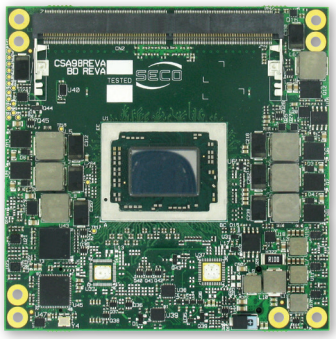
COM EXPRESS®

SOM-COMe-CT6-MBPF

COM Express® Compact Type 6 with AMD 3rd gen. R-Series, G SoC-I or G SoC-J Series (Codename: Merlin Falcon, Brown Falcon, Prairie Falcon)

When scalable graphics performance makes the difference



HIGHLIGHTS

CPU
AMD Embedded 3rd generation R-Series SOC or G-Series SOC-I

CONNECTIVITY
4x USB 3.0; 8x USB 2.0; 3x PCI-e x1 Gen3

GRAPHICS
AMD Radeon 3rd -Generation Graphics Core Next (GCN)

MEMORY
Two SO-DIMM slots supporting DDR4 ECC and non-ECC modules

Available in Industrial Temperature Range

MAIN FIELDS OF APPLICATION

Coffee & Vending

Medical

Digital Signage

FEATURES

Processor	AMD **RX-421BD**, Quad Core @ 2.1 GHz (3.4 GHz Max), cTDP 12-35W AMD **RX-418GD**, Quad Core @ 1.8 GHz (3.2 GHz Max), cTDP 12-35W AMD **RX-216GD**, Dual Core @ 1.6GHz (3.0 GHz Max), cTDP 12-15W AMD **RX-416GD**, Quad Core @ 1.6 GHz (2.4GHz Max), TDP 15W, Industrial Temperature range
	AMD **GX-217GI**, Dual Core @ 1.7GHz (2.0GHz Max), TDP 15W
	AMD **GX-224IJ**, Dual Core @ 2.4GHz (2.8GHz Max), cTDP 10-15W AMD **GX-215IJ**, Dual Core @1.5GHz (2.0GHz Max), cTDP 6-10W
Max Cores	4
Memory	R-Series: Two SO-DIMM slots supporting DDR4 ECC / non-ECC modules up to 2133MHz G-Series SoC-I: Two SO-DIMM slots supporting DDR4 ECC / non-ECC modules up to 1600MHz G-Series SoC-J: One SO-DIMM slot supporting DDR4 non-ECC modules up to 2133MHz
Graphics	AMD Radeon 3rd -Generation Graphics Core Next (GCN) AMD RX-421BD - Radeon™ R7 AMD RX-418GD, RX-416GD - Radeon™ R6 AMD-RX-216GD - Radeon™ R5 AMD GX-217GI - Radeon™ R6E AMD GX-224IJ - Radeon™ R4E AMD GX-215IJ - Radeon™ R2E Up to 3 independent displays supported (up to 2 with G-Series SoC-I and SoC-J) DirectX® 12 supported UVD 6 (4K H.265 and H.264 decode) and VCE 3.1 (4KH.264 encode) supported

Video Interfaces	Up to 3 x Digital Display Interfaces (DDIs), supporting eDP1.4, DP 1.2, DVI and HDMI® 1.4b/2.0 (up to 2x DDIs with G-Series SoC-I and SoC-J) Optional VGA interface (excludes one DDI Port) Optional eDP or Single / Dual-Channel 18- / 24- bit LVDS interface (excludes one DDI Port)
Video Resolution	DDIs: up to 4K LVDS, VGA: up to 1920 x 1200 @ 60Hz
Mass Storage	2 x S-ATA Gen3 Channels SD interface shared with GPI/Os
Networking	Gigabit Ethernet interface Intel® I219-LM GbE Controller
USB	4 x USB 3.0 Host ports 8 x USB 2.0 Host port
PCI-e	3 x PCI-e x 1 lanes PCI-express Graphics (PEG) x8 (R-Series SoCs) or x4 (G-Series SOC-I and SoC-J)
Audio	HD Audio Interface
Serial Ports	2 x HS UARTs
Other Interfaces	SPI, I2C, SM Bus, LPC bus, FAN management LID#/SLEEP#/PWRBTN#, Watchdog 4x GPI, 4 x GPO (multiplexed with SD interface) Optional TPM 1.2 or 2.0 module onboard
Power Supply	+12V_{DC} ± 10% and +5V_{SB} (optional)
Operating System	Microsoft® Windows 7 Microsoft® Windows 10 Microsoft® Windows 10 IoT Linux

