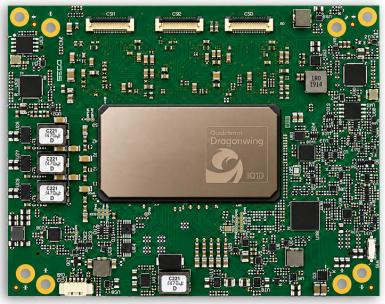
COM HPC®

SOM-COM-HPC-A-Dragonwing-IQ10

COM-HPC® 1.3 Client Size A module based on Qualcomm Dragonwing™ IQ10 Series, with up to 700 TOPS of AI Acceleration.

Advanced edge AI acceleration with up to 700 TOPS, enabling robotics, autonomous systems and foundation models in a compact COM-HPC® Client Size A module.



HIGHLIGHTS

CPU
Dragonwing™ IQ10 Series: IQ-10800MD-AA and IQ-10800MD-AD

CONNECTIVITY
2x 2.5/10GbE; 4x USB 2.0; 4x additional USB ports; 16x PCIe lanes

NPU
Up to 700 TOPS of AI Acceleration

GRAPHICS
3x DisplayPort (DDI); 1x eDP; 5x CSI camera inputs

COM-HPC®

Powered by Qualcomm Dragonwing

Clea OS

Linux™

MAIN FIELDS OF APPLICATION

- Industrial Automation
- Medical Robotics
- Safety & Surveillance
- Aerospace & Defence
- Robotics

FEATURES

Processor	Dragonwing™ IQ10 Series: IQ-10800MD-AA (64 GB memory) or IQ-10800MD-AD (32 GB memory)
Memory	Integrated LPDDR5x ECC memory: 64 GB (IQ-10800MD-AA) or 32 GB (IQ-10800MD-AD)
NPU	Up to 700 TOPS of AI Acceleration
Graphics	Qualcomm® Adreno™ GPU
Video Interfaces	3x DDI (DisplayPort); 1x eDP.
Video Processing	4K @ 480 decode; 4K @ 240 encode.
Camera	2x CSI2 4-lanes camera inputs via COM-HPC® connector; 3x CSI2 4-lanes camera inputs via bottom-side on-board connectors
Mass Storage	UFS 4.0, 2 lanes, up to 512 GB; OSPI flash
Networking	2x NBASE-T Ethernet ports, each supporting 2.5GbE / 10GbE

USB	4x USB 2.0; Up to 4x USB SS
PCI-e	1x 8 Lanes PCIe Gen5 1x 4 Lanes PCIe Gen5 1x 2 Lanes PCIe Gen5 4x 1 Lane PCIe Gen3
Audio	I2S audio interface
Serial Ports	2x UART; 2x SPI; 1x general-purpose SPI
Other Interfaces	12x SoC GPIOs; 2x I2C; watchdog; fan and management signals; ACPI signals; RTC; interfaces from internal SIL processor via bottom-side on-board connector
Security	TPM 2.0
Functional Safety Features	Functional safety (FuSa) signals; interfaces from internal SIL processor on bottom-side connector
CAN Bus	Up to 2x CAN FD interfaces

