

Embedded Software Engineer

Job Description:

We are seeking a skilled Firmware Developer to play a pivotal role in the design and development of firmware, interfacing directly with sophisticated hardware SoC features. The ideal candidate will collaborate closely with SoC architects, meticulously translating hardware architecture into robust firmware architectures.

Key Responsibilities:

- Architect key blocks of firmware that interact with low level hardware SoC features.
- Design, develop, analyze, and thoroughly test embedded software and firmware for our range of Hamilton products, ensuring optimal integration with low-level hardware components.
- Interface with SoC architects to work through hardware design ambiguities and translates hardware architecture to firmware architectures.
- Maintain and enhance firmware for our existing product lineup, with a focus on stability and efficiency.
- Actively develop and implement firmware modifications in response to customer requests and for product advancements.
- Engage in firmware development for both new initiatives and existing Hamilton products, ensuring high-performance outcomes.
- Address and resolve firmware issues encountered in series production, ensuring product reliability.
- Conduct comprehensive performance measurement and firmware testing prior to new product launches.
- Adapt firmware based on client specifications and provide detailed test reports of the firmware integrated into Hamilton products.
- Prepare and maintain essential firmware documentation and assist users in using the developed firmware solutions.

Professional Experience & Skills Required:

- Typically requires a minimum of 5 years (10 years preferred) of system-level design experience in embedded real-time control systems.
- Demonstrated expertise in object-oriented analysis, design, and real-time development using C/C++.
- Strong skills in documenting complex systems.
- Proficient in interpreting low-level hardware specifications.
- Significant experience in designing and implementing embedded software subsystems, with a focus on balancing performance, memory efficiency, simplicity, reliability, and safety.
- Proficiency in standard development tools (e.g., Keil uVision), version control, issue tracking, and debugging.
- Experience with multi-core microcontrollers. Knowledge of Infineon XMC and familiarity with RTOS (CMSIS, FreeRTOS, ...) or Embedded Linux environments are advantageous but not mandatory.
- Familiarity with communication protocols such as I2C, SPI, and CAN is a distinct advantage.
- Exceptional communication skills.

If you would like to apply for this position or have any further questions, please contact:

BioFluidix GmbH

Dr.-Ing. Nils Lass

Engesserstr. 4

79108 Freiburg E-Mail: jobs@biofluidix.com

Telefon: +49 761 45893831