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

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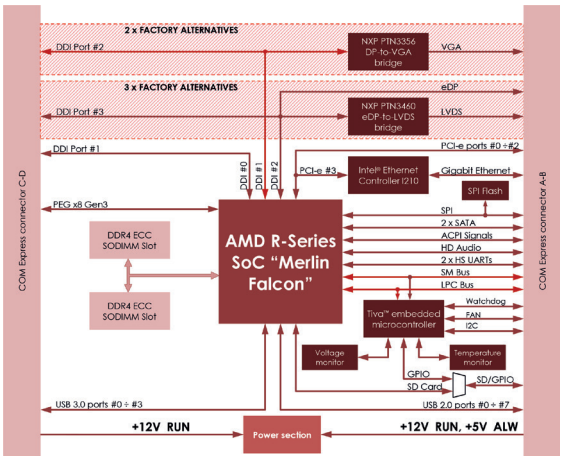
FEATURES

Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
Dimensions	95 x 95 mm (Com Express® Compact Form factor, Type 6 pinout)

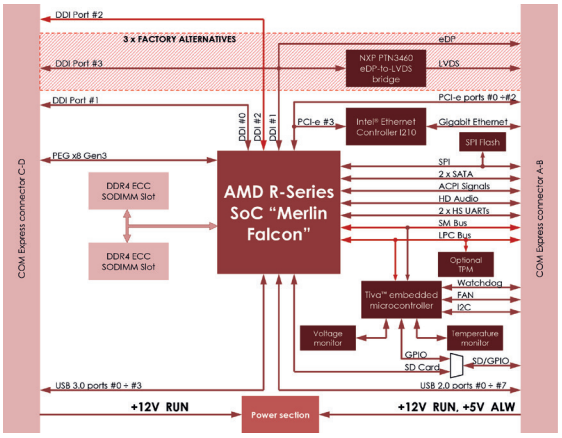
*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader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

