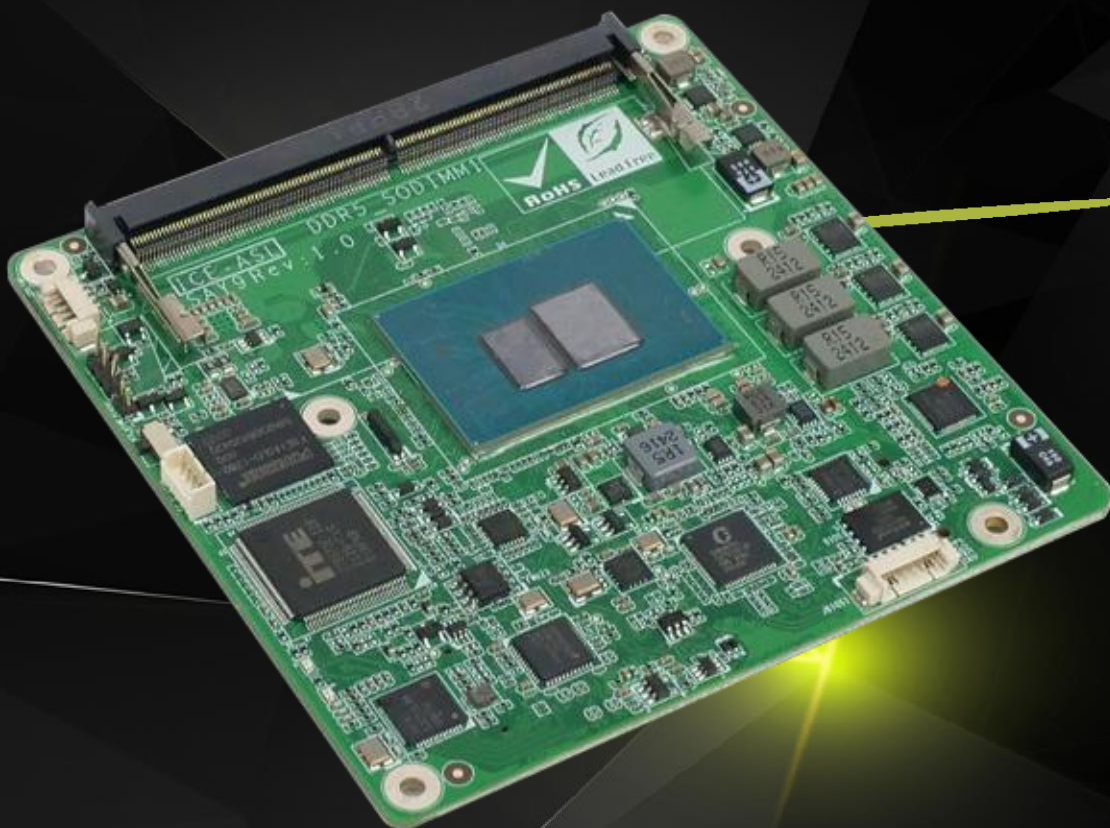


ICE-ASL-T6C

COM Express® R3.1 Type 6 Module Compact size

- Support Intel® Amston Lake / Twin Lake Atom™ series SOC processor
- Support DDR5-4800 SO-DIMM, up to 16GB
- Support On board eMMC (Option)
- Support PCIe Gen3, USB3.2 Gen2, 2.5GbE



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ICE-ASL-T6C

COM Express® R3.1 Type 6 Module
Compact size



Next-Generation Intel® Atom® Platform

ICE-ASL is powered by the latest Intel® Amston Lake / Twin Lake Atom™ x7000 Series SoC, delivering improved performance while maintaining low power consumption. It is ideal for industrial control, HMI, and edge computing systems that require long product lifecycle support.



Future-Ready COM Express® Type 6 Design

Compliant with COM Express® R3.1 Type 6, ICE-ASL supports DDR5-4800 memory up to 16GB in a compact 95 x 95 mm form factor. The modern architecture ensures long-term scalability and compatibility with standard carrier boards.



