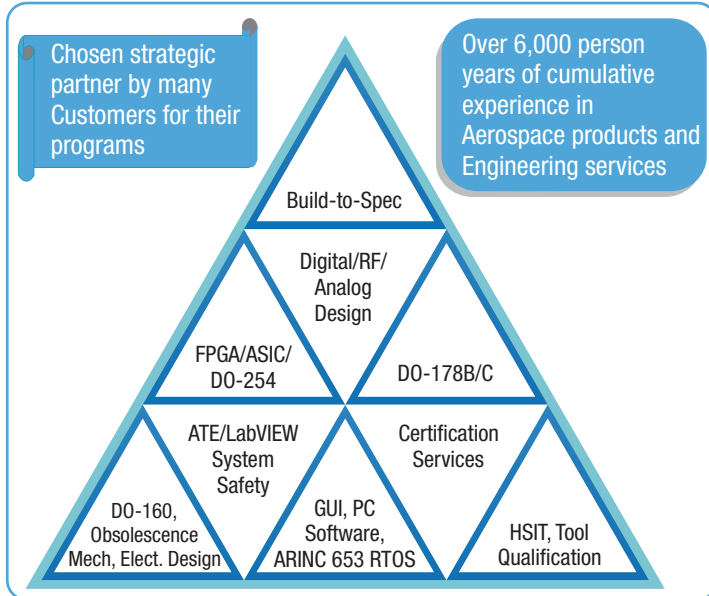


Aerospace Products and Engineering Services



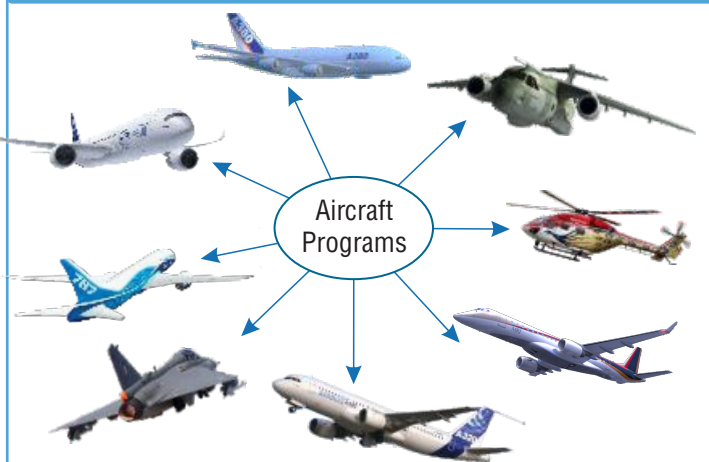
Accord Global Technology Solutions Private Limited (AGTSPL) is part of Accord Group of companies and primarily focuses on Aerospace products and Engineering Services.



ACCORD ADVANTAGES

- One-Stop solution for all avionics engineering services
- DAL A-D, as per DO-178 B/C, DO-254, DO-160 F/G, FPGA/ASIC
- Avionics product engineering company - Product development team does engineering services as well
- Experience of directly interacting with several ACOs in USA
- Experience of participating in many FAA SOI audits
- Cost Reduction through In-house Tools
- Fast reaction time making extremely short development models a reality
- Proven rapid ramp up in team size & composition
- High retention of talent, including senior key resources, best in the industry

Software Engineering Services - Avionics



Accord has contributed to many aircraft programs in software development, verification and certification complying to DO-178B/C standards.

- Proven capability to assist you in any or all phases of Software development life cycle
- Engineers trained by FAA DERs
- In-house OpenGL SC compatible library
- In-house ARINC 653 compatible RTOS (OASYS) used in Avionics LRUs of two Rotor craft platforms (CEMILAC certified).

Subsystems

- Landing Gear Control
- Control Display Units
- Flight Control System
- Remote Data Concentrators
- Cargo Doors Controls
- Doors Slides Control
- Slats-flaps Controls
- Transponders and AHRS
- IMA
- 615A Data Loaders
- Steering Control
- Mission Computer

Aerospace Products

Accord's FAA TSO-C145c Class Beta 3 GPS-SBAS receiver

- Designed, Developed, Certified and Manufactured by Accord
- First FAA certification in 2007
- Over 10,000 units delivered for GA, business jets, rotor craft, UAV and other platforms
- DO-229D, DO-178B Level B, DO-254 Level B, DO-160F, DO-301, ARINC 429, ARINC 743A, MIL HDBK 217F, SAE ARP 4754, SAE ARP 4761 compliant
- Platforms: Eclipse 500, Beechcraft, Cessna, Dornier, Pilatus, Piper, BAE Hawk AJT, Bell helicopter and many others



Build-to-Spec Aerospace Products

FAA/EASA certified

CEMILAC certified



UAT Transponder



Control Display Unit



ARINC 429 Router



Control Saturation Warning System



AIBU-Cabin lighting for A320



Ruggedized Time Distribution Unit

Software Engineering Services - Automotiv

Being a center for excellence in GNSS technology, Accord has supplied GPS chipsets and modules for vehicle tracking in India and overseas and also provides software and Hardware Engineering Services.

