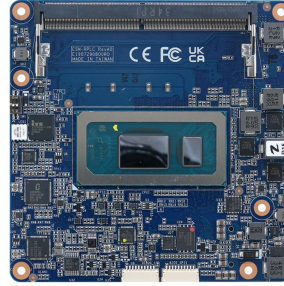


ESM-RPLC

COM Express Rev. 3.1 Intel®13th Generation Core™ Embedded Mobile Processor Type6 COMe Basic Module



Product Features

- COM Express Rev. 3.1 Intel®13th Generation Core™ Embedded Mobile Processor Type6 COMe Basic Module
- 1 x Intel® I226LM/IT
- On board Storage NVMe SSD (Optional)
- COMe Type 6 Compact Size: 3.74" x 3.74" (95 x 95 mm)
- 1 x 262-Pin DDR5 5200MT/s SO-DIMM Up to 32GB
- Intel® HD Audio Integrated on CPU
- Onboard nuvoTon_NPCT754AADYX TPM 2.0 Optional
- DC in +9V ~ +19V

Specification

System Information

Processor	13th Gen. Intel® P-Series Embedded / Industrial (28W) U-Series Embedded / Industrial (15W)
System Memory	1 x 262-Pin DDR5 5200MT/s SO-DIMM Up to 32GB
I/O Chipset	EC iTE IT5782
Watchdog Timer	H/W Reset, 1Sec. ~ 65535Sec. and 1Sec./Step
BIOS	AMI uEFI BIOS, 256 Mbit SPI Flash ROM
H/W Status Monitor	Monitoring System Temperature Voltage and FAN Status with Auto Throttling Control
TPM	Onboard nuvoTon_NPCT754AADYX TPM 2.0 Optional

Expansion

Expansion	2 x PCIe x4 (Gen4), Only for SSD, (From CPU) 7 x PCIe x1 (Gen3), (2 Lanes Shares with SATA), (From PCH), (Total Max 6 Devices)
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Storage

Storage	On board Storage NVMe SSD (Optional)
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Display

Graphic Chipset	Intel® Iris® Xe Graphics on i7/i5 Processor Intel® UHD Graphics on i3/Celeron® Processor Intel® Gfx Up to 96 EU
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Spec. & Resolution

3 x DDI, VGA, eDP/LVDS (BOM Optional)
VGA Supported by Build Option Via DP-to-VGA IC, Max. Resolution 1920x1200@60Hz
VDS Single/Dual Channel 18/24-bit LVDS from eDP-to-LVDS IC, Max. Resolution 1920x1200@60Hz in Dual Mode or eDP Build Option in Place of LVDS, 4 lanes, eDP 1.4b (by BOM)
USB4 Max. 2 x USB4 in Place of DDI 1/2, Supports DP 1.4a by DP Alternative Mode
DDI3 for Avalue EX-EX26 Carrier HDMI 2.1 or DP 1.4a
Select by BIOS, Support Feature Depend on Carrier Board.

Multiple Display

Four Display Support, Up to 4K (3DDI+eDP)

LVDS

CH7511B(eDP to LVDS)

DDI

3 x DDI, VGA, eDP/LVDS (BOM Optional)
HDMI/DP(Default)
VGA Supported by Build Option Via DP-to-VGA IC (In Place of DDI 3)

Audio**Audio Interface**

Intel® HD Audio Integrated on CPU

Ethernet**LAN Chipset**

1 x Intel® I226LM/IT

Ethernet Interface

10/100/1000/2500 Base-Tx GbE Compatible

Software Support**OS**

Windows 10 Enterprise 2021 LTSC
Ubuntu 22.04 (Kernel 5.15) above

Certification**Certification Information**

CE, FCC Class, RoHS Compliant

I/O**USB**

2 x USB 4 by TCP Ports (Optional by BIOS)
4 x USB 3.2 Gen2
8 x USB 2.0

COM Port

2 x UART (RX/TX Only)

SATA

2 x SATA III

DIO

1 x 8-bit GPIO

MIO

1 x SMBus
1 x LPC (Via ESPI-to-LPC Bridge IC)
1 x GP_SPI(TBC)
1 x I2C

Mechanical & Environmental**Operating Temp.**

Standard 0°C ~ 60°C (32°F ~ 140°F)
Industrial (Build Option with Selected SKUs): -40°C ~ 85°C (-40°F ~ 185°F)

Storage Temp.

-40°C ~ 85°C (-40°F ~ 185°F)

Operating Humidity

40°C @ 95% Relative Humidity, Non-condensing

Weight

0.44lbs (0.2Kg)

Power Requirement

+9V ~ +19V

Power Mode

AT/ATX

Ordering Information

Ordering Information

ESM-RPLC-S65-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i7-1365UE CPU

ESM-RPLC-S35-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i5-1335UE CPU

ESM-RPLC-S15-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i3-1315UE CPU

ESM-RPLC-S70-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i7-1370PE CPU

ESM-RPLC-S40-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i5-1340PE CPU

ESM-RPLC-S20-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i3-1320PE CPU

ESM-RPLC-300-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -U300E CPU

ESM-RPLC-300-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -U300E CPU

ESM-RPLC-W65-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i7-1365URE CPU

ESM-RPLC-W45-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i5-1335URE CPU

ESM-RPLC-W15-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i3-1315URE CPU

ESM-RPLC-W70-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i7-1370PRE CPU

ESM-RPLC-W50-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i5-1350PRE CPU

ESM-RPLC-W20-A1R
Intel® Raptor Lake-P SoC COM Express Module Type 6 on board -i3-1320PRE CPU
