amc TECH

AMC TECH
competencies & capabilities

IT outsourcing for industry

OUR ADVANTAGES:

20+
YEARS OF EXPERIENCE

100+
ENGINEERS

300+
CUSTOMERS

150+
PROJECTS

WHY US?

industry oriented

price competitive

24/7 availability

proven quality

electronics production line

professional test lab

CUSTOMERS WE SERVE INCLUDE:

GE Power

ALSTOM

BOMBARDIER

FEV

THALES

VOLVO

PGE

TAURON POLSKA ENERGIA

SOLARIS

LOTOS

TI Automotive

ANALOG DEVICES
AHEAD OF WHAT'S POSSIBLE™

software

INDUSTRIAL COMPUTERS

architectures

- X86
- ARM Cortex-A (Ti Sitara AM3359, Freescale i.MX51)
- ARM Cortex-M (Cortex-M3 and M4)

real-time systems

- Windows Embedded
- RTX, QNX
- Open RTOS

skills

- OS installation and configuration on customized HW platform
- Knowledge of tools for: developing, programming and debugging, toolchain selection and installation
- Ability do develop applications without OS (bare-metal programming)

DATABASES

engines

- MS SQL Server 2005-2019, vNext; OracleDB 10g, 11g; MySQL; SQLLite, Cassandra, MongoDB, Infuxdata, Elasticsearch

skills

- Database server management
- Database design (OLTP i OLAP)
- SQL Queries optimisation
- Programming in languages: T-SQL, SQLCLR, PL/SQL
- Libraries in languages C#, C++, Java

MOBILE & WEB

- HTML5, JavaScript, Angular, Electron, Ionic, Node.js, Xamarin

BIG DATA

- MQTT, ActiveMQ, Apache Kafka, Apache Camel, Apache Spark, Apache Flink, Grafana, Kibana, OSGi

TOOLS

- Software: Matlab, Labview, DasyLab
- Visual Studio, Visual Studio Code, CMake

CONTAINERS

- Docker, Kubernetes, Service Fabric

PROGRAMMING LANGUAGES

.NET

- User interfaces: WinForms, WPF, XBPAP, ASP.NET, Steema, DevExpress, Telerik
- Communication: WCF, .NET Remoting, TCP/IP, Web Services
- Communication protocols: MODBUS, OPC UA, KWP2000, SAEJ1939
- Tests: NUnit, MSTests, MSBuild, NAnt, CruiseControl
- Other: Add-ins and Extensibility, Matlab Compiler Runtime, XPath, XSLT, XSD

C/C++

- User interfaces: WinForms, Stingray Grid, BCG, National Instruments Tools
- Communication: TCP/IP, RS232, RS422, RS485, RPC, OPC
- Communication protocols: MODBUS, ADAM (ADVANTECH)

Java SE / EE / ME / FX

- User interfaces: GWT, SmartGWT, Android enabled
- Frameworks: Eclipse, Netbeans, Spring, REST, JMS
- Communication: TCP/IP, RS232, RS422, RS485

UAV, DRONES, ROS

- PX4 , MAVLINK, MAVROS, QGroundControl, ROS

ML/AI CV

- Darknet (YOLOv3, YOLOv4), OpenCV, OpenVino

OPERATING SYSTEMS

- Windows XP/Vista/7/8/10; Windows Server 2003-2019; Linux/Unix

CLOUD

- AWS, GCP, AZURE

METHODOLOGIES

- SCRUM, PRINCE2, PMBOK

electronics

ANALOG CIRCUITS

linear analog circuit

- Low-pass, high-pass and band-pass filters; active/passive
- Analog signal amplifying in range from 1 to 10000
- Specialized high impendance input circuits
- Charge amplifier circuits
- Input circuits for precise A/D processing
- D/A processing in band, DC 2,5 MS/s
- High voltage power amplifiers

data acquisition

- 8 to 24 bit, frequencies up to 2,5 MHz
- Parallel processing up to 64 channels (24bit/100kHz/channel)

DIGITAL CIRCUIT

microcontrollers

- Atmel: AVR32, ARM7, ARM9, ARM11
- Analog Devices: ADuC, BlackFin
- Texas Instruments: MSP430, TMS320
- STMicroelectronics: CORTEX M0, M3, M4
- Microchip: PIC 8/16/32 bit, DSPIC
- Freescale/Motorola, NXP
- DSP (Texas Instruments, Motorola)

FPGA

- Xilinx/Vivado: ZYNQ, Family-7, Spartan/Virtex-6
- VHDL, Verilog, SystemVerilog

communication bus

- Modbus RTU, Modbus TCP, Hart, CAN, GSM/GPRS

wireless communication

- Radio band 433 MHz, 868 MHz, 915 MHz, 2.4 GHz
- MASH Network, Wireless Hart, 6LoWPAN

ELECTRONICS MANUFACTURING

PCB layout and assembly

- Automatic Pick-and-Place machine
- Manual fixed assembly
- Solder paste and glue SMT Stencil Printer
- Solder paste and glue dispensing
- SMT Reflow Soldering
- Climate chamber, EMC tester
- Up to 32 layers
- RF and Microwave circuit layout

design software

- Altium Designer, IAR, Eclipse, CAD

STANDARD

- ATEX, RoHS, IEC 61508, ISO 14 000

industrial design

DESIGN

- Autodesk Inventor
- Solid Edge
- NX, SolidWorks

MODELLING

- Abaqus
- Ansys Workbench
- Matlab-Simulink

PROGRAMMABLE LOGIC CONTROLLERS (PLC)

- TIA PORTAL
- SIEMENS STEP 7 (S7-300/400, Siemens S7-1200/1500)

STANDARD

- Machinery design directive 2006/42/EC
- Industry branch norms: ISO 16949, IRIS

MANUFACTURING

- CNC
- 3D printing
- manual assembly

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