

Intel® Jasper Lake Platform



Improved Performance

- New Tremont core, 6W/10W TDP, 10nm CPU/14nm PCH MCP, 1.5M L2 + 4M L3 cache, FIVR, 35x24 package
- Up to 4 Cores



Faster Connections

- Integrated WiFi/BT with 802.11ax/ac support w/ Discrete option
- Integrated USB 3.1 Gen 2 for 2x the speed vs. Gen 1
- Up to 8 PCIe 3.0 lanes



Gen 11 Graphics

- Next Gen Graphics and Display with significantly better Graphics up to 32 EUs improved Perf and new features
- Integrated IPU, MIPI-CSI



Security & Manageability

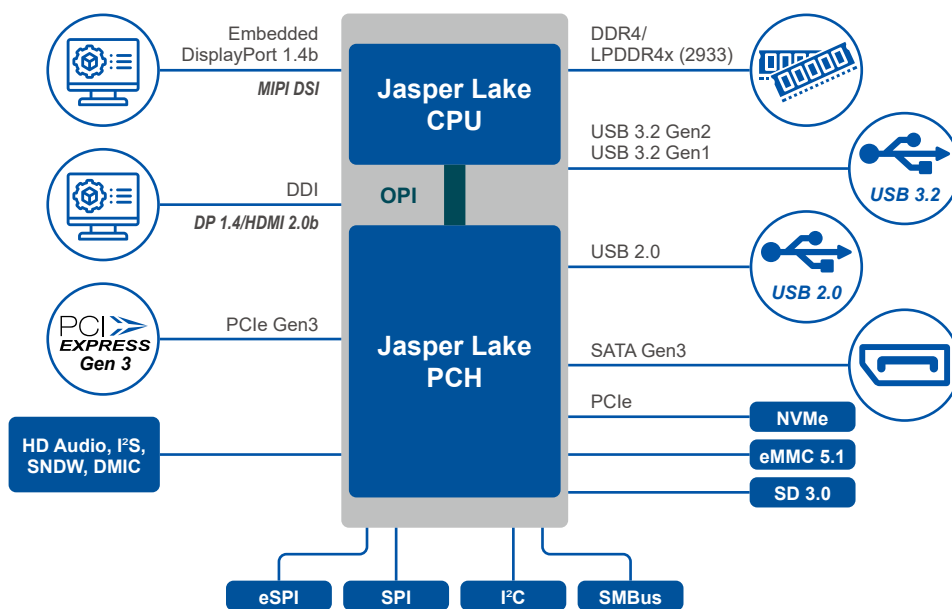
- Integral Intel Security Engine HDCP2.2, Playready 3, Widevine, Microsoft VSM.

