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| **Title** |  **Principal Firmware (VHDL) Engineer**  |
| **Band** | **Individual Contributor – Professional** |
| **Grade** | **P5 - Specialist** |
| Job Family | Engineering |
| Reporting To |  |
| Location |  Hastings Flexible  |

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| **Position Objective** |
| This role is for a Principal Firmware (VHDL) Engineer who is looking to apply their experience in a new and challenging environment, working across the full development lifecycle on existing and new programmes. This is a senior technical role with no expectations of line management.While primarily working on defense products and contracts, candidates with domain experience in adjacent areas are encouraged to apply for this role. Working within a team environment the candidate will be able to use their technical knowledge, decision making and interpersonal skills to achieve the project goals.General Dynamics Mission Systems UK (GDMS-UK) is a world-leader in the integration of cutting-edge defence and security systems, delivering decisive advantage to military, government and civil customers worldwide. Our employee culture is one that thrives on innovation, embraces teamwork and possesses a strong will to succeed. The pioneering technologies and the quality of our people give us our competitive edge.   |

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| **Generic Level Description** |
| General Accountabilities | Advanced specialization in one or more areas of expertise; applies expertise cross-functionally. |
| Supervision Required or Provided to Others | Acts independently to determine methods and procedures on new or special assignments. May lead a project team with significant impact on company results - focus is on task and resource management - is not responsible for staff management. May be an expert in their field, providing ideas, opinions and advice to others. |
| Complexity | Works on significant and unique issues involving the manipulation of a number of extremely complicated variables within diverse environments characterized by considerable change. Has an impact on the objectives and policies of the overall organization or a major segment of the organization. Exercises independent judgment in methods, techniques and evaluation criteria for obtaining results. |
| Knowledge and Technical Expertise | Expert in one or more areas; understands other disciplines and know how they affect own discipline and vice versa. Applies expertise to the most complex problems; coordinates work outside own area of expertise. Uses skills to contribute to development of company objectives and principles and to achieve goals in creative and effective ways. |
| Problem Solving | Anticipates problems and challenges, and proposes innovative solutions and ensures solutions are consistent with organization objectives. |
| Planning & Organizing | Develops longer term plans with effect on own and other areas and influences business strategy; may manage resources to achieve the plan. |
| Project Management Accountabilities | Manages very complex or multiple complex projects, including cross-functional projects. Coaches others on the team. |
| Decision Making and Autonomy | Has decision-making authority and autonomy to deliver on goals of work or project team; influences others cross-functionally to ensure functional goals are met, and resolves conflicts in an effective manner. |
| Client/Business Orientation | Assists in the development and implementation of customer service enhancements on cross-functional basis; plays role in resolving issues that require a cross-functional solution; facilitates sharing of best practices on customer service. Focuses on developing long-term partnerships with internal clients. Anticipates internal/external business and legislative issues impacting other areas of the business. May manage costs and profitability across more than one project/work activity. |
| Communication, Negotiation and Influencing | Influences strategic and other issues which affect the business internally and externally, makes presentations at senior management level. |
| Leadership Requirements | Coaches others on how to enhance communication, problem solving, teamwork and innovation; involves others in problem solving, decision-making and creative thinking. |
| Key Contacts | Builds cross-functional relationships to gain support; maintains positive relationships with key customers, suppliers, etc., who have a significant impact on the success of the organization; may represent the organization in public speaking venues and/or community events. |

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| **Discipline Description** |
| Responsibilities Include | The successful candidate will pro-actively contribute to product development and advancing the skills and capabilities of GDMS-UK engineering. The role involves a range of activities, including:* Firmware development and verification, primarily VHDL, of complex systems and functions
* Adherence to RTCA/DO-254 and other applicable standards
* Lead internal and external firmware design reviews throughout the development life-cycle
* Support system architecture discussions where the firmware is a key component of the system

 This is a technical individual contributor role, line management responsibilities are not expected |

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| **Knowledge, Skills & Abilities** |
| Required Skills & Abilities | *~* The candidate should be able to demonstrate engineering and domain experience across a number of the aspects listed below:* Solid experience of FPGA design and implementation for complex functions, primarily using XILINX SoCs and MicroSemi FPGAs
* Proficient in the use of VHDL
* Proficient in the use of simulation tools and the generation of verification test benches
* Recent design experience in the use of XILINX Vivado toolset and supporting tools
* Recent design experience in the use of MicroSemi Libero toolset and supporting tools
* Good understanding of requirements capture, work package definition and effort estimation
* Experience of implementing the development guidelines set out by RTCA/DO-254
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| **Education & Experience** |
| Required Education & Experience | Candidates should be able to demonstrate:* Wide experience of digital hardware development
* A good understanding of the challenges associated with firmware development
* A proven track record of delivering complex firmware components
* High levels of motivation, integrity and professionalism
* Flexibility, innovation and commitment to delivery

The successful candidate will need to hold, or be able to obtain, UK Security Clearance (SC).Professional registration as a Chartered Engineer (CEng or equivalent) is desirable, but not essential. GDMS-UK actively support employees in attaining CEng status.  |