

J6412I-EM-A

Features

- Built-in Intel® Celeron® Quad-core Processor J6412
- Two DDR4 3200/2666/2400/2133 MHz Non-ECC Un-buffered SO-DIMMs up to 32 GB
- 2 x SATA 6Gb/s, 4 x USB 3.2 Gen 1, 4 x USB 2.0, 1 x COM headers
- 1 x PCIe 3.0/2.0 x4 slot, 1 x M.2 Socket 1 with E key, 1 x M key, type 2242/2260/2280 supports NVMe
- Multi-display: 1 x HDMI™, 1 x DisplayPort++, 1 x VGA

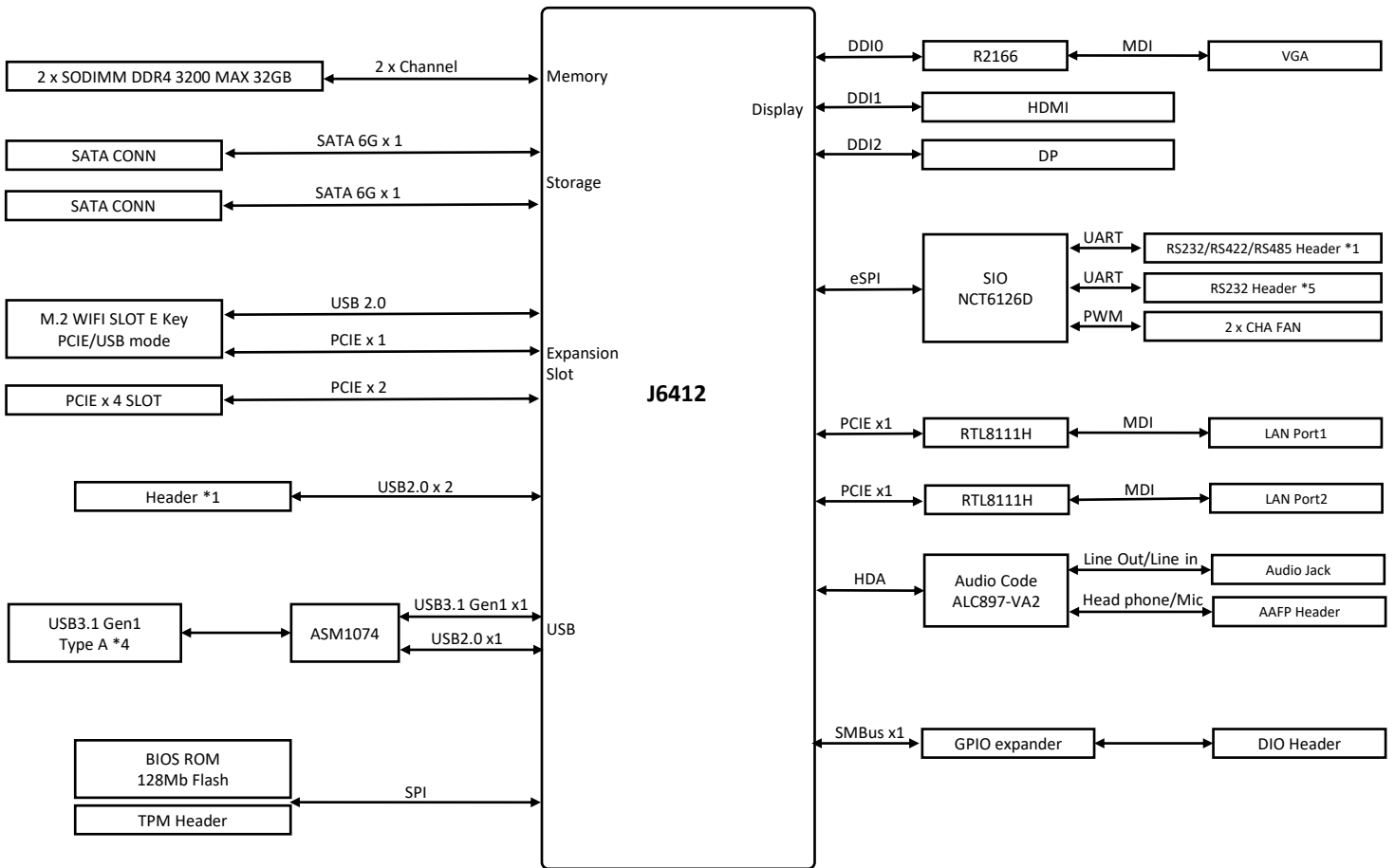


Specifications

Processor System	CPU	Intel® Celeron® Quad-Core J6412 SoC onboard Processors (Elkhart Lake) TDP 10W
	Chipset	Integrated
Memory	Technology	DDR4 3200/3000/2800/2666/2400/2133 MHz, (non-ECC)
	Max.	32 GB
	Socket	2 x So-DIMM
Display	Graphic Engine	Intel® UHD Graphics (default)
	HDMI	1, Supports HDMI 1.4b, up to 4096x2160 @ 60Hz
	Display Port++	1, Supports up to 4096 x2160 @ 60Hz
	VGA	1, Supports up to 1920x1200 @ 60Hz
Expansion Slot	PCIe 3.0/2.0	1 (PCIe x4 slot, x2 speed)
	M.2	1 x E key, type 2230 for WIFI/BT device (PCIe x1/USB2.0) 1 x M key, type 2242/2280 (PCIe x2) supports NVMe
Ethernet	Speed	10/100/1000 Mbps
	Controller	2 x Realtek RTL8111H (Support WOL/PXE)
	Connector	2 x RJ-45
Audio	Codec	Realtek ALC897 High Definition Audio
	Connector	Line-Out, Line-In
Storage	SATA port	2 x SATA Gen 3.0, Up to 6Gb/s
Rear I/O	HDMI	1
	DP	1
	VGA	1
	USB	4*USB 3.1 Gen 1, 4*USB 2.0
	Serial Port	1 (COM1 supports RS232/422/485: Ring/5V/12V Select, switch by jumper)