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

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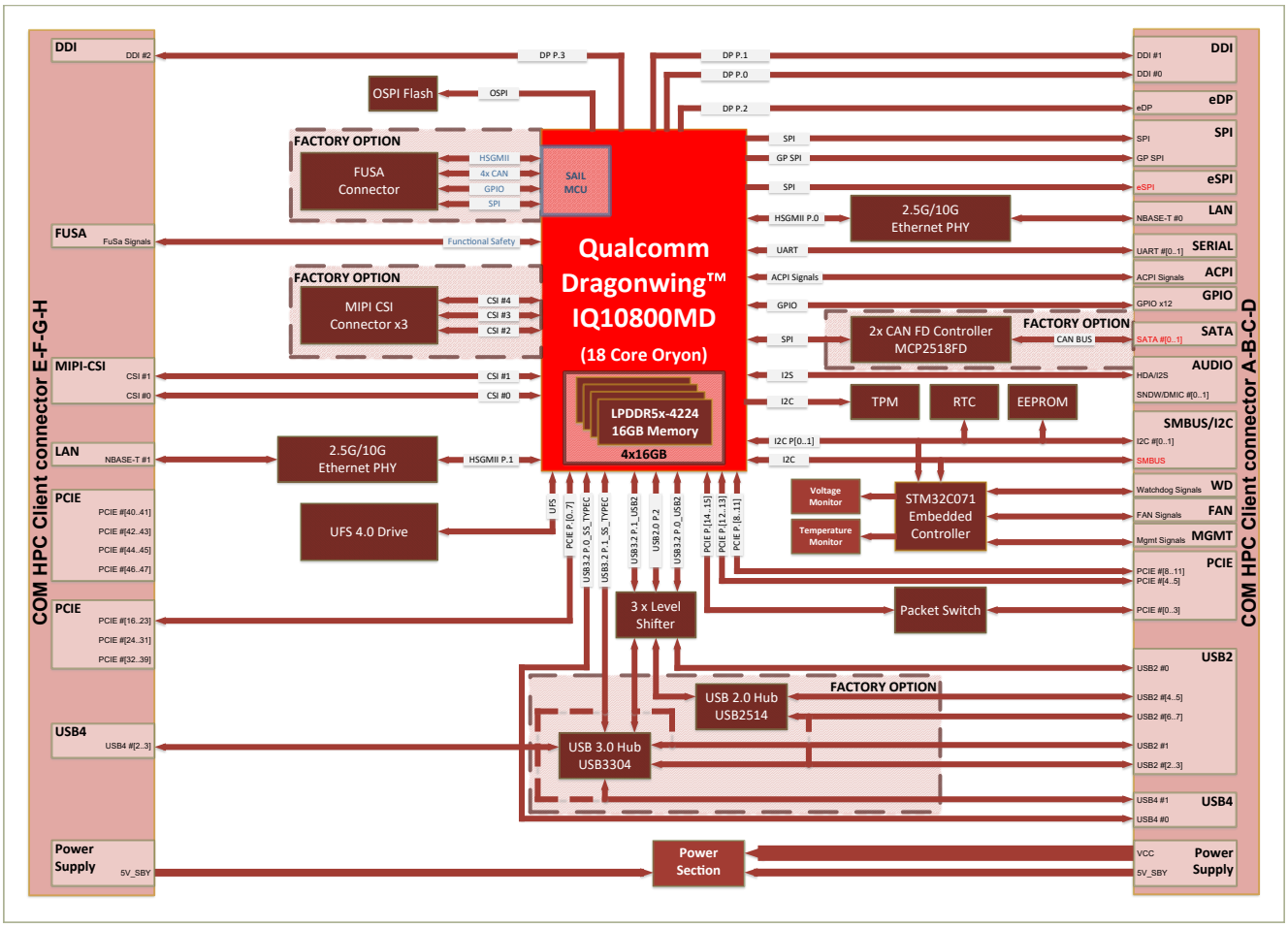
FEATURES

Operating System	Clea OS, Yocto Linux
Norms & Standards	CE and FCC compliance specified for ITE target markets

Operating Temperature *	0°C to +60°C (commercial); -40°C to +85°C (industrial)
Dimensions	120 x 95 mm (COM-HPC® Client Size A)

*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.

BLOCK DIAGRAM



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

Build, Deploy and Maintain Secure Edge Products at Scale.

The secure framework for industrial edge devices, combining fleet operations, cybersecurity, data orchestration and Edge AI enablement.

Fleet Operations at Scale

Manage and monitor distributed device fleets.

Cybersecurity by Design

Zero-trust architecture, secure lifecycle management and CRA support.

Secure OS with LTS

A secure Yocto-based foundation with OTA updates, container runtime and long-term maintainability.

