

# Automotive Resume

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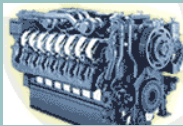
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*Craftsmen Design Consulting and Intellectual Property*



## **Applications DDC Has Expert Knowledge In**

DDC has a wide breadth of automotive electronics experience. DDC has significant experience in designing, simulating and supporting field testing of automotive electronics. We are familiar with and have substantially used the vehicle simulators commonly used for validation, and have significant experience in the rigors of automotive design and practices, and a wide breadth of applications and customer base. DDC tends to be on the high end in terms of complexity and algorithmic sophistication, and we ultimately culminate our experience in the most advanced applications and highest levels of integration, using the latest FPGA and ASIC technologies.



DDC has extensive experience and done countless chips in engine controllers, UART/Comm control channels, servo control, gyro control, ADC, DAC, RDC interfacing, transcendental function generation, transmission controllers, CAN bus interfaces, injector control, protected outputs, H-Bridge, sensor access, Power steering Controllers, Position/torque inputs, filtering, end of life replacements, PID controllers, airbag deployment, Navigation system (GPS), MP3, Voice Activated/controlled system, PCMCIA controller/Flash device. Drive-by-wire vision systems, night vision, etc. See below for an itemization

### **Systems experience**

- Engine controls
- Transmission controls
- Power steering controls
- Airbag deployment
- Navigation systems
- On-board camera development and control
- Servo controllers
- Gyro controllers
- Vision systems
- Night vision

### **Related Interfacing / communications**

- UART/Comm control channels
- ADC, DAC, RDC, resolvers
- Protected outputs
- H-Bridge
- Sensors and gyros
- PID / filters
- PCMCIA interfacing
- Flash interfacing



## Why DDC is uniquely qualified to work with you

- **We have extensive experience in automotive controls and circuits:** We have implemented several engine, transmission, navigation, vision, and power steering systems, and in many cases have solved the same problems through several means. We have built a substantial infrastructure of tools, intellectual property, experience, and talent.
- **We have extensive chip design experience:** Having designed complex systems and chips for over 17 years, we have a breadth of experience from which to draw from. We are world-class experts on all main technologies: ASIC, FPGA, and SoC. Our experience in these technologies is unparalleled. We are typically at the cutting edge of technology, using the latest technologies and techniques to achieve high quality in completing the most complex designs.
- **We have extensive experience in system design:** We have designed whole systems, boards, chips, and software for a range of complex (and simple) automotive products. Although most of the really high-end complexity ends up in the chips, we have a proven track record in everything between requirements definition of the overall system, to testing the final product. We have an experienced staff that has expert knowledge in system design, board design, chip design, and software design, and the documentation and testing of such products.
- **We are efficient and cost effective:** In addition to being excellent designers, we are accurate estimators and schedulers. Having done this for so long, we are very predictable and reliable. This makes us efficient and cost effective, time and time again.
- **Every one of our previous customers is a reference:** We have been designing chips and systems for 17 years, and doing so independently for 9 years. In that time, we have proven our abilities over and over again. We use all of our previous customers as a reference, and we will be looking to add each new customer to that list.
- **We have a world-class talent pool:** We have advanced degrees in DSP, communications, and video. Most employees are 10-20 year veterans, and have been with us a long time. We have countless working customer products in the field.
- **We have good relationships with chip and tool vendors:** Relationships take time to develop. Having done this for so long and working with so many processes, chip vendors, and EDA tools, we have nurtured and maintained solid relationships, which allow us to provide the highest quality services and products to our customers.
- **We use the latest tools, software, and equipment:** We keep up to date to provide the fastest and highest quality design cycles.