



EN-J6412DL

ELKHART LAKE 3.5 INCH SBC



Intel® Elkhart Lake
Celeron® J6412 processor



1 x HDMI, 1 x DP, 1 x LVDS/eDP
Up to 4096 x 2304 @60 Hz



Support Wi-Fi/BT module
Support 3G/4G module



3.5 inch form-factor
146 mm x 102 mm (5.74" x 4.02")

CPU

CPU	Intel® Celeron® J6412 processor
Chipset	SoC
Total Cores	4 Cores
Total Threads	4
TDP	10 W

System

GPU	Intel® UHD Graphics for 10 th Gen. Intel® Processors
Graphic Engine	DirectX, OpenGL, OpenCL
System Memory	Up to 32 GB, 2 x SO-DIMM DDR4
Storage	1 x M-Key M.2 (2280) for PCIe SSD 1 x 2.5" SATAIII Optional: Onboard eMMC5.1
TPM	Optional: TPM2.0
Watchdog Timer	Yes
Auto Power On	Yes
RTC	Set up independently every day, a week as a cycle
Power Requirement	DC-IN, 12 V~24 V
Dimensions	146 mm x 102 mm (5.74" x 4.02")
Fan	Smart Fan, active cooling
Operation System	Windows 11 (64bit) /Windows 10 (64bit) /Linux Ubuntu (64bit)
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F) @0.7m/s Air Flow
Humidity	95% @ 60°C (non-condensing)

Network

Network Controller	2 x Realtek RTL8111H Gigabit Ethernet
Wi-Fi/BT	1 x E-Key M.2 (2230) for Wi-Fi 6/BT
Mobile Network	1 x B-Key M.2 (3042) for 3G/4G, 1 x SIM Slot

Rear I/O

USB	3 x USB3.2 Gen1, 3 x USB2.0
Display Interface	1 x HDMI (Max.4096 x 2304 @60 Hz) 1 x DP (Max.4096 x 2304 @60 Hz)
Audio	1 x 2-IN-1 Headset
Ethernet Interface	2 x RJ45

Internal I/O

USB	2 x USB2.0, signal by 2 x 5pin USB header
Display	1 x 30pin dual channel 24bit LVDS (Max. 1920 x 1200@60 Hz) Optional: 1 x eDP
Serial Port	1 x RS232, signal by 2 x 5pin COM header 1 x RS232/422/485, signal by 2 x 5pin COM header
Audio	1 x 4pin SPEAKER 1 x 10pin GPIO, 4GPI, 4GPO
Others	1 x 8pin F_PANEL 1 x 3pin CLR_CMOS 1 x 7pin INVERTER 1 x 4pin SATA_PWR 1 x 4pin SYS_FAN