Rich High-Speed Connectivity

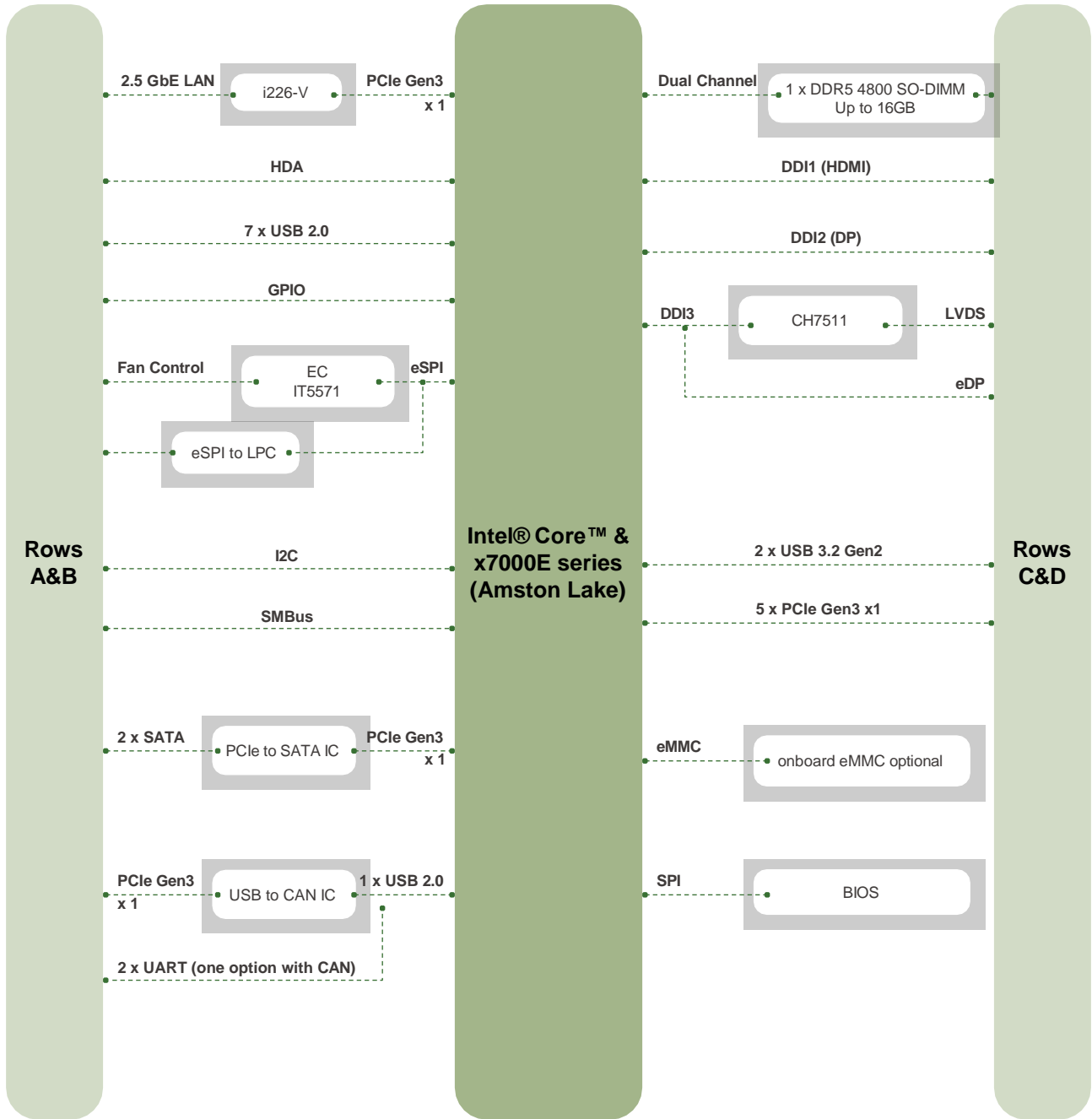
With multiple PCIe Gen3 lanes, USB 3.2 Gen2, and 2.5GbE (Intel® i226-V), ICE-ASL enables flexible system expansion. The comprehensive I/O design simplifies integration while enhancing overall system reliability.



