



SOM-COMe-BT6-PTL

COM Express Rel. 3.1 Type 6 Module with Intel® Core™ Ultra Series 3 Processors (Codename: Panther Lake-H)

AI-ready solution with comprehensive I/O and connectivity options for deployment in advanced embedded systems



HIGHLIGHTS

CPU Intel® Core™ Ultra Series 3 processors with embedded 50TOPS Intel NPU5. Up to 180 platform TOPS	MEMORY Two DDR5 SO-DIMM slots supporting DDR5-5600 up to 96GB
CONNECTIVITY 1x NBase-T 2.5GbE; up to 2x USB4 40Gbps + 4x Superspeed 10Gbps; 8x Hi-Speed USB; Up to 20 PCI-e lanes	GRAPHICS Integrated Intel® Graphics with up to 12 3rd Gen Xe Cores. Next-Gen Intel® IPU 7.5



MAIN FIELDS OF APPLICATION



Industrial Automation



Medical



Safety & Surveillance



Smart Buildings & Smart Cities

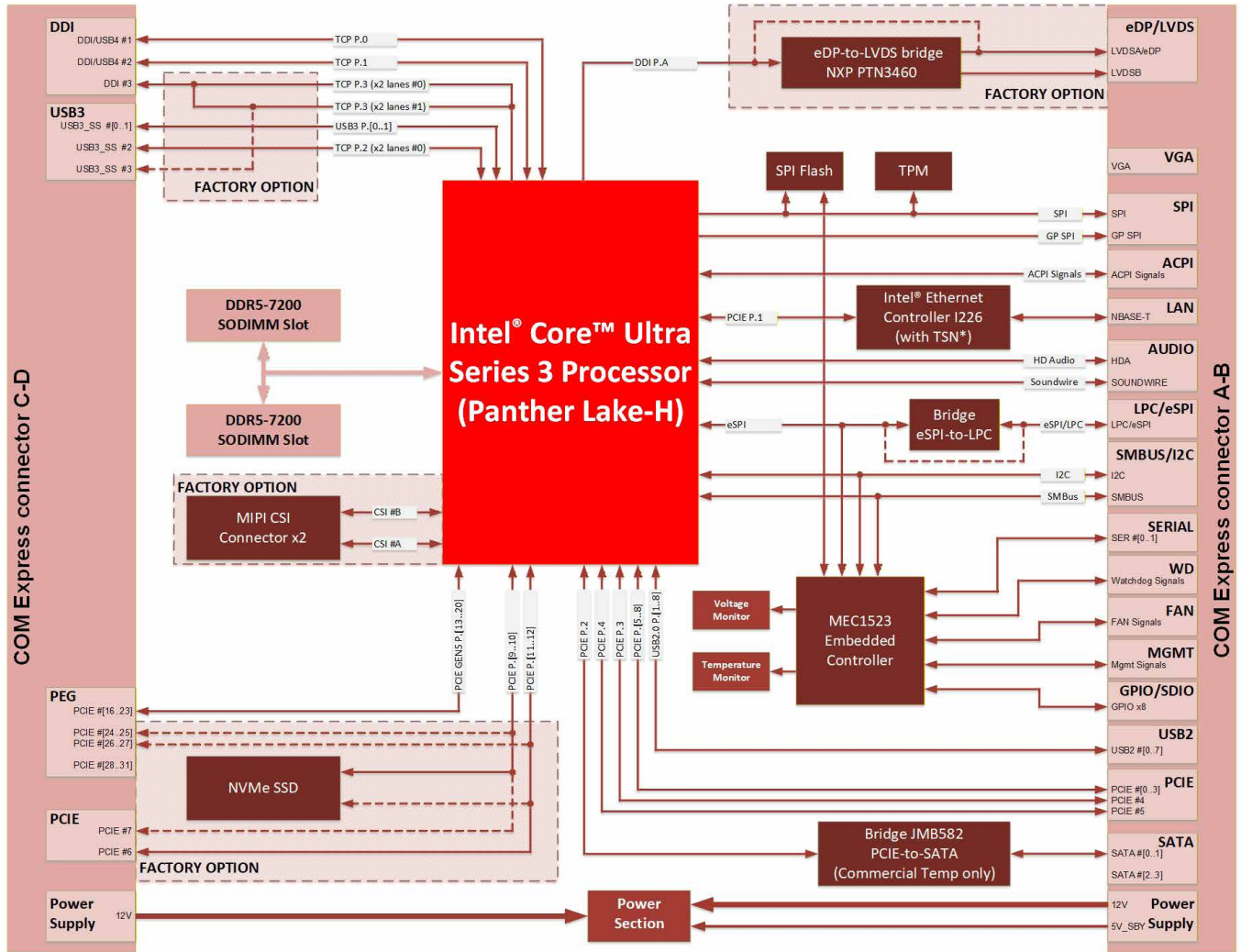
FEATURES

Processor Intel® Core™ Ultra X9 Series 3 processors Intel® Core™ Ultra X7 Series 3 processors Intel® Core™ Ultra 9 Series 3 processors Intel® Core™ Ultra 7 Series 3 processors Intel® Core™ Ultra 5 Series 3 processors	Video Resolution Max resolution 4x 4K120Hz across four simultaneous displays
Memory 2x DDR5-5600 SO-DIMM slots, up to 96GB	Audio HD Audio interface SoundWire Interface
Mass Storage Optional NVMe SSD soldered on-board, up to 1TB, PCI-e x4 interface Optional, 2x SATA interface (commercial temp modules only)	Serial Ports 2x 2-wires UARTs
Networking 1x NBase-T Ethernet port via Intel® I226 Ethernet Controller, supporting 2.5GbE and TSN	Other Interfaces 2x mipi-CSI 4-lane connectors, optional SPI, 2x I2C, SM Bus, Thermal Management, FAN management eSPI or LPC interface (factory alternatives) Optional TPM 2.0 on-board LID#/SLEEP#/PWRBTN#, watchdog 4x GPI, 4x GPO