	Ethernet	2
	Audio jack	2
	DC-12V Power Input	1
Internal I/O Connectors	Serial Port	5 (COM2 supports RS232:Ring/5V/12V Select, switch by jumper, COM3~6 supports RS232)
	USB	2*USB 2.0
	LPT Port	1
	Chassis Fan	2 (PWM)
	Front Panel Audio Header (AAFP)	1
	Front panel as Power/Reset/HDD (F_Panel)	1 (10-1 Pin)
	Chassis Intrusion	1
	Speaker	1 (4 pin)
	Clear CMOS	1
	PORT80 debug	1
	GPIO	1 (8 Bit)
Power in Connector	1 (4-pin ATX Power Connector, DC in mode)	
Watchdog Timer	H/W	Yes
Security	TPM	1 x SPI TPM Header

Power	Power Type	12V DC-in (1x External DC jack; 1 x Internal 4-pin power connector)
BIOS	Follow Lenovo's Request	
OS & Software Support	Microsoft Windows Linux	Windows® 10 (64-bit) / Windows® 10 IoT Enterprise Ubuntu, RedHat Enterprise, Fedora Workstation, OpenSUSE
Environment	Operating Temperature	0 ~ 60°C
	Non-Operating Temperature	-40 ~ 85° C
	Relative Humidity	Operational humidity: 40°C@10%~95%
Mechanical	Dimensions	Mini-ITX, 170 x 170 mm
Certification	EMC	CE

Block Diagram



Order Information

Model name	Part number	Description
J6412I-EM-A	90ME07W*	J6412, DP, HDMI, VGA, Mini-ITX

* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

Packing List

Part number	Description	Quantity
13020*	IO shield	1
14013*	SATA 6G CABLE	1
13ME*	M.2 SCREW PACK	1

* The part number might vary due to part number revision.