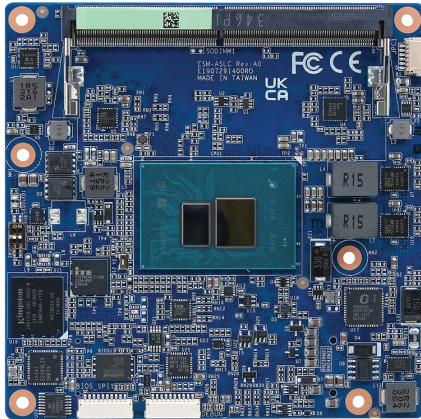




# ESM-ASLC

Compact Type6 COMe Module with Intel® Atom™ x7000RE Series Processors



## Features

- PICMG COM R3.1 Type 6 module with Intel® Atom™ x7000RE Processors
- Formerly Intel® Amston Lake Platform
- 1 x 262-pin DDR5 4800MHz SO-DIMM socket supports up to 16GB
- Supports In-Band ECC memory protection (selected SKUs)
- 1 x Intel® Ethernet Controller I226-IT(2.5GbE)
- DC in +9V ~ +19V
- Supports extended temp: -40°C ~ 80°C (-40°F ~ 176°F)
- Optional onboard TPM 2.0
- COMe Type 6 Compact Size: 3.74" x 3.74" (95 x 95 mm)

## SPECIFICATIONS

System	
CPU	Intel® Atom™ x7000RE Series Processors
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM socket supports up to 16GB. Select SKUs support In-Band ECC memory protection.
BIOS	AMI uEFI BIOS, 256 Mbit SPI Flash ROM
I/O Chipset	EC iTE IT5782VG-I-128/BX or Equivalent
Ethernet	Intel® Ethernet Controller I226-IT (2.5GbE)
Audio	Intel® HD Audio Integrated on CPU
Storage	eMMC 5.1 Up to 128GB (Optional)
Watchdog Timer	H/W Reset, 1Sec. ~ 65535Sec. and 1Sec./Step
H/W Status Monitor	CPU temperature monitoring. Voltages monitoring. CPU fan speed control
Expansion	4 x PCIe Gen3 x1 or 1 x PCIe Gen3 x4 or 2 x PCIe Gen3 x1
TPM	Onboard TPM 2.0 (Optional)
OS Support	Microsoft® Windows 11 64-bit. Linux
Display	
Chipset	Intel® UHD Graphics
Resolution	1 x HDMI 2.0b: 1920x1080 as Default or 4096x2160 @ 60Hz set by Bios. *VBT1 use Vbios for Full HD/ no display audio. VBT3 use Vbios for output 4K/ support display audio 1 x DP 1.4a: 3840x2160 @60Hz 1 x LVDS (via eDP-to-LVDS): 1920x1080 @60Hz LVDS via CH7511B or 1 x eDP 1.4b(Optional): 3840x2160 @60Hz
Multi-Display	Support 3 Independent Display
LVDS	CH7511B (eDP to LVDS)
DDI	3 x DDI DDI1: 2 CH LVDS (via eDP-to-LVDS) or eDP(By BOM Optional) DDI2: DDI Signal TCPO: DDI2 signal or Type C signal I/O



I/O	
USB	8 x USB2.0, 2 x USB3.2 Gen 2x1 or 8 x USB2.0, 4 x USB3.2 Gen 2x1 or 8 x USB2.0, 4 x USB3.2 Gen 2x1
COM Port	2 x UART (RX/TX Only)
GPIO	1 x 8-bit GPIO
SATA	2 x SATA III or N/A
MIO	1 x SMBus, 1 x LPC, 1 x eSPI (W-B 10Px1 1.0mm 90D for debug conn), 1 x I2C, 1 x SPI
Mechanical, Power, and Environment	
Power Requirement	+9 ~ +19V
Power Type	AT/ATX
Operating Temperature	Extended Temp: -40°C ~ 80°C (-40°F ~ 176°F)
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Form Factor	COM Express Modules
Dimensions	3.74" x 3.74" (95 x 95 mm)
Weight	0.16lbs (0.07kg)

\* All product specifications and images are subject to change without notice. Last update: 02/10/2025