USB Up to 2x USB4 40Gbps interfaces Up to 4x Superspeed USB 10Gbps interfaces 8x USB High-Speed ports	Power Supply +12VDC ± 10%, +5VSB, +3VRTC
PCI-e Up to 8 PCI-e Gen4 lanes 1 PCI-e Graphics (PEG) x8 Gen5 port (depending on the processor) Optional additional PEG x4 Gen4 port	Operating System Microsoft® Windows 11 IoT Enterprise 2021 LTSC Clea OS
Graphics Integrated Intel Graphics with up to 12 3rd Gen Xe Cores Support up to 4 independent displays Next-Gen Imaging Processing Unit (IPU) 7.5 for 3x concurrent camera management	Dimensions 120 x 95 mm (COM Express® basic Form factor, Type 6 pinout)
Video Interfaces 2x Type-C interfaces supporting DP, DP Alt mode over Type-C, HDMI, DP tunneled 1x DDI interface supporting DP 2.1 2-lane/4-lane (factory option) 1x eDP 1.5, max resolution 4K120Hz HDR or 1x LVDS Single/Dual Channel, max resolution 1920x1200 @ 60Hz - factory alternatives	Operating Temperature* 0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)

SOM-COMe-BT6-PTL

COM Express Rel. 3.1 Type 6 Module with Intel® Core™ Ultra Series 3 Processors (Codename: Panther Lake-H)

BLOCK DIAGRAM



Information subject to change. Please visit www.seco.com to find the latest version of this datasheet.

01425

Streamline and expedite your edge computing implementations

Clea OS

A flexible operating system that adapts to your needs, thanks to the customization tool and Docker support. Reliability and security are built-in through a dual-partition system and native integration with Exein's robust AI-based protection.

