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# Job Description: Analogue/RF Layout Engineer

# Summary MediaTek is the world’s 4th largest global fabless semiconductor company, leading the market in chipset technology. We enable more than 1.5 billion consumer electronic products a year including Smart TVs, Voice Assistant Devices (VAD), Android tablets, feature phones, Optical and Blu-ray DVD players, and we’re number two globally in mobile phones.

MediaTek is one of the top four companies globally to advance 5G development. Working together with 5G component suppliers and worldwide cellular operators around RF technology, MediaTek is quickly bringing a complete, standards-based and optimized 5G solution to the market.

Due to our continuing success and growth in the cellular chipset market, we have some exciting new opportunities in MediaTek’s UK RF IC Design Centre in Kent.

**The Role**  
We are looking to recruit an Analogue/RF Layout Engineer to join our team, developing multimode transceivers and related IP for mobile phones. This position offers an excellent development opportunity for the right candidate.

As layout-dependent effects become an increasingly significant factor in circuit performance, the role of Analogue/ RF Layout Engineer becomes more important and more technically challenging. In this rewarding role you will work very closely with designers to overcome these challenges, explore new process technologies and achieve optimum circuit performance.

# Key Challenges

* Increasingly complex mask topologies (multiple patterning)
* Increasingly complex physical Design Rules, including ever-tighter density constraints
* Understanding stress, spacing and other geometry-dependent parametric effects (WPE, LOD, PSE...) and meeting matching requirements in the presence of these effects
* Improving methodology to reduce design/layout iterations and increase confidence in first silicon (including increased use of rule-based checking)

# Responsibilities

* Layout of analogue/RF and mixed-signal circuits, primarily using Cadence Virtuoso XL. This will cover all levels of hierarchy from small cells to system-level.
* Verification (DRC, LVS, ERC, ESD, Antenna...) and parameter extraction using Calibre, Assura and QRC
* Floor-planning and planning of supplies and critical nets
* Estimating layout size and resource requirements (scheduling)
* Liaising with designers to ensure high quality layout within time and area requirements
* Assisting with Tape-Out and executing layout for designers at other MediaTek sites, sometimes as a remote resource, and sometimes travelling to the remote site

**Essential Technical Skills & Experience**

* Bachelor’s or Master’s degree or equivalents, in Engineering or Physical Sciences
* Some exposure to analogue IC layout and/or design

**Desirable Technical Skills & Experience**

* Good understanding of semiconductor processes, including deep sub-micron CMOS
* Good understanding of principles of analogue IC design and layout and underlying physical mechanisms
* Good understanding of the requirements of RF circuits and layouts
* Familiar with Cadence Virtuoso XL Layout and Composer XL Schematic
* Familiar with Calibre ad/or Assura DRC, LVS and parameter extraction. Able to understand and debug rules in command files.
* Good working knowledge of Linux
* Familiar with a Design Data Management tool

**Soft Skills**  
• An innovative thinker with a passion for solving challenging technical problems

• Highly motivated and results driven to see projects through to completion

• A team player with the ability to work with others to complete challenging projects together

• A good communicator who is able to communicate effectively using a range of tools (Email, IM, VC etc.) with people across different timezones and cultures

• Meticulous in ensuring work is completed to a high quality

• Excellent time management and organisation skills

# Location Our UK RF Design Centre is located in West Malling, Kent. This location offers an excellent choice of living environments in traditional rural villages and local towns. West Malling is conveniently located within one hour from Central London, four main London airports and The Eurostar.

**MediaTek and You**  
MediaTek look for people with a great passion and work ethic, who have a broad set of technical skills and are ready to master new technologies and tackle some of industry’s greatest challenges to positively impact billions of future users. From 4G and 5G smartphones, to tablets and digital television, MediaTek employees are changing the industry one innovative product after another.

We pride ourselves on having an accomplished and successful global collaborative team culture and a competitive compensation and benefits package. We know that every employee makes important contributions, and that every employee is integral to our success.