

Companies Information Form

1. Company information

Company Name	EFFECT Photonics
Address	Torenallee 20, 5617 BC Eindhoven, The Netherlands
Number of employee	80
Business field	Integrated Photonics
Home page	http://www.effectphotonics.nl
	Our Company: Founded in 2010, EFFECT Photonics delivers highly integrated optical communications products based on its Dense Wavelength Division Multiplexing (DWDM) optical Systemon-Chip technology. As a spin out of the prestigious Technical University of Eindhoven, EFFECT Photonics takes a platform approach to integration using high-yielding building blocks within the wafer. Growing different quaternary alloys of Indium Phosphide on a single wafer means that all of the active and passive optical functions of a system can be created within a single chip, which is then combined with simple packaging, designed for high-volume, low-cost manufacture from the very start.
Company Introduction (English)	The key enabling technology for DWDM systems is full monolithic integration of all photonic components within a single chip and being able to produce these in volume with high yield at low cost. With this capability, EFFECT Photonics is addressing the need for low cost DWDM solutions driven by the soaring demand for high bandwidth connections between different datacenters and between datacenters and mobile cell towers. EFFECT Photonics develops and delivers highly integrated optical products based on InP (Indium Phosphide) which is the material of choice for creating efficient laser light sources, waveguides, modulators, and photodiodes used in optical communication systems throughout the world. Extensive development work and European funding has already been invested to develop and refine the processes needed for the integration of multiple optical functions within a single chip.

Our Culture:

Although we exist since 2010 we still feel like a start-up company and we want to keep this mentality alive for as long as possible. This means we have very short communication lines and all people work closely together with the same goals in mind: "Bringing our great and innovative products to the market as soon as possible".

In October 2018 we will have colleagues with 16 different nationalities (will Korean be nr. 17?) onboard and this means we all communicate in English. As we have recruited and relocated many of our colleagues before we perfectly understand how to deal with that, including arranging for housing, work permits and residency cards.

A very cool thing we are proud of is that we all have lunch together every day. The company provides for this and office management makes sure there is all kinds of food available. We sit down and talk about work as well as about our private life's. This way we all learn about each other's work, including that in other disciplines, and life. One of our lunch tables is the "Dutch table". This is where you can practice your Dutch language skills, which very often is quite funny! Fun is a very important part of our work so please let us know if you would be open for a challenging job in our cool, young and dynamic company in The Netherlands!

For a quick peek behind the scenes click here: https://effectphotonics.nl/news/video-behind-the-scenes-at-effect-photonics-headquarters/

2. Job opportunities information

Interested	\square Mechanical engineering, \boxtimes computer science, \boxtimes electrical engineering, \square chemistry,
Major	\square industrial engineering, \boxtimes material science, \square bio science, \square energy,
	⊠ (others: Photonics)
Possible Job1	Photonic Integrated Circuit Design Engineer (PIC Design Engineer)
	As a Photonic Integrated Circuit Design Engineer you will work on current and next generation high-speed optical communications modules. You will design a wide variety of active and passive components for our Indium Phosphide based integration platform. You will be responsible for the design of individual building blocks, such as couplers, splitters, reflectors, semiconductor amplifiers, phase modulators etc. You will also characterize fabricated circuits and test structures.

The position is in our headquarters in Eindhoven, The Netherlands and you will support our manufacturing team in Brixham, UK.

Responsibilities for the position include:

- Independently work on building block design, simulation and circuit analysis.
- Develop, document and execute test procedures for PIC designs.
- Perform signal integrity analysis.
- Analyze measured data, compare with simulations and prepare reports.
- Collaborate with cross-functional teams to create test plans for concept, design and production release validation testing.

What do we expect from you?