Edge AI Enablement

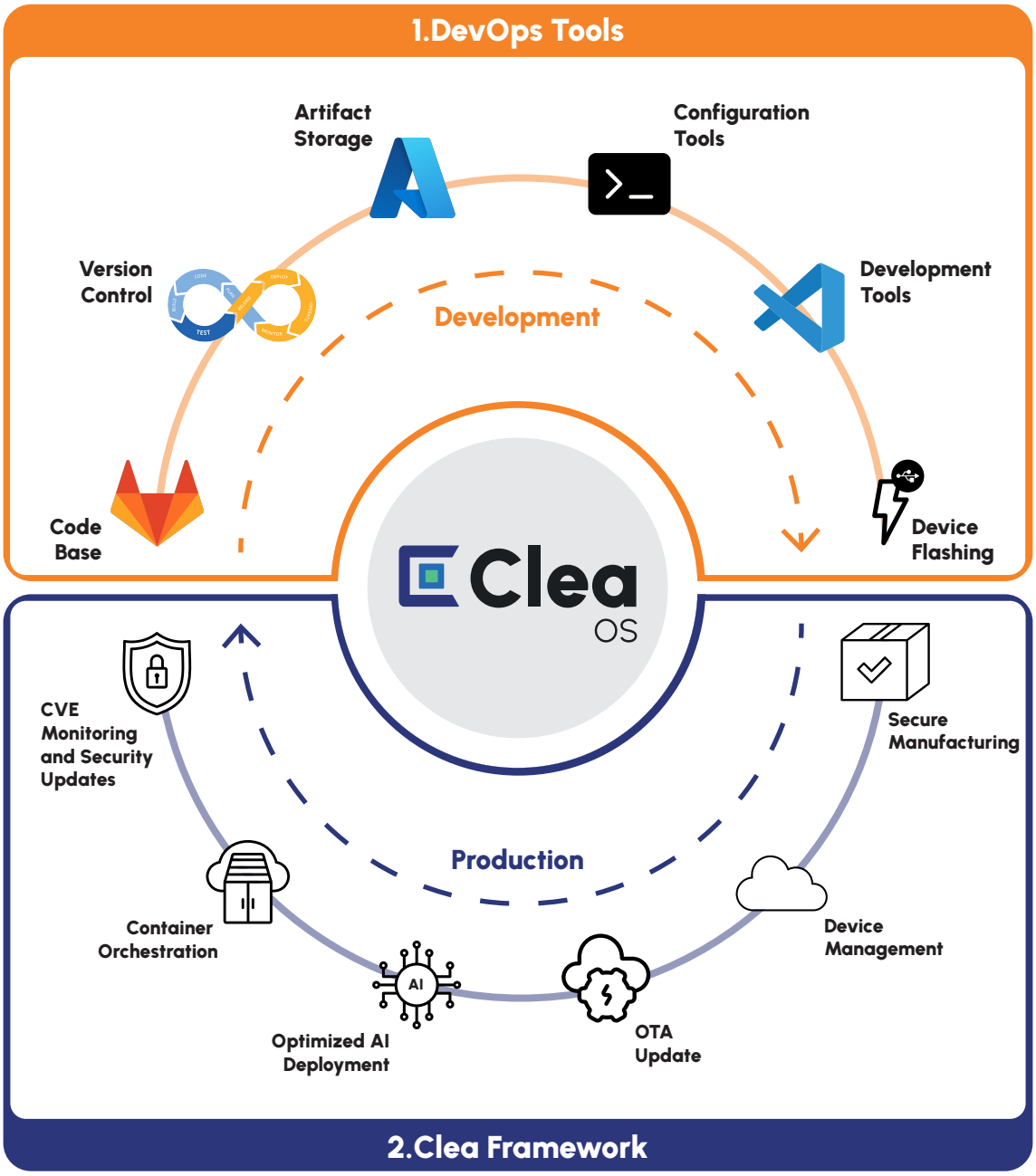
Deploy and manage hardware-aware AI services at the edge

Hardware & Cloud Agnostic

Run on ARM, x86, cloud or on-prem infrastructures.

From Development to Operations

Clea supports the entire product lifecycle, from embedded software development and deployment to fleet operations, maintenance and continuous updates.



Discover how Clea enables secure fleet operations, data orchestration and Edge AI at scale on **clea.ai**

Clea