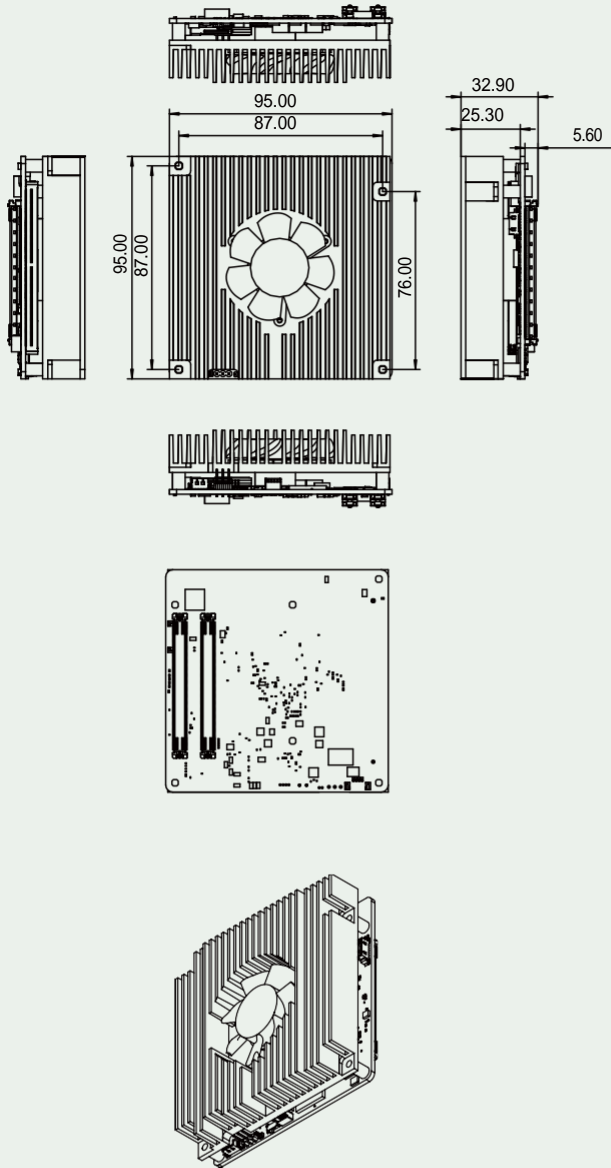
Industrial-Grade Reliability

Designed for 24/7 operation, ICE-ASL integrates TPM, watchdog, CAN, and thermal protection features. With an operating range up to -10°C to 65°C, it ensures stable performance in demanding industrial environments.

Block Diagram



Dimensions (mm)



Specifications

Model	ICE-ASL-T6C
Form Factor	COM Express® R3.1 Type 6 Module Compact size
CPU	Intel® Amston Lake Atom™ x7000 series SOC processor Intel Atom® x7433RE on-board CPU Intel Atom® x7835RE on-board CPU
Memory	1 x DDR5 4800 SO-DIMM, up to 16GB
BIOS	UEFI BIOS
Graphic Engine	Intel® UHD Graphics
Display Output	Triple independent display signals to baseboard 1 x LVDS: 1920 x 1080 or 1 x eDP:4096 x 2304 @ 60Hz 2 x DDI: (DP up to 4096 x 2160 @ 60Hz / HDMI up to 4096 x 2160 @ 60Hz)
Ethernet	1 x PCIe 2.5 GbE with Intel® i226-V signal to baseboard
I/O Interface	8 x USB 2.0 signal to baseboard (one colay with CAN) 3 x USB 3.2 Gen2 signal to baseboard 2 x UART signal to baseboard
CAN	1 x CAN signal to baseboard (Default, Option with one COM Port & one USB 2.0)
Storage	2 x SATA 3GB/s signal to base board onboard eMMC optional (up to 256G)
Expansion	5 x PCIe Gen3 x1 signal to baseboard
Front panel	Front panel signal to base board
Audio	1 x HD Audio signal to baseboard
SMBus	1 x 4-pin wafer signal to baseboard
I2C	1 x 4-pin wafer signal to baseboard
LPC/eSPI	1 x LPC signal to baseboard or 1 x eSPI signal to baseboard
Watchdog Timer	Software programmable support 1~255 sec. System reset
GPIO	8 bit GPIO signal to baseboard
FAN	1 x CPU Fan connector 1 x SYS Fan signal to baseboard
TPM	1 x On-board TPM
CHASSIS OPEN	Support
Sleep_BTN	Support
LID_BTN	Support
Thermal Protection	Support
Battery Low Alarm	Support
Suspend/wake signals	Support
Rapid Shutdown	Support
Power Supply	ATX: Vin, VSB; AT: Vin 12 V power input
Power Consumption	TBD
Operating Temperature	-10°C – 65°C
Storage Temperature	-30°C – 70°C
Operating Humidity	5%–95% (non-condensing)
Dimemension	95 x 95 mm
Weight	TBD

Packing List

1 x ICE-ASL-T6C single board computer	1 x Cooler module
1 x Screw bag	1 x QIG (Quick Installation Guide)

Ordering Informaiton

ICE-ASL-T6C-N2-R10	COM Express Compact size Type 6 Module, Intel® ADL N97 Processor, DDR5, LVDS, DDI, 2.5GbE, SATAIII, USB 3.0 and HD Audio, RoHS
ICE-ASL-T6C-R3-R10	COM Express Compact size Type 6 Module, Intel® ASL x7433RE Processor, DDR5, LVDS, DDI, 2.5GbE, SATAIII, USB 3.0 and HD Audio, RoHS
ICE-ASL-T6C-R4-R10	COM Express Compact size Type 6 Module, Intel® ASL x7835RE Processor, DDR5, LVDS, DDI, 2.5GbE, SATAIII, USB 3.0 and HD Audio, RoHS