FANLESS EMBEDDED COMPUTERS

Titan 300 TGL-UP3 AI

Fanless embedded computer with the 11th Gen Intel® Core™ and Intel® Celeron® SoCs (Codename: Tiger Lake UP3)

Vision gateway with 11th Gen Intel® Core™ performance



HIGHLIGHTS

CPU
11th Gen Intel® Core™ processors and Intel® Celeron® SoCs

CONNECTIVITY
2x 2.5 GbE, Optional M.2 WWAN and WLAN modules

GRAPHICS
Intel® Iris® Xe architecture with up to 96 EUs, up to 4 independent displays

MEMORY
Two DDR4 SO-DIMM slots supporting DDR4-3200 ECC memory with IBECC

MAIN FIELDS OF APPLICATION

Medical | Transportation | Safety & Surveillance | Industrial Automation | Smart Devices | Digital Signage | Energy & Utilities

FEATURES

Processor	**Intel® Core™ i7-1185G7E**, Quad Core @ 2.8GHz (4.4GHz Turbo) with HT, 12MB cache, 28W TDP (12W cTDP) **Intel® Core™ i5-1145G7E**, Quad Core @ 2.6GHz (4.1GHz Turbo) with HT, 8MB cache, 28W TDP (12W cTDP) **Intel® Core™ i3-1115G4E**, Dual Core @ 3.0GHz (3.9GHz Turbo) with HT, 6MB cache, 28W TDP (12W cTDP) **Intel® Celeron® 6305E**, Dual Core @1.8GHz, 4MB cache, 15W TDP **Intel® Core™ i7-1185GRE**, Quad Core @ 2.8GHz (4.4GHz Turbo) with HT, 12MB cache, with IBECC, 28W TDP (12W cTDP) – Industrial **Intel® Core™ i5-1145GRE**, Quad Core @ 2.6GHz (4.1GHz Turbo) with HT, 8MB cache, with IBECC, 28W TDP (12W cTDP) - Industrial **Intel® Core™ i3-1115GRE**, Dual Core @ 3.0GHz (3.9GHz Turbo) with HT, 6MB cache, with IBECC, 28W TDP (12W cTDP) - Industrial
Memory	2x DDR4-3200 SODIMM slots Up to 64GB (IBECC supported only with Core™ industrial SoCs)
AI Chip	100+ TOPS inference power Voyager SDK for effortless deployment of AI applications
Graphics	Up to two video decode boxes (VDBoxes) for enhanced video stream capabilities Support for up to four independent displays at up to 4K60 HDR resolution or one display at 8K resolution
Video Interfaces	2x Multimode DisplayPort 1.4, on dual DP++ connector 2x Multimode Display Port 1.4 on USB Type-C connectors (alternate mode)
Video Resolution	DP: up to 5120x3200 @60Hz 24bpp / 7680x4320@60Hz 30bpp with DSC HDMI® 1.4: up to 4Kx2K 24-30Hz 24bpp
Mass Storage	On-Board NMVe Drive, up to 2 modules with global capacity up to 1TB