- Development of Hardware & Software of Connectivity Control Unit for a major Automotive Customer
- Designed & developed a IoT compatible highly scalable Vehicle Tracking Solution for major Automotive Customer.
- Vast experience in design, development and verification using CAN protocol



Vehicle Tracking



Report Generation



Device Interaction



Geo-Fencing



Data Administration



Live Alert

Vehicle Tracking Application

Applications Development Services

Accord provides complete lifecycle services in designing high quality, flexible, portable, cross platform applications. We provide complete life cycle services including

- Scoping of requirements, architecting the solution, business rules definition, UI design, Database design and integration
- Solution to migrate legacy desktop applications to web / mobile applications
- Some Examples: Airport Networks Diagnostic Tool, Data Analysis & Reporting Tool (Web app)



Software Engineering Services

- Aerospace software full life cycle per DO-178B/C Level A-E
- Aerospace software partial life cycle V&V per DO-178B/C Level A-E
- Automotive software ISO-26262, AUTOSAR, ASPICE
- Desktop / Web Application Development
- Mobile Application Development
- Tools development and qualification
- Requirement management
- BSP and driver development
- Re-usable and shared component development
- Hardware-software integration testing
- Engineering and process quality assessment services
- Documentation services
- RTOS support
- Graphics Library support

FPGA / DO-254/ASIC Engineering Services

- 20+ years of experience
- PLD / FPGA development using VHDL or Verilog
- FPGA to ASIC engineering
- Re-usable IP for ARINC 429, MIL-1553, FFT blocks
- SEU mitigation schemes
- Complete DO-254 life cycle services - Level A, B, C
- FAA / EASA SOI audits



AST-230



AST-234



AST-GLSRF



AST-GPSRF

ATE / LabVIEW Engineering Services

- Design, development, validation & installation of ATE
- LabVIEW, LabWindows, Python, Perl based fully automated application
- ATE for analog / digital discrete I/Os, RF and microwave signals
- NI Pxi Ballard or custom hardware



ATE for GNSS Receivers



ATE for CDU

Hardware & RF Engineering Services

- Over 25+ years of experience
- Design & development compliant to DO-160, EMI/EMC, ESD, Lighting open/short circuit protection etc.
- Analog, Digital, Power supply
- RF and Microwave
- Power amplifier
- Up/Down converter
- Power splitter
- Clock distributor
- UHF, L, S, C and X band frequencies



200W Power Amplifier



Aircraft Power Interface Board

Systems Engineering Services

- "Build-to-spec" FAA-certified product development
- "Build-to-spec" CEMILAC-certified product development
- Hardware design engineering
- RF and Microwave Engineering
- FPGA/ASIC Engineering
- DO-254 Engineering
- ATE/LabVIEW Engineering
- Hardware & Software integration
- Environmental Engineering
- Obsolescence Engineering
- Mechanical CAD design
- Electronic CAD design
- Systems Safety and Reliability Analysis
- "Build-to-print" manufacturing services

Tools Capability

Life Cycle Tools

- ❖ Requirements Management
 - DOORS
 - ReMa (Accord)
- ❖ Software Design
 - Mentor Graphics Case Tool
 - Rhapsody
 - Teamwork/Ada
 - Easy Case
- ❖ Software Testing
 - RTRT
 - IPL Cantata
 - VectorCAST C/C++
 - LDRA
 - SmartTester for C (Accord)
 - SmartAct for assembly (Accord)
 - IPL AdaTEST
 - Logiscope and Lint
- ❖ Coverage Analysis
 - C-Cover
 - Logiscope
 - VectorCAST Cover
 - CodeTrax for C (Accord)
- ❖ Project Management
 - MS-Project
 - Smartworks Project Planner (Accord)

Configuration Management

- ❖ ClearCase
- ❖ CVS
- ❖ RCS
- ❖ PVCS
- ❖ SVN

Software Engineering Tools

- ❖ RTOS
 - GreenHills Integrity
 - VxWorks
 - MS-WinCE
 - DSP-OS
 - VDK
 - MicroC/OS
- ❖ Compilers
 - C/C++/Ada 83 Compilers for various hardware platforms (Power PC, TI DSP, ADSP etc.)

FPGA Tools

- ❖ Front end design
 - XST, SynplifyPro, ispLEVER, VIVADO
 - Eclipse EDK for Zynq Devices
- ❖ Back end design
 - Xilinx ISE
 - Actel's Libero SOC
 - Altera's QUARTUII
 - Vivado
- ❖ Simulation and Coverage
 - Questa-Core
 - Modelsim PE/SE
 - Vivado Simulator
- ❖ Coverage Analysis
 - TransEDA VN-Cover

Hardware Engineering Tools

- ❖ Python
- ❖ GNSS Constellation Simulator
- ❖ High-density FPGA boards for ASIC prototyping
- ❖ High-speed DAC Interfaces
- ❖ Eclipse EDK for Embedded Programming
- ❖ Spectrum Analyzer
- ❖ Signal Generators
- ❖ Logic Analyzer
- ❖ Digital Oscilloscopes
- ❖ Multifunction Counters
- ❖ Development tools and ICE for all ADI DSPs, TI DSPs, ARM Processor, PowerPC
- ❖ Orcad, Cadstar Viewer, Alegro, PspiceT
- ❖ Matlab
- ❖ Temperature & Humidity Chamber
- ❖ Network Analysis
- ❖ Arbitrary wave form generators
- ❖ Automated test equipment
- ❖ PXI based RF test instrumentation

Awards & Recognitions



Defence Technology Award
from the Government of India
Awarded by the Prime Minister Of India



National Award
from the Government of India
Awarded by the President Of India

29 Years of Excellence in Services

Aerospace
Space
Automotive
Commercial

Quality Standards

ISO 9001:2015
AS9100:2016 Rev D
CMMI Level 5 V1.3 (Software)

