CHIPS.

Newsletter
June 2024

In a constitutional state, the authorities are public and the citizens are private. In an unjust state, it is the other way round.

Charles B. Blankart

CEO's Note

Dear Reader

Today I have the great pleasure of introducing you to Thomas Willi, our chip design project manager. Thomas joined ESPROS on June 1, 2014.

In his letter of motivation dated 21st March 2014 he wrote the following: "As a freshly graduated Master of Science ETH (Swiss Polytechnical University of Zurich) in electrical engineering and information technology with a specialization in communication, I unfortunately have no professional experience and relatively little experience in the field of digital design - but I have a lot of motivation and interest in developing myself further in this field and learning a lot of new things."

Thomas (l.) and Eloi

What a statement: full of energy, drive, a backpack full of extremely solid know-how and yet a great deal of modesty.

Everything that Thomas put on paper in his letter of motivation, he implemented without the slightest reservation. I think the most important skills that Thomas has are his modesty and humility. Only these make it possible to work well in a team and to achieve top performance together.

And when you then become a role model for the others in the team like Thomas does with endless energy and great commitment, great things happen.

Thomas' hands were involved in all important designs. Be it the epc660, the epc635 or the epc611. But Thomas also developed some customer-specific ASICs as part of the team and later with his team and brought them to series production. Each of these design projects was special in its own way. But they all have one thing in common: they are extremely complex projects. Mixed signal with up to six power domains (including negative voltages), highly sensitive analogue parts, large currents and very short switching times, together with complex pixels are the pinnacle of chip design. Thomas mastered them all and, with his enthusiasm, also pushed young colleagues to top performance time and again.

Thank you Thomas for everything you have done for the ESPROS family.

Beat De Coi

PS: Read also the interview on next page

Patent Wall

We recently decided to make our innovative power visible. In the form of a wall on which we have posted the front pages of patent documents.

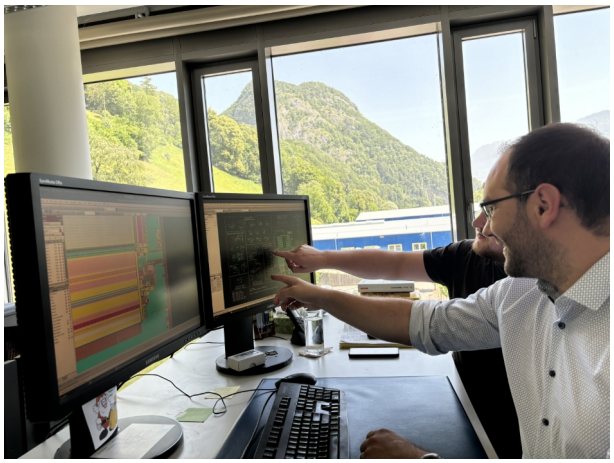
Patent wall of ESPROS

These are the patents of ESPROS, as well as the patents that our CEO has registered in his previous activities. In total, there are sixty patent applications in the areas of optics, electronics, semiconductor technology, chip design, process technology, signal processing, control technology, application technology and, not to forget, photonic systems.

Innovation never ends. It is our vision, that the patents on the wall are just the beginning of much more to come. We are working hard to innovate. Not only in technology, but also in applications. New technologies do not necessarily address mature applications. Often these have to be developed. And sometimes you focus on a specific application which then, for whatever reason, cannot be implemented. If there is enough openness and innovation, doors often open that you would not have expected. At ESPROS, innovation does not end with technology. Innovations are only successful when they make sense and achieve market acceptance.

Thomas Willi, Chip Design Project Lead

We've come a long way says Thomas as he celebrates 10 years or ~315 * 10^{15} nanoseconds with ESPROS. This month we feature an extended employee interview to mark Thomas' decade of dedication to the company.



Thomas at his best: working in a team

"I can't believe it's been ten years. It feels like it has only been a few because there were always exciting projects to dive into. Nevertheless, ten years is quite some time – especially for a digital IC design engineer usually thinking in nanoseconds. Technology has been constantly advancing and with it the demands of the market place. Put it this way 2014 the year I joined ESPROS, Apple launched its *first* large screen smartphone the iPhone 6. Or that's when Germany beat Brazil 7-1 in the World Cup semi-final. Seems a lifetime ago now," say's Thomas Willi.

"Back then, ESPROS was very much still in its start up phase, refining its products.

As a father it is very satisfying to know that I've been working on chips and modules that will be used by the next generations. Products that will make life safer and more productive around the globe."

What do you most enjoy about your job?
I have read other employee interviews and many of them refer to how important the team atmosphere here is. I have to agree to be working on really boundary-breaking TOF chips and imagers in small closely-knit teams is both enjoyable and very efficient. Something I believe would be missing in many of the so-called 'tech giants'. Switzerland is a small innovative country, that punches above its weight internationally – just like ESPROS.

I love that I have the opportunity to pursue such an interesting and challenging career in imager technology here in the region where I grew up and yet still have plenty of time to enjoy family life and my hobbies close-by.

What do you like to do in your spare time?

I love hiking in the beautiful Alps, I'm also someone who leeks to enjoy life's simple pleasures, like good food and drink especially with family and friends.

Do you remember your first day at work at ESPROS? What do you remember?

I remember the orchid sitting on my desk which was welcoming me on my first day and accompanied me for multiple years from then on.

Are there any professional milestones you are particularly proud of? Do you have a favorite project on which you have worked?

The epc915 is my favorite project. And I guess its tape-out was my biggest personal milestone at ESPROS.

What were some of the biggest challenges?

Designing very different imager chips requiring a lot of new blocks each with rather limited resources and make them work right from the beginning.

What do you wish for the next 10 years at ESPROS?

Growing sales and increasing demand for our cool products – but also more interesting design projects, for my team and myself.

What advice would you give to employees who have just started?

Don't be afraid of asking questions and bring in your considerations.

What would you like to learn / where would you like to develop yourself personally?

Italian would be a language which I would like to learn at some point. On the technical side, I would be interested to touch the area of machine learning and artificial intelligence. Id love to build up an even deeper understanding of analog architectures and pixel design.

If you could invent a product, what would it be and why?

A machine which is able to get rid of any microplastics and other pollution in nature caused by humanity.

If you could be someone else for a day, who would it be and what would you do?
Our cat – I would just lay around and to nothing for a day:-)

Is there a talent you would like to have?
To be able to play the trumpet at a very high level without the need to practice.

What three things would you take with you to a desert island?

Food, water, solar-powered ice maker

What was your dream job as a child?
I don't remember.

Who has had the biggest influence on you in your life?

My parents.

What is your favorite way to spend your evenings?
Playing video games with my friends.