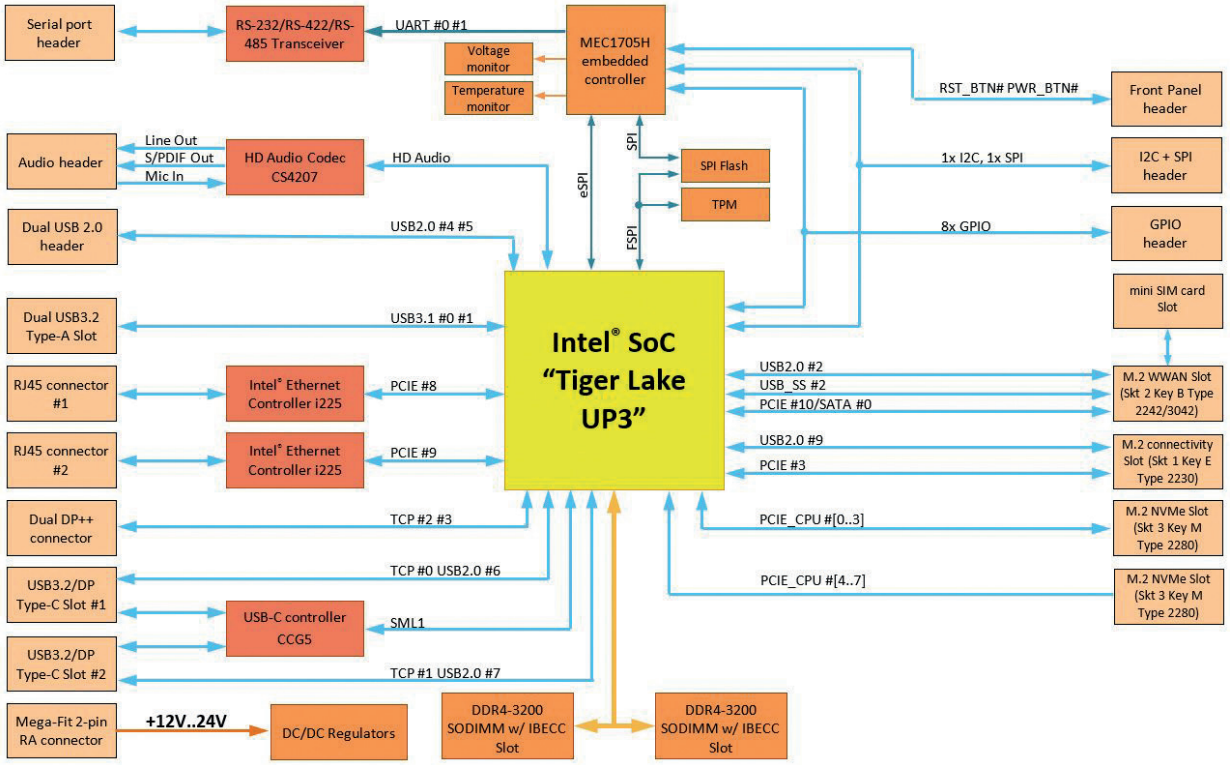
Networking	2x 2.5 Gigabit Ethernet RJ45 connectors Optional on-board M.2 Wi-Fi (802.11 ac / a / b / g / n) + BT 5.0 module, with dipole antennas included* Optional on-board M.2 LTE modem with Mini-SIM slot, with dipole antennas included* *Certification upon request
USB	2x Superspeed USB 10Gbps ports on Dual Type-A sockets 2x Superspeed USB 20Gbps on USB Type-C slots
Serial Ports	2x RS-232/RS-422/RS-485 UARTS software configurable, on DB9 connector
Audio	Lineout + MicIn combo TRRS Audio Jack
Other Interfaces	Optional 2x 12 poles terminal block connectors with the following I/O: · 8x GPIOs · 1x I2C · 1x SPI · 1x 5V · 1x 3.3V · 1x 12V · 3x GND Power ON Button Optional TPM 1.2/2.0 module on-board
Power Supply	$12V_{DC}$ to $24V_{DC}$ range, Mega-Fit 2p RA Connector Coin cell battery for RTC On-Board
Operating System	Microsoft® Windows 10 IoT Enterprise LTSC 2021 Linux (Kernel ≥ 5.4 version)
Operating Temperature	Commercial range: 0°C to +40°C, with 0.7m/s airflow** Extended range: -30°C to +40°C, with 0.7m/s airflow** **Up to 60°C with scaled down CPU TDP
Dimensions	199 x 174 x 73 mm (7.83" x 6.85 " x 2.87") DIN-rail or Wall Mount brackets (Factory Alternatives)

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

Titan 300 TGL-UP3 AI

Fanless embedded computer with the 11th Gen Intel® Core™ and Intel® Celeron® SoCs (Codename: Tiger Lake UP3)

BLOCK DIAGRAM



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

Streamline and expedite your edge computing implementations

EDGEHOG 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.

