CHIPS.

Newsletter
October 2021

The only real mistake is the one from which we learn nothing.

Henry Ford

CEO's Note

Dear Reader,

I wonder which force will be stronger? The power to reduce or even stop the rise in temperature on earth. Or the power to prevent blackouts in the winter months. I'm not a gambler, but here I would make a bet: After one or the other painful breakdowns in the electrical power supply in the western world, the word climate crisis will be replaced by another word. Shall I guess? Is it an electrical power crisis? Probably not, the word is too bulky. But it describes exactly what will happen. Maybe it's just "blackout crisis". Lights go off, refrigerators no longer cool, factories no longer produce, the internet is paralyzed, ski lifts no longer run, railways may run, albeit restricted, and so on and so on.

I am aware that thinking of such a scenario is anything but opportune. Because free thinking is barely allowed these days. Free thinking is to form your own vision of the future, to have your own opinion. And this does not always have to correspond to that which the majorities believe or political correctness.

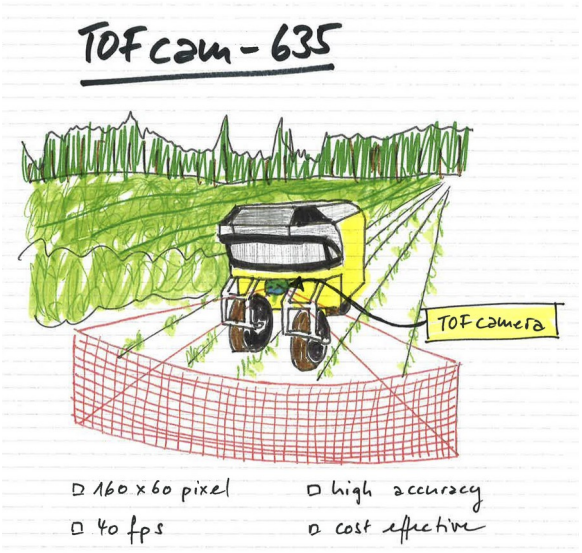
How many times has it been prophesied that oil supplies will run dry in 25 years? That was the case with the first oil crisis in the 1970s. The 25 years are already over. Or the forest dieback in the 80s. The end of the world was prophesied to us. But that was a good thing as I understood it, because the focus was on environmental protection with visible success. The air got better, the waters cleaner, the land more and more natural. But environmental protection no longer seems to be a topic. Climate and CO2 are the key words nowadays. Exclusively. Why is that so?, I ask myself. Perhaps it is an evangelism that can be used for political powerplay? I don't know.

All I know is that the models we use to develop our chips are less complex than the climate models. And yet they are quite imprecise, our chip simulation and TCAD models. Errors in the results of a factor of two are not uncommon. However, the climate models want us to believe to within a tenth of a degree how high the temperature on earth will be in 2050.

At least we at ESPROS would do well not to believe everything in our chip design models and to use our common sense and experience at one point or another. And, for us, environmental protection takes precedence over a "Green Deal".

Beat De Coi

Agricultural automation



The range of applications for TOF seems to be endless. The reason is the increasing number of robots and thus automation of processes almost everywhere. However, such robots can operate successfully only if their eyes see the environment. Important information is a stable and accurate 3D image whether in the dark or in bright sunlight. The TOF chip ranges epc611, 635, and 660 all utilize the same TOF pixel technology based on CCD/CMOS called lock-in pixel with an automatic background suppression in the charge domain. This technology is the best possible way for low noise operation. It's the only technology which is virtually shot noise limited.

A workhorse of such a 3D TOF camera is the TOFcam-635. 160 x 60 pixelfield only. But good enough for helping a farming robot to find its way in the field. Why not a megapixel resolution? The camera is much, much cheaper because it needs less illumination and much lower processing power. Cost-performance ratio is almost unbeatable. If you want to know more about the tiny but powerful TOFcam-635, click here.

TOFcam-635

Katerina, Operator

What are your responsibilities at ESPROS?
I work in the mounting section of production. I had never done anything like that before, however, I have a very steady hand so I quickly got into the swing of things.

How long have you been working with ESPROS?
August will mark my first anniversary.

What do you most enjoy about working with ESPROS?
I find working with the machinery is as enjoyable as the mounting. I love the challenge of learning new things. I love the teamwork and atmosphere that we have in the production department.

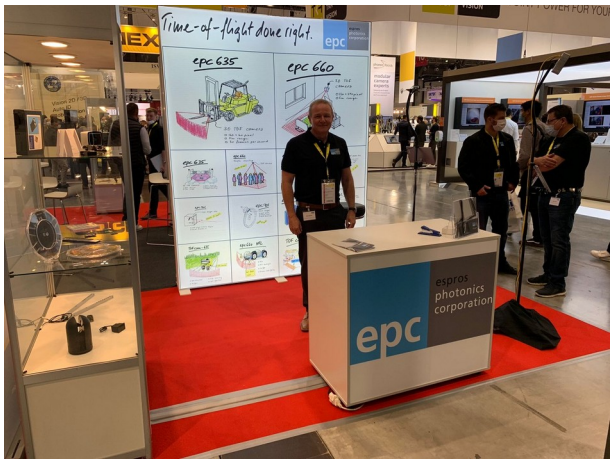
Where are you come from and where do you live?
I'm originally from the Czech Republic but for the past eight years I have been living in nearby Buchs SG.

What do you like doing in your spare time?
In winter I love snowboarding, summers I spend at the lake or in the mountains and I also love to travel.

ESPROS TOF camera modules at Vision Stuttgart

Our extensive range of powerful TOF camera modules and cost optimized 3D cameras lay at the heart of the ESPROS booth at the recent Vision trade fair in Stuttgart, the world's leading trade fair for machine vision. "it was a fantastic feeling to take part in a real trade fair again, and we were certainly kept on our feet with the huge interest in our compact camera modules, especially our TOF cam-660. This system is modular and able to handle almost every kind of application." Our three-man team of Udo Graf, Urs Grimm and myself, handled hundreds of queries on this the fastest growing product segment for ESPROS." reveals Ulrich Hotz, Vice President, Business Unit modules.

Check out our website here. "During the pandemic we made huge advances in our module production capabilities." continued Hotz, "So it was great to have some face to face meetings with existing customers to get them up to speed, as well as introducing potential new customers to the incredible application possibilities our products offer," continued Hotz.



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