#### **Infineon Preferred Design House**

# Distribution Communications Package

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### Introduction to RDM Group Ltd



- Strong pedigree for supplying bespoke systems / components and engineering design services for automotive and industrial customers
- Celebrating 20 years of operation of RDM Group this year (2014)
- Tier 1 automotive electronic system, wire harness and mechanical solution supplier to major OEMs in UK and mainland Europe
- UK based Advanced Engineering Centre in Binley, Coventry
- Capabilities in embedded systems, hardware design (schematics capture, PCB layout, board bring up), firmware, embedded software, diagnostics, EMC / RFI / 'E-marking' certification, outsourced manufacturing, Quality control, inventory control and JIT
- Accredited ISO/TS 16949 (Automotive Quality / Process)
- Accredited ISO 26262 (Functional Safety) Engineering staff

#### **Experience and Capabilities**



- Automotive ECU development. Bespoke designs for body chassis and powertrain systems, from the ground up
- Advanced powertrain controls for Electric Vehicles and Hybrid Electric Vehicles
- Control systems and electronics for Hydrogen powered fuel cell vehicles
- Ethernet, WiFi and Bluetooth enabled ECUs for App connectivity and cloud computing
- Safety management ECUs for EVs and HEVs, including safety case analysis and ISO26262 functional safety engineering process, work products and organisation
- Experts in Infineon Microcontrollers, Power Devices, Transceivers, ASSP, and their usage in automotive and industrial applications
- Experts in Microcontroller design methodology, tooling, testing, debugging, calibration, modelling, bus systems (LIN / CAN / Flexray /Ethernet / CANfd)
- iOS App development (registered Apple Development partner and Mfi member)
   for connected vehicle and cloud computing on iPhone and iPad
- Android App development for off board tuning and calibration systems

### Standard Support Package



1st level customer support to ensure that customers successfully develop their application with Infineon products and solutions

- Technical interface and support to the customer
- Support the design phase of the project at the customer
  - Hardware
  - Software
  - Product support
- Trainings at customers for design teams on Infineon products and solutions
- 24hrs response time to the customer
- One stop shopping for Infineon technical support





### Turn key solutions for new product developments

- Project planning
- Schedule / Cost estimating
- Quality targets
- Architecture and system specification
- System design
- Prototyping
- Manufacturing
- End of line testing
- Certification / Customer approval (electrical / mechanical testing)
- Warranty / field return investigations

# Premium Packages Software Engineering Services



#### Turn key solutions for new or updated Products

- Project planning
- Schedule / Cost estimating
- Software process implementation / environment set-up
- Software Architecture / functional specification / resource allocation
- Modelling / System design / auto-coding
- Operating System / scheduling / worst case timing analysis / instrumentation
- Multicore aspects and real-time considerations
- Automated testing / verification an validation testing / report generation
- Board bring-up / bug tracking / software auditing
- Defensive programming / MISRA / Functional safety

# Premium Packages Re-Engineering Services



# Re-Engineering of Previous Generation of Embedded System to:

- Change system to a newer / cheaper / faster / larger processing platform
- Remove obsolete or difficult to source components
- Reverse engineer systems where specification is not available / accurate
- Integrate several disparate functions on a multicore processor
- Include IP from other vendors or protect own IP from other vendors
- Commonise hardware or software platform between several different product lines to increase purchasing power and reduce NRE / maintenance / variance / warranty
- Leverage rapid prototyping tooling and autocode generation to decrease time to market and increase software quality

# Premium Packages Training Services



### Short Courses or bespoke training on all aspects of Embedded systems

- Infineon Microcontrollers (TriCore<sup>TM</sup> / AUDO<sup>TM</sup> / AURIX<sup>TM</sup> / ARM<sup>TM</sup>)
- Hardware engineering (component selection / circuit analysis / specific applications / custom silicon devices / PCB design / ESD / EMC / RFI)
- Software engineering (engineering process / change management / software quality / tooling / code optimisation / defensive programming / testing methodologies / embedded code / operating systems / multicore processors / software safety / MISRA / low level drivers / OSEK / Autosar / debugging techniques / timing analysis / resource allocation / makefiles / bootloaders )
- Functional safety
  - ISO26262 Automotive
  - IEC61508 Industrial and automation

### **Supported Regions**



### RDM Group is UK based so can provide:

- Direct on-site and Remote support (phone and email) for UK customers
- Remote support (phone and email) for other EU countries outside of UK

Further information available at: www.rdmgroup.co.uk/infineon.html

#### **Contact:**



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