DEVICE MANAGER

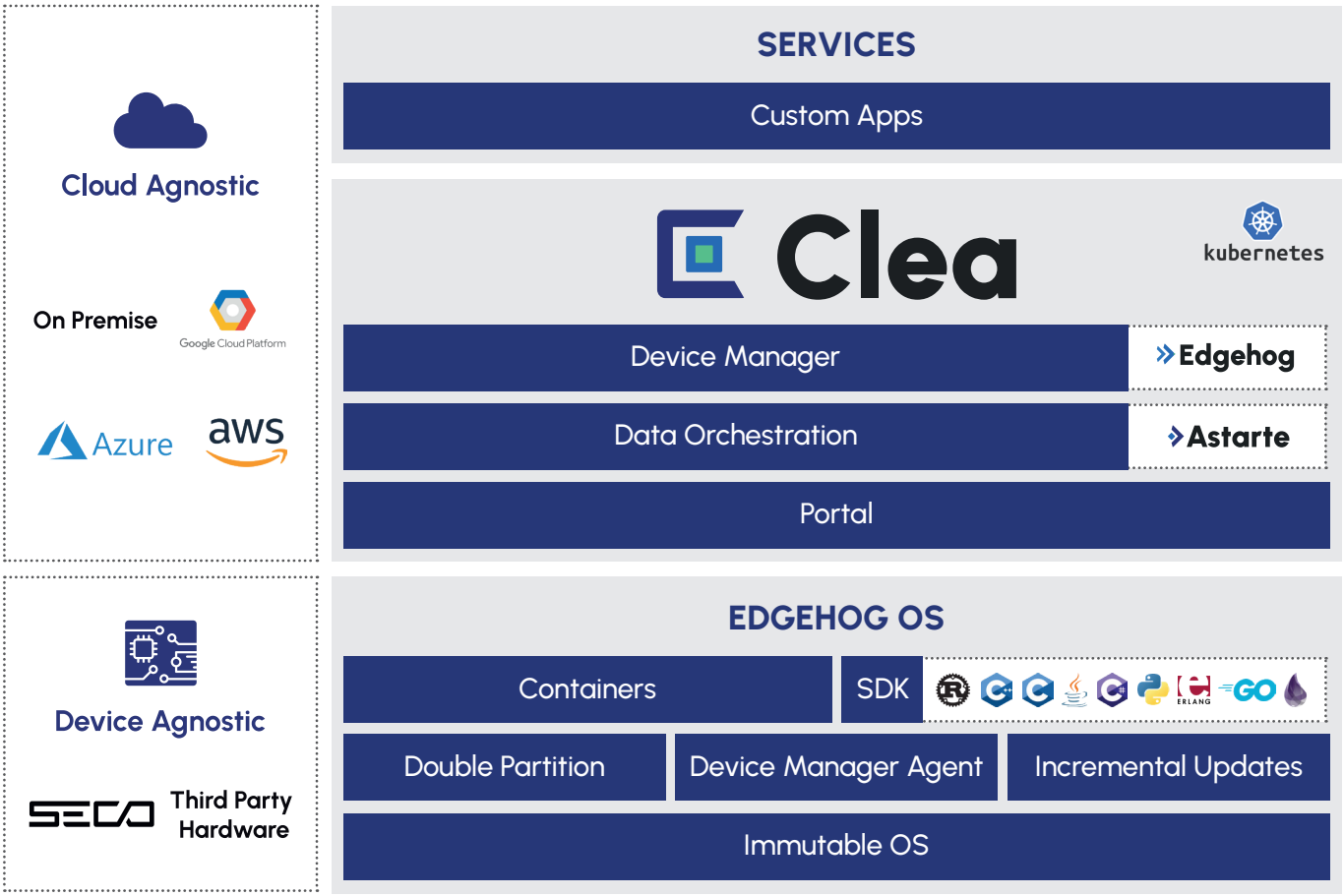
Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

DATA ORCHESTRATION

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

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

EDGEHOG OS

CLEA DOCS

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