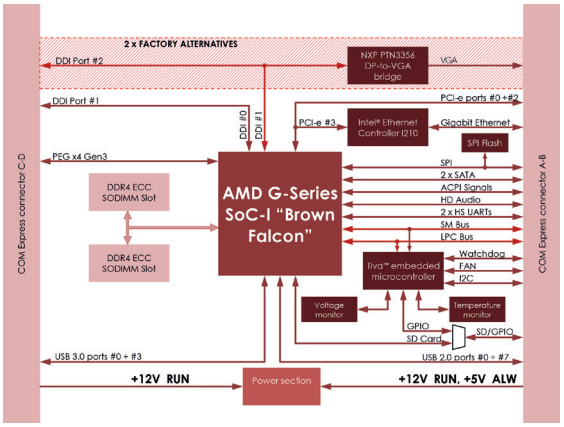
BLOCK DIAGRAM

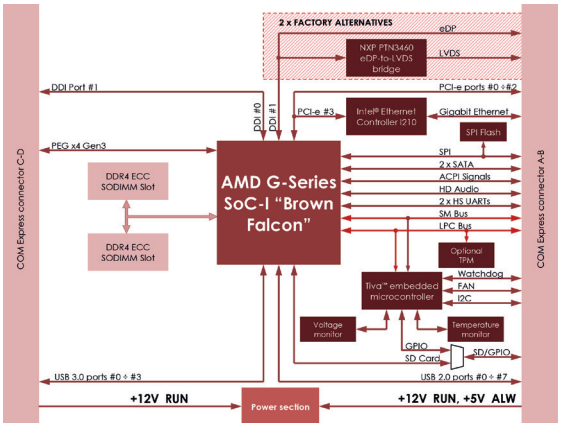
Version with VGA

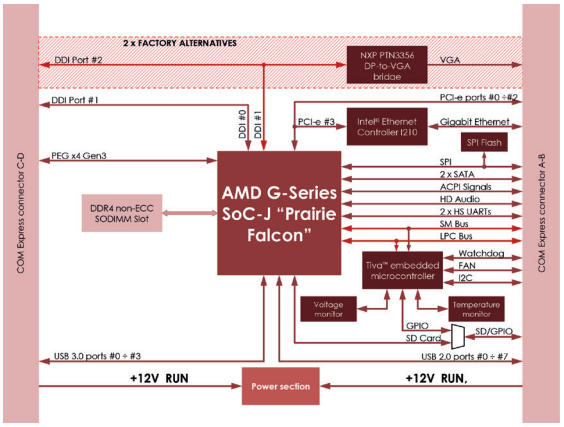


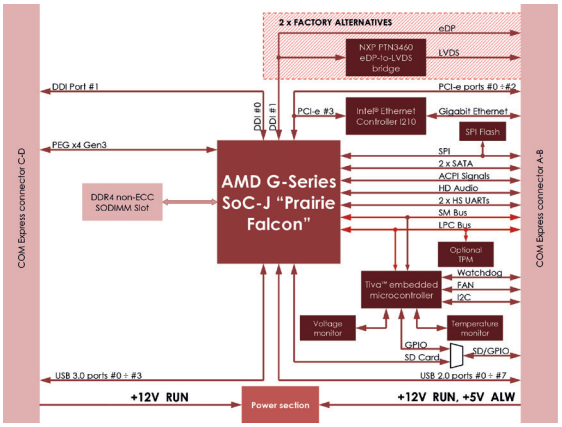
Version with TPM











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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

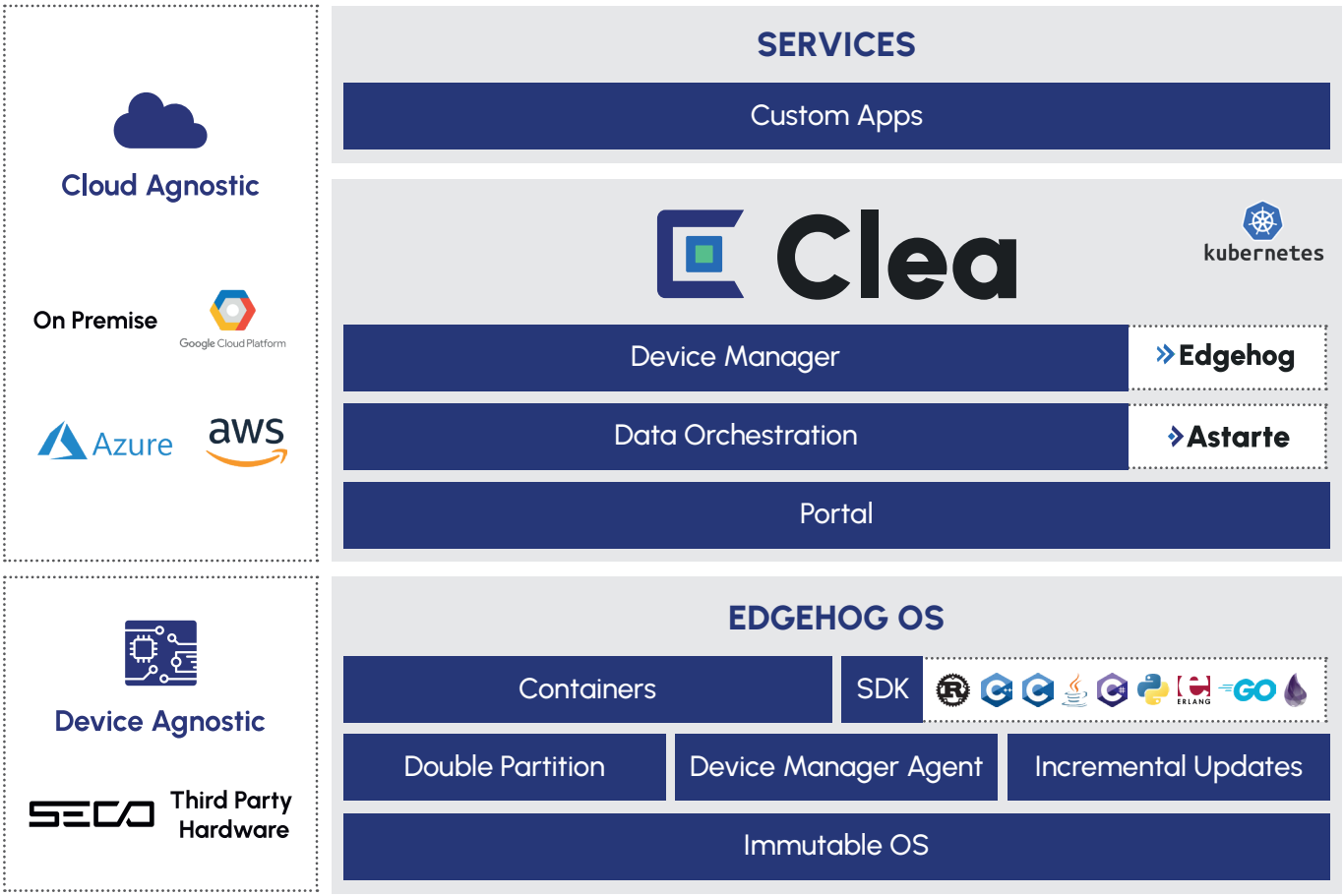
Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

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

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