About Huawei

Huawei is a leading global provider of information and communications technology (ICT) infrastructure and smart devices. With integrated solutions across four key domains – telecom networks, IT, smart devices, and cloud services – **we are committed to bringing digital to every person, home and organization for a fully connected, intelligent world.**

At Huawei, innovation focuses on customer needs. We invest heavily in basic research, concentrating on technological breakthroughs that drive the world forward. We have more than **200,000 employees**, of **which 55% are employed in R&D**, and we operate in more than 170 countries and regions.
Huawei invests more than **20% of revenues in R&D** every year: in the past 10 years our total **R&D investments exceed 150B USD**.
By the end of 2023, Huawei held **+140.000 active patents**.

Find out more about Huawei Research and Development at this link https://www.huawei.com/en/corporate-information/research-development

Huawei's end-to-end portfolio of products, solutions and services are both competitive and secure. Through open collaboration with ecosystem partners, we create lasting value for our customers, working to empower people, enrich home life, and inspire innovation in organizations of all shapes and sizes.

Who we are

- Our motto is "make it possible", we use our customer-centric obsession, our perseverance, our dedication and a continuous self-challenge to accomplish the most challenging goals and always raise the bar!
- We think and execute very fast, but we are never superficial and always guarantee the highest standards.
- We are obsessed about continuous improvement and about creating value for the company, for the employees and for society.
- We are like a big multicultural family where relationships are informal and direct and where cooperation and support are our daily keywords.
- We are a place where "results talk and ideas walk", good ideas are always welcome, but you have to take ownership and make them happen too.
- Openness and flexibility are our mantra.

Job title: **R&D engineer of board/module high-current PDN**

Job Location: Segrate (Milan), Italy

Type of Contract: Permanent Contract

R&D engineer of board/module high-current PDN in a nutshell

The PI Lab is an advanced power supply technology research lab under Huawei Technologies Co., Ltd., The purpose of this lab is to lead Board level power supply engineering innovation in ICT field.
We have formed a Power Integrity Research Team at the Microwave Research Center (found in 2008,) in Milan, Italy. In 2022, we already have two local PhDs working on high current PDN and precision power supply design, and now we are looking for experts in the field of high current power supply architecture design， who will take charge of the full-link power supply network design to achieve the optimal power density and energy efficiency of the board-level power supply solution. The job position is intended for all the people that have a knowledge regarding the full power link system starting from the main voltage up to the chip level including. We expect that the expert is able to predict anticipate and consider all the possible issue related to the full power supply system, impact due to component level, issue generated by power plane impedance, impact of capacitance and in the end consider also the impact due to aging and all the relevant phenomena behind like electromigration for example. All of this aspect could be considered as a plus. We expect a strong knowledge about DSC DC converter architecture, strong knowledge regarding PDN and Decoupling capacitance placement, deeper understanding about power integrity analysis and in the end aging.

What will be your main responsibilities?

Be responsible for the exploration of board-level high-current PDN technologies, and the electromigration, through-current modeling and simulation, and performance evaluation of the interconnection microstructures such as the board power plane, BGA ball, and via.

- Researched innovative technologies for low-loss and high-current power supply architecture, took charge of the electromigration and through-current capability improvement of 1000 A+ high-current PDNs, and resolved the through-current bottleneck and key technical challenges of boards and modules.
- Undertake board-level PDN technology development projects with low loss and large current, and support the competitiveness of large current and energy efficiency of the next-generation large-sized CPU.
- Build the capability of simulating and testing the electromigration of PDN microstructures (vias, bumps, and balls) under low voltage and high current.

What are the skills required for this position?

- Master's degree or above, in Electrical Engineering, Computer Engineering, or Computer Science, PhD preferred.
- Have successful experience in developing power supply systems such as large chips and CPUs, and have a deep understanding of board-level power supply architecture, board-level PDN design, power encapsulation, and power conversion modules.
- Experience in developing simulation and testing of high current electromigration and through-current capability;
- Knowledge of PCB microstructure (vias and BGA balls), PCB surface treatment methods, and BGA solder materials;
- Excellent communication and presentation skills.
- Availability to travel
- Fluent knowledge of English is mandatory

What We Offer

We offer you an exciting professional career in one of the leading and fastest growing multinational telecommunication companies, challenging work and a competitive salary package. Personal development is ensured through many training opportunities in Western Europe and abroad.

Privacy Statement

We therefore commit to protecting your privacy following the local legal data privacy legislation. Please read and understand our West European Recruitment Privacy Notice before submitting your personal data to Huawei so that you fully understand how we process and manage your personal data received (http://career.huawei.com/reccampportal/portal/hrd/weu_rec_all.html)

If you have any queries in regards to Huawei WEU Data Privacy please feel free to contact our WEU Data Protection Officer by clicking here (https://www.huawei.com/en/personal-data-request).

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