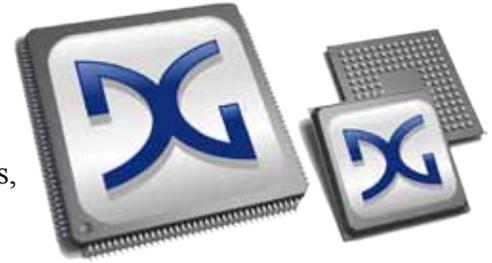# DPA on a Chip

DG TECHNOLOGIES
Vehicle Network Solutions

- ✓ Design the latest DPA functionality into your own project!
- ✓ Dearborn Group provides: Design assistance, support or Turn-Key solution.
- ✓ You provide: Space on your board and your engineering expertise.
- ✓ Useful for development, vehicle network data acquisition, system diagnostics, end-of-line testing, and hardware-in-the-loop simulation.
- ✓ Uses standard ARM7 microcontroller.
- ✓ Supports J1939, J1708/J1587, CAN (ISO 11898), GM Class 2, and is RP1210 compliant.
- ✓ Supports Cummins, Detroit Diesel, MeritorWABCO, Caterpillar, Mack, Allison, Eaton, Navistar and many more.

DPA on a Chip

The DPA series is designed for private branding with the addition of proprietary protocols, hardware, features and logos. Many firms have chosen this route to provide their own branded diagnostic hardware. This provides a validated platform that can also be conveniently used on other manufacturers' subsystems, while DG maintains compatibility.

Leveraging Our Dearborn Protocol Adapter (DPA)

Our industry standard DPA adapters for the heavy duty industry can now be incorporated directly into your product. Typical targets include engine, transmission, HVAC, braking, body, plus any other vehicle systems. Dearborn Group extends the DPA family to include licensing the intellectual property, plus on-going maintenance for inclusion into your proprietary hardware. We take care of all support and regular maintenance issues with the various vehicle network protocols and RP1210-compliant diagnostic packages.

Development

The DPA on a Chip firmware is delivered programmed in a ARM7 chip using the appropriate package. DG supplies schematics, software and assistance for the peripheral driver chips for protocols that are to be supported. We can also completely design and implement a complete project solution meeting your specifications.

Software Options

The DPA on a Chip can be accessed via RP1210 protocols, allowing use with many OEM diagnostic packages. DG also sells our DLM software, useful for reading, writing and saving data to and from supported vehicle networks. You can bypass RP1210 and write your own Windows diagnostic software to directly access the target though the DPA on a Chip using supplied API drivers. Custom applications can be developed using a DPA to read and write to a vehicle or network system using programs such as C, Visual Basic, Visual C and LabView. The DPA accepts ASCII commands from non-Windows devices such as PDAs, PLCs, data acquisition or other proprietary hardware.

Wireless Options & DPA Flexibility

DG has expertise with WiFi, Zigbee, Bluetooth and other wireless technologies and can assist in implementing these into your project. Any protocol, wired or wireless, that uses modules or ICs that can be attached to the processor can be implemented with DPA on a Chip. DPA on a Chip is quite flexible and can adapt to your needs.

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