- Master of Science or PhD degree in Electrical, Electronics, Photonics or Communications Engineering.
- Detailed knowledge in optical design theory and measurement techniques of photonic integrated circuits.
- Experience in EM simulations with Lumerical, Photon Design and/or Phoenix tools.
- Experience with mode solvers, Beam Propagation Methods, FDTD
- Experience in the layout of photonic integrated circuits
- Experience with test equipment such as optical spectrum analyzers, tunable lasers, source meters.
- Experience with manual electrical probing of integrated circuits.
- Excellent communication skills in English both oral and written.
- Hands on mentality

What do we have to offer?

- Working in an exciting entrepreneurial company environment.
- Working on state-of-the-art technology.
- Being part of a very enthusiastic and highly skilled team.
- Develop your own skills and contribute to a company that is in full development.
- A competitive salary.
- Stock Appreciation Rights (SAR stock program).
- Relocation assistance.

For more information regarding this position please send your question to: frankwolfs@effectphotonics.nl

Applications via this email will not be considered. For applying for this job, click here



Possible Job2

<u>Photonic Integrated Circuit Reliability Engineer (PIC Reliability Engineer)</u>

As a Photonic Integrated Circuit Reliability Engineer you will provide measurements, analysis and diagnostic support on our PIC's. In this position, you will be working closely with PIC Design Engineers to determine design rules and practices that can mitigate issues discovered in reliability testing. We are looking for you if you have a hands-on mentality and experience and if you are not afraid to jump in to provide support where necessary. The ideal candidate has an engineering background (preferably PhD) who is experienced in semiconductor processing, data analysis and root cause analysis.

EFFECT Photonics is a cutting-edge developer of high-speed optical transceivers for communication networks based on Photonic Integrated technology. Our teams are made up of enthusiastic and energetic employees who all share a passion for developing and creating interesting products that will carry the internet of the future. The combination of the international character of our teams and the high level of education make EFFECT Photonics an interesting working environment. Currently we have about 80 employees, covering 16 nationalities already!

Responsibilities for the position include:

- Organize chip level reliability testing such as:
 - Temperature cycling
 - o Damp-heat
 - o High current stress / accelerated lifetime tests
 - Determine the parameters for these tests
- Organize, analyze and visualize the data coming out of the experiments and collate everything in reports for both management and customers.
- Lead Root-Cause-Analysis efforts in case of failed reliability tests; typical steps involve SEM top-view and cross-section imaging, FIB, EDX, etc.
- Direct Communication with second and third parties, such as foundry engineers that are involved in the RCA as well as with service providers.
- Develop incoming chip inspection processes to ensure excellent quality.
- Review foundry processes for possible reliability and quality issues.
- Interface with internal product teams to determine test and reliability strategies.
- Communication with customer engineering teams on quality and reliability plans and results.

What do we expect from you?

We are looking for a self-starting engineer who has broad knowledge and experience in Reliability Engineering. This function requires in-depth understanding and appreciation of Photonic Device Operation, Manufacturing and Reliability (Telecoms). You also have broad experience in multi-format and multi-level communications including data handling and reporting.



In the past, you have shown the ability to translate customer requirements into reliability projects and implement them. You can highlight gaps in information appropriately and have shown good decision-making skills based on incomplete information under high(time)pressure.

It is very important that you have an eye for details and that you are able to maintain meticulous record keeping. Finally, you have excellent skills in cross functional, multi-site and multi-discipline team working and you have effective influencing skills to enable project success.

What do we have to offer?

- Working in an exciting entrepreneurial company environment.
- Working on state-of-the-art technology.
- Being part of a very enthusiastic and highly skilled international team.
- Develop your own skills and contribute to a company that is in full development.
- A competitive salary.
- Stock Appreciation Rights (SAR stock program).
- Relocation assistance.

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Possible Job3

Open applications are always welcome. Please apply via this link:

https://effectphotonics.nl/careers/open-application-ep/

Recruiting sites

https://effectphotonics.nl/category/careers/

EFFECT Photonics positions advertised on LinkedIn

If you need more information please contact Recruitment via email at frankwolfs@effectphotonics.nl