

**Firmware Engineer – BL SIS**

**The Company**

NXP Semiconductors N.V. (NASDAQ: NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has 45,000 employees in more than 35 countries. Additional information can be found by visiting [www.nxp.com](http://www.nxp.com).

The Business Line Secure Identification Solutions develops, produces and sells a complete range of ICs for smart cards, tags, labels and readers, featuring many co-processor, security, memory and interface options; address the needs of all customers, from low-cost smart label ICs for high-volume supply chain management applications through high secure multi-application smart cards. In Shanghai, the Identification development team will focus on smart card IC development based on the requirement from local market. To enforce our team we are looking for new members to join our successful journey.

**Your Responsibilities**

In this role you will:

* Collect and manage chip feature requirements together with other functional teams.
* Define and implement the firmware modules from system architecture and functional specification.
* Optimize the firmware modules for limited resource usage, low power consumption, and security constrains.
* Implement and extend test suites to ensure a quality delivery of the full-fledged firmware.
* Develop creative ideas and software countermeasures for security threats and attacks.
* Drive and accompany certification procedures including generation of related documents.
* Support both internal stakeholders and external customers at expert level.
* Create, review and update the firmware design and implementation documents.
* Work in multi-site and multi-cultural environment.

**Your Profile**

The candidate should possess:

* Bachelor/Master degree in electrical/electronic engineering, computer science, information technology or relevant disciplines.
* Experience in embedded software development with 8/16/32-bit MCU architectures (e.g. 8051, ARM-Cortex).
* Excellent programming skills in C and assembly languages. Strong debugging capabilities.
* Sound experience in software development lifecycle and configuration management tools.
* Proficiency with verification methodologies and automated scripts in lab environments.
* Proficiency with RTOS architecture and underlying hardware peripheral blocks.
* Domain knowledge in smart card and its standards (e.g. ISO7816/ISO14443/ISO18092).
* Knowledge of crypto algorithms and attacking methods would be an added advantage.
* Enthusiastic team player, fast learning and ability to deliver under pressure.
* Clear dedication to project targets & structured way of working.
* Good command of English, both written and spoken.
* Fresh graduates are also welcome.

**Location**

Shanghai, China

**Contact Details**

Emily Qian

Talent Acquisition, Human Resource

Email: [emily.qian@nxp.com](mailto:emily.qian@nxp.com)