Intel® Atom™ Comparison



	Cedar Trail	Bay Trail	Braswell	Apollo Lake	Jasper Lake
Launch	Q1'12	Q4'13	Q1'15	Q4'16	Q4'20
Process	32nm	22nm	14nm	14nm	10nm
Processor Frequency & TDP	D2550: 2C, 1.86GHz/10W N2800: 2C, 1.86GHz/6.5W N2600: 2C, 1.6GHz/3.5W	J1900: 4C, 2 GHz/10W N2930: 4C, 1.83 GHz/7.5W N2807: 2C, 1.58 GHz/4.3W E3845: 4C, 1.91 GHz/10W E3827: 2C, 1.75 GHz/8W E3826: 2C, 1.46 GHz/7W E3825: 2C, 1.33 GHz/6W E3815: 1C, 1.46 GHz/5W	N3710: 4C, up to 2.56GHz/6W N3160: 4C, up to 2.24GHz/6W N3060: 2C, up to 2.48GHz/6W N3010: 2C, up to 2.24GHz/4W	N4200: 4C, up to 2.5GHz/6W N3350: 2C, up to 2.3GHz/6W x7-E3950: 4C, up to 2.0GHz/6.5W x5-E3940: 4C, up to 1.8GHz/9.5W x5-E3930: 2C, up to 1.8GHz/12W	N6005: 4C up to 3.30GHz/10W N5105: 4C up to 2.90GHz/10W N4505: 2C up to 2.90GHz/10W N6000: 4C up to 3.30GHz/6W N5100: 4C up to 2.80GHz/6W N4500: 2C up to 2.80GHz/6W
Chipset TDP	Intel® NM10: 1.5W	N/A	N/A	N/A	N/A
Memory	DDR3 1066 MHz for D2550/ N2800 (Max. 4GB) DDR3 800MHz for N2600 (Max. 2GB)	DDR3L 1333MHz for J1900/ N2930/E3845/E3827 (Max. 8GB) DDR3L 1333MHz for N2807 (Max. 4GB) DDR3L 1066MHz for E3826/ E3825/E3815 (Max. 8GB)	DDR3L 1600MHz (Max. 8GB)	DDR3L 1866 MHz (Max. 8GB)	DDR4 2933Mhz (Max. 16GB)
Graphics	2 Independent Displays DirectX9 , OpenGL 3.0 Gfx @ up to 640MHz (D2550/ N2800)	Gen 7 graphics 2 Independent Displays Gen 7 4 EUs DirectX11.1 , OpenGL 4.0 Gfx @ up to 854MHz (J1900/ N2930)	Gen 8 graphics 3 Independent Displays Gen 8 LP 16 EUs DirectX12 2, OpenGL 4.2 Gfx @ up to 700MHz (N3700)	Gen9 Low Power graphics 3 Independent Diplots Gen9 LP 18 EUs OpenGL* ES 3.0/3.0+, OpenGL* 1.2 Gfx@ up to 750 MHz (N4200)	Gen11 Graphics, 3 Independent Diplots Gen11 32 EUs OpenGL* ES 3.2/4.5, OpenCL* 1.2
Video Decode	MPEG2, h.264, VC-1/WMV9 Up to 1080p	MPEG4, h.264, VC-1/WMV9 VP8 up to 1080p	H.265/HEVC @ level 5, H.264 @ Level 5.2, MPEG2, MVC, VC-1, WMV9, JPEG, VP8	4K Codec Decode & Encode for HEVC, H.264, VP8	4K Codec Decode & Encode for HEVC, H.264, VP9
Storage & IO	SATA 3Gb/s, 8 USB 2.0	SATA 3Gb/s, 1 USB 3.2 Gen 1, 3 USB 2.0, eMMC 4.51	SATA 6Gb/s, 4 USB 3.2 Gen 1, 1 USB 2.0, eMMC 4.51	SATA 6Gb/s, 5 USB 3.2 Gen 1, 2 USB 2.0, eMMC 5.0	SATA 6Gb/s, 3 USB 3.2 Gen 1, 2 USB 3.2 Gen 2, 4 USB 2.0, eMMC 5.1

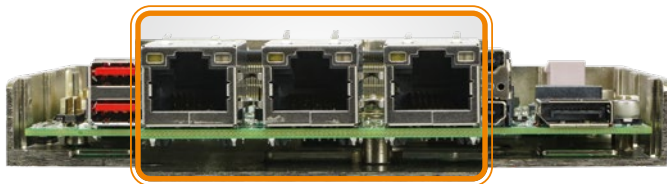
Block Diagram



Features of IEI Jasper Lake Product

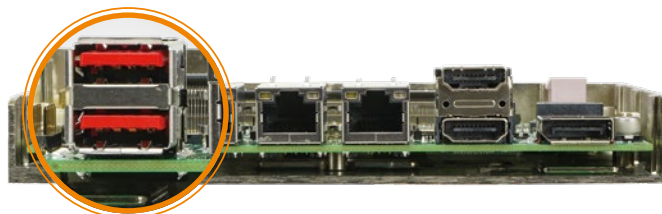
2.5GbE LANs

IEI provides products support triple 2.5 GbE LANs with i225V/LM which can provide a high-speed networks option for communication demand.



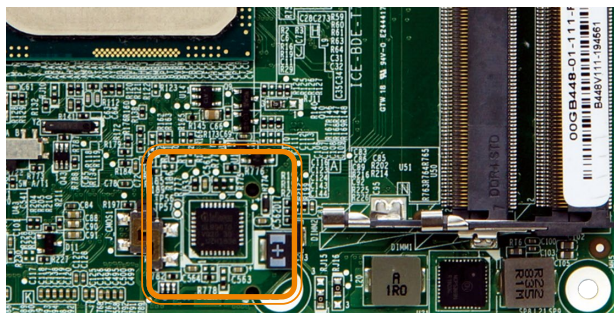
USB 3.2 Gen 2

IEI provides products support integrated USB 3.2 Gen 2 which is twice the speed more than USB 3.2 Gen 1.



SPI TPM

IEI provides products support Onboard TPM 2.0 a software management security solution for data protection and reliable passwords and digital certificates.



M.2

IEI provides new products supporting M.2 expansion cards in different types, such as SSD, WWAN and WLAN cards suitable for small devices.