Clea Astarte

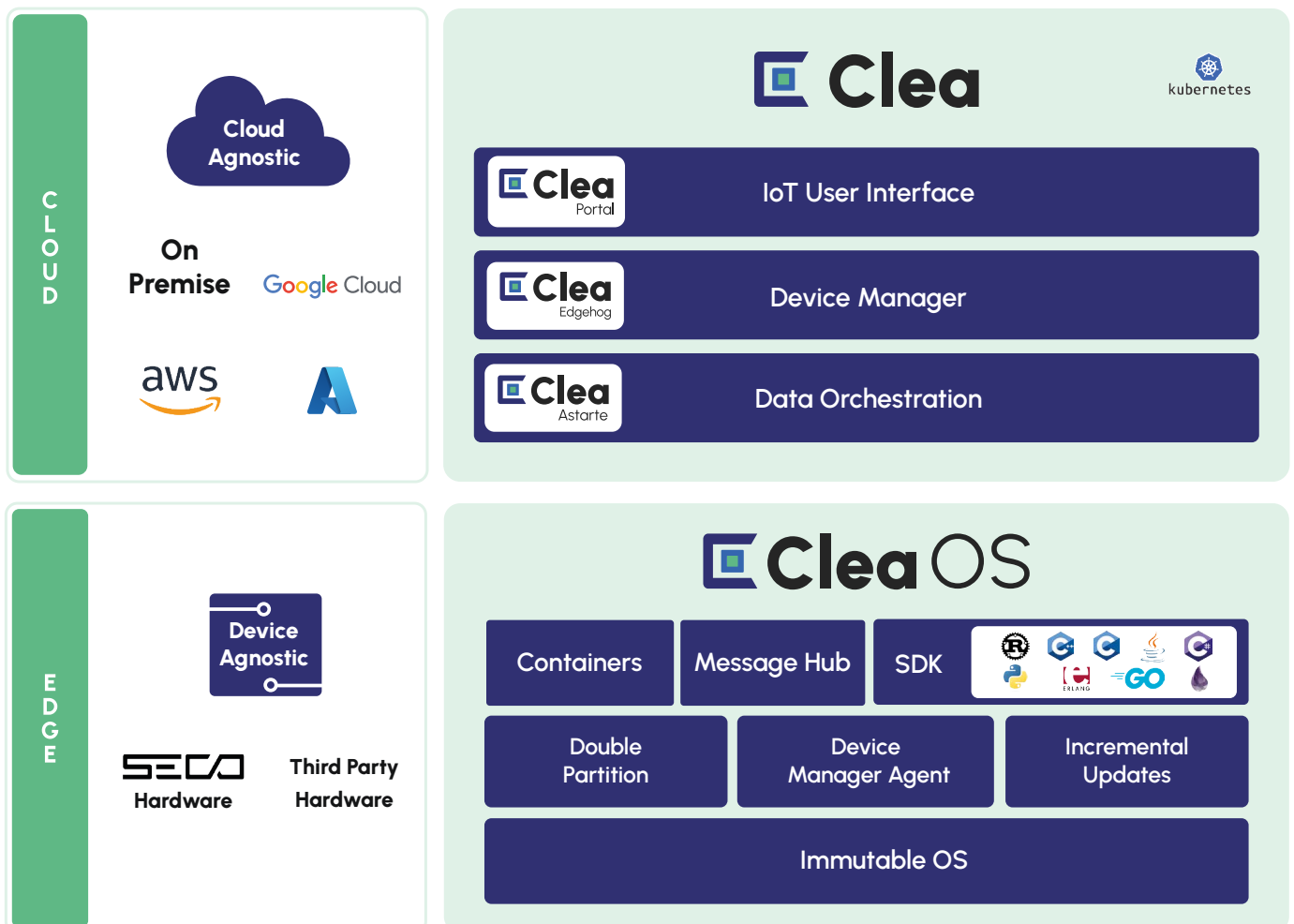
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

Clea Edgehog

Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

Clea Portal

Analyze data from remote devices, customize the user experience with applications tailored to user needs, and manage user rights, company access, and tenant privileges.



Scan to know more about our solution

Clea OS



Clea DOCS

