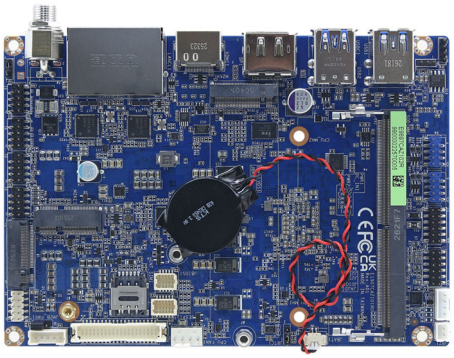
ECM-WCL

Intel® Core™ Series 3 Processor 3.5” Micro Module



Product Features

- Bottom Layer Soldered Processor
- Triple Display, 1 x DP++, 1 x USB Type-C support DP, 1 x HDMI, 1 x 2CH LVDS or eDP
- Two Gigabit Ethernet, 2 x 2.5GbE
- One 262-pin SO-DIMM socket supports DDR5 5600MHz SO-DIMM/ 6400MHz CSO-DIMM up to 64GB Max.
- Expansion Slot, M.2 Key-B, M.2 Key-E, M.2 Key-M
- DC in +12V ~ +24V

Specification

System Information	
Processor	Intel® Core™ Series 3 processors
System Memory	One 262-pin SO-DIMM socket supports DDR5 5600MHz SO-DIMM/ 6400MHz CSO-DIMM up to 64GB Max.
TPM	Onboard NuvoTon NPCT760AABYX support TPM 2.0

Expansion	
Expansion	1 x M.2 Key-E 2230 support Wi-Fi module and CNVi with PCIe x1 and USB 2.0 signals. 1 × M.2 Key-B 2242/3042/3052 with PCIe x1, USB 3.2 Gen2x1 and USB 2.0 (From USB Hub IC) signals, or PCIe x1 SSD, and USB 2.0, with 1 x SIM card slot for LTE/IO Cards support WWAN+GNSS. * Does not support I2S and PCM functions * Only supports one SIM card (co-lay 1 x 10pin FPC connector for uSIM card adapter) * 1 x 1 x 3 pin, pitch 2.00mm connector for M.2 module card 3.3V and 3.8V selection (Jumper default: 1-2 for 3.3V) 1 x M.2 Key-M 2280 with PCIe x2 Gen4 signal for storage NVMe SSD.

Storage	
Storage	1 × M.2 Key-B 2242/3042/3052 with PCIe x1, USB 3.2 Gen2x1 and USB 2.0 (From USB Hub IC) signals, or PCIe x1 SSD, and USB 2.0, with 1 x SIM card slot for LTE/IO Cards support WWAN+GNSS. 1 x M.2 Key-M 2280 with PCIe x2 Gen4 signal for storage NVMe SSD.

Display

Graphic Chipset	Intel® 3rd Gen Xe cores Graphics
Spec. & Resolution	1 x HDMI 2.1: 4096 x 2160 @ 60Hz 1 x DP++: 4096 x 2160 @ 60Hz 1 x DP (From USB Type-C): 4096 x 2160 @ 60Hz
Multiple Display	Triple Displays
LVDS	1 x LVDS: 1920 x 1080 2CH 18/24-bit or 1 x eDP: 1920 x 1080@60Hz 2 lanes, default LVDS

Audio

Audio Codec	RealTek ALC888S-VD2-GR
Audio Interface	Line-in, Mic-in, Line-out
Audio Amplifier	2 x 2W 4Ω Amplifier

Ethernet

LAN Chipset	1 x Intel® I226LM 2.5 Gigabit Ethernet Controller 1 x Intel® I226V 2.5 Gigabit Ethernet Controller
Ethernet Interface	10/100/1000/2.5G Base-Tx GbE compatible
LAN Port	2 x RJ-45

Power Requirement

Power Mode	AT/ATX (Default Setting: AT)

Software Support

OS	Windows 11, Linux

I/O

USB	2 x USB 3.2 Gen 2x1 Type-A (+5VSB/0.9A) on dual deck I/O 1 x USB 3.2 Gen 2x1 Type-A (+5VSB/0.9A) & 1 x USB Type-C 15V@3A with DP 1.4a support on dual deck I/O 4 x USB 2.0 by pin header
COM Port	2 x RS-232, 2 x RS-232/RS422/485
GPIO	1 x 8-bit GPIO

Mechanical & Environmental

Operating Temp.	Standard Temperature: 0°C ~ 60°C (-4~140°F) with 0.5m/s Air Flow

Ordering Information

Ordering Information	TBC