 24V
- 3.5" board size design: 146 x 102mm (L x W)
- CE/FCC Class B, ESD 8KV/15KV
- Windows 10, centos 7/8, ubuntu 18.04/20.04/22.04

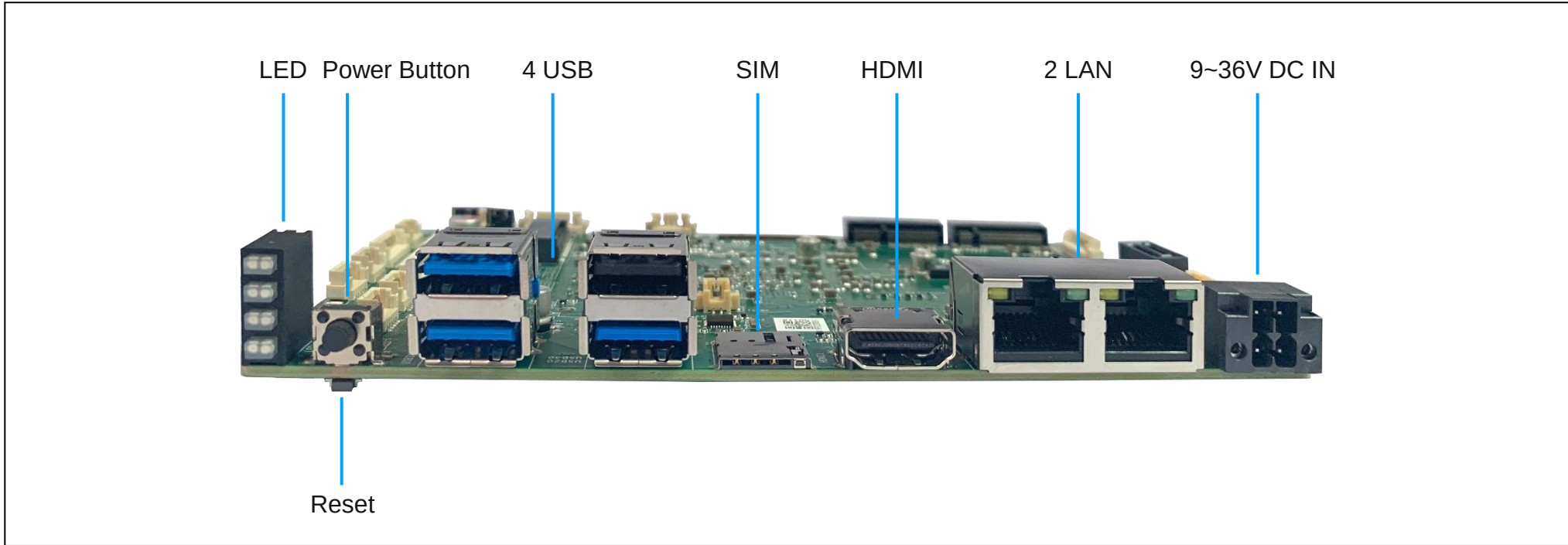
Specifications

Item	Specs	Description
Processor System	CPU	Intel® Apollo platform Pentium J4205 / Celeron J3455
	TDP	10 W MAX
	BIOS	AMI UEFI BIOS at 64 Mb
Memory	Technology	LPDDR4
	Max. Capacity	8 GB
Graphics	Controller	Intel Gen9 Graphic Engine
	Graphic Features	DirectX 12.0, OpenGL 4.3, OpenCL 2.0,HW Decode: H.264, MPEG2, VC-1, WMV9, H.265/HEVC, VP8, JPEG/MJPEG
Display	HDMI	1x HDMI up to 3840 x 2160 @ 30Hz
	LCD 1	1x eDP/LVDS up to 1920x1200 60Hz
	VGA	1x VGA up to 1920 x 1200@60Hz
External I/O	HDMI	1
	Ethernet	2 x Intel I225-V 2.5GbE LAN
	USB	1 x USB2.0, 3 x USB3.0
	SIM	1x Nano SIM
	LED	Power status, HDD R/W,USER1,USER2
	Power DC Jack	Phoenix 4pin
Internal Connectors	USB 2.0	2 x USB2.0
	VGA	1 x VGA
	SATA 3.0	1 x SATA3.0
	Serial Port	1 x RS-232/422/485, 1x RS-232
	Serial Port	4 x (TTL TX/RX/CTS/RTS/GND)
	GPIO	8-bit general purpose input/output
	Audio	1x HDA
	SMBus	1
	LPC	1
	CPU FAN	1 x 4-Wire Smart Fan,12V@2A
	Front Panel Control	Power LED, HD LED, Reset, Power Switch
	User LED	4
	UPS	1(Optional)
Expansion	M.2 E-Key	1x M.2 E-Key 2230 Support Wi-Fi (Support PCIe protocol)
	M.2 B-Key	1x M.2 B-Key 3052 Support 4G USB3.0
	M.2 M-Key	1x M.2 B/M-Key 2280 Sata3.0
Board Feature	Watchdog Timer	65536 lever, 0-65535 sec
Power Requirement	Supply Voltage	DC 9~36V
	Power Management	AT/ATX
	Max. Consumption	35W
Environment	Operational Temperature	0 ~ 60 °C, Extend -40°~85°C
	Storage Temperature	Non-Operating -40 ~ 85 °C (-40 ~ 185 °F)
	Relative Humidity (Operating)	Operating 40 °C @ 95% RH Non-condensing
	Relative Humidity (Storage)	Non-Operating 60 °C @ 95% RH Non-condensing
Physical Characteristics	Dimensions	146 x 102 mm (L x H)
OS Support	OS support	Windows 10, centos 7/8, ubuntu 18.04/20.04/22.04

Dimensions



Interface



Ordering Information

Part Number	CPU	TDP	Base Frequency	Core	Thread	LAN	USB3.0	USB2.0	COM	M.2	SATA 3.0	4G/5G	Wi-Fi	DC-Input
63B0-01	Celeron-J3455	10W	1.50 GHz	4	4	2	3	1	6	1 x M.2 B-Key+1 x M.2 M-Key + 1 x M.2 E-Key	1	Optional	Optional	9~36V
63B0-02	Pentium-J4205	10W	1.50 GHz	4	4	2	3	1	6	1 x M.2 B-Key+1 x M.2 M-Key + 1 x M.2 E-Key	1	Optional	Optional	9~36V