Press release

TTTech Aerospace's mature TTEthernet® network solutions enable Honeywell Anthem's™ system architecture

- Honeywell Anthem is Honeywell's next-generation, modular and highly intuitive, integrated flight deck that enables a groundbreaking new flight experience scalable for a broad range of aircraft types and sizes.
- Honeywell Anthem uses TTTech Aerospace's certifiable TTEthernet network solutions as the avionics backbone, the 'nervous system' connecting all functions on the flight deck.
- TTTech Aerospace provides a complete portfolio of mature, high-performance (Gbit/s) TTEthernet switches, end systems, embedded software certifiable to DAL A, and tooling and development equipment for this program.
- TTTech Aerospace's TTEthernet network platform is the most mature, high-performance (Gbit/s), open standards-based Deterministic Ethernet solution certifiable to level A available on the market.
- TTTech Aerospace's Deterministic Ethernet-based TTEthernet products enable Honeywell to build safe, reliable, high-performance avionics and control platforms in a much shorter time and help to reduce space, weight, power, and cost.

Vienna, Austria, September 7, 2023: **Aviation applications today are more connected and more data-driven than ever before. Modern flight decks need to accommodate these needs and provide pilots with real-time information in an easily accessible and actionable format. Honeywell Anthem is a next-generation, modular, and highly intuitive integrated flight deck that can be customized for virtually every type of aircraft, from passenger planes and business aircraft to defense, general aviation, and advanced air-mobility (AAM) vehicles. The highly intuitive and modular/scalable system architecture is enabled by TTTech Aerospace's open standards-based high-performance TTEthernet network solution (implementing Deterministic Ethernet technology) guaranteeing safe, secure, and reliable data transfers in the avionics network.**

"TTTech Aerospace's open standards-based TTEthernet solution is a great fit for the data backbone network in Honeywell Anthem, as it enables faster integration, system and application software upgrades, and technology insertions for a future-proof platform thanks to its high performance, determinism, and modularity. TTTech Aerospace contributes not only certifiable switches and end systems but also development tools and test equipment enabling a shorter time-to-market for building a DAL A-level avionics network," says Andrew Barker, Vice President/General Manager - Avionics Business Enterprise at Honeywell Aerospace USA.

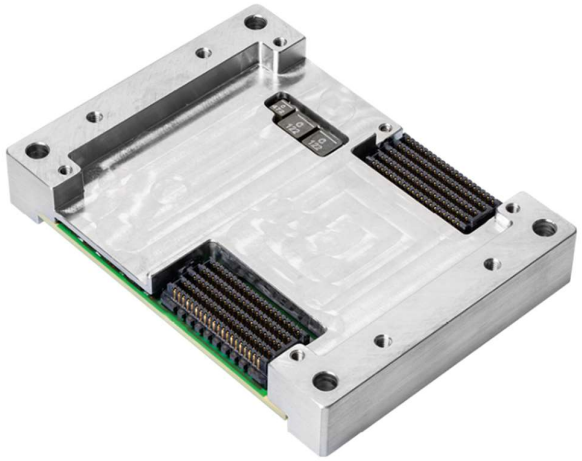
TTEthernet is a commercial implementation of Deterministic Ethernet that uniquely allows three traffic classes based on open international standards to use one physical medium without interference (Standard Ethernet according to IEEE 802.3, rate-constrained traffic according to ARINC 664 part 7, and Time-Triggered Ethernet according to SAE AS6802). This ensures optimal use of bandwidth and guarantees that safety-critical messages (e.g., weather conditions, airport traffic news, system alerts) are transmitted at the pre-scheduled time while opening the rest of the available bandwidth for non-critical messages (e.g., video feeds or non-flight-critical apps). In the space sector, TTEthernet has also been baselined for deep space missions in the International Avionics System Interoperability Standards (IASIS) by NASA, ESA, CSA, and JAXA and is being implemented among others on NASA's Gateway.

TTTech Aerospace's TTEthernet offering for the aviation market is based on the main building blocks of the TTESwitch Module A664 Pro and the TTEEnd System A664 Core IP. It includes very powerful network configuration and qualifiable V&V software tools supporting the setup and integration of TTEthernet networks.

TTTech Group has been applying Deterministic Ethernet solutions successfully across a wide range of industries for more than two decades. This expertise has been the basis for TTTech Aerospace's mature TTEthernet product line explains Werner Köstler, Member of the Executive Board – Aerospace at TTTech: "Our TTEthernet solutions are fully DAL A certifiable, offering data transfer rates of up to 1 Gbit/s and allow scaling to larger vehicles and system extensions for future applications. We have been working with Honeywell on system architectures based on deterministic networking solutions since 2000 and have successfully collaborated on a wide range of groundbreaking projects in the aviation and space sectors, from engine controls and civil avionics to the NASA Orion spacecraft. We have also jointly contributed to the standardization of Deterministic Networking technology (TTP in the SAE AS6003 and Time-Triggered Ethernet in the SAE AS6802 standard). We are proud to continue our long and successful partnership with Honeywell and to be a part of their future-

oriented Honeywell Anthem flight deck solution.”

Image



The TTESwitch Module A664 Pro is the world’s first 1 Gbit/s, fully ARINC 664 part 7 compatible, TTEthernet switch module for the aviation market and one of the key building blocks of TTTech Aerospace’s complete TTEthernet solutions portfolio. It can be used for a wide range of certifiable on-board Ethernet networks, from UAM to rotorcraft and aircraft of different sizes. (© TTTech Computertechnik AG)

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About TTTech Aerospace

TTTech Aerospace provides deterministic embedded network and platform solutions for aviation and space applications. Its products have already completed over 1 billion flight hours in Level A safety-critical applications like fly-by-wire, power systems, avionics, engine controls, and environmental control systems and covered distances of more than two million kilometers in deep space. Proven, mature solutions help customers in the aviation and space industries to develop integrated, modular, and scalable deterministic network platforms that increase safety, fault tolerance, and availability. In addition, integrated solutions reduce size, weight, power, and cost (SWaP-C), allowing for easier handling of equipment and lowering total lifecycle costs.

TTTech Aerospace is part of the TTTech Group, a globally oriented group of high-tech companies, founded and headquartered in Vienna, Austria. TTTech is the innovator of Deterministic Ethernet and a driving force behind the IEEE TSN and the SAE AS6802 Time-Triggered Ethernet standards. TTTech North America Inc, headquartered in Andover, MA, and with offices in, among others, Houston, TX, is also part of the TTTech Group.

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