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endrich NEWS

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VOX Populi – the voice of the people

26% of Germans would currently vote for the AfD if a general election were to be held. On the one hand, this is sad; on the other, it is surprising, for how could one vote for a party that has no experience of government, no politicians trained in this field, and which, in its foreign policy, plays both sides: Russia and the USA.

That is why the voice of the people no longer seems meaningful to me. To pick on Chancellor Merz seems too easy to me, because when it comes to foreign relations and world politics, Mr Merz – God knows – is very successful and makes a great effort to position Germany correctly amongst the world powers.

And why should he fail when it comes to the Federal Republic and its problems, or why is there dissatisfaction with this? In my opinion, we currently have a rather crazy situation in Germany. Despite a special fund of 500 billion euros having been approved – an inconceivable sum! – the tax revenues for this year are nowhere near enough.

It is social spending that will continue to rise significantly this year as well, and which will exceed the estimated tax revenue for 2026 by many billions. The reasons for this are as follows: our exports have been severely hampered by political circumstances – such as US tariff policy – and the economy is



Wolfgang Endrich



The public's dissatisfaction with the current situation is understandable – but actually unreasonable.



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stagnating; there is a lack of profitable sales, which limits tax revenue!

The global economy has quite different concerns, primarily due to the Iran-US war – namely, a looming oil shortage, regardless of the outcome of the conflict – and we, above all, have a home-grown problem.

For 30 years, we in Germany have lived in blissful ignorance – many governments have come and gone with varying degrees of success. But the main cost drivers have not been brought under control, namely the social costs of healthcare, old-age pensions, subsidies, environmental issues and the age pyramid.

Germany has indeed managed to significantly reduce its use of non-renewable energy sources such as coal and gas in a relatively short time, but the electricity generated in the North Sea still cannot be transported directly to the south of Germany.

To do justice to the current government, one must bear in mind that governments over the past decades have swept many long-standing problems under the carpet. The age pyramid is no longer balanced; in other words, birth rates are much lower than they have been over the past 30 years, and our working population is ageing and retiring. The civil service has been continually expanded, so that the existing flood of legislation has grown ever larger, free enterprise has been severely restricted, and economic life has been heavily regulated by rules and regulations, etc.

The consequences are a shortage of affordable housing, the national rail network is in trouble, our

roads are in a deplorable state in places, bridges are collapsing, and so on. One must therefore ask: how is a government without sufficient funds supposed to rectify all these grievances within a year, and with a limited budget?

The AfD once had a relatively sensible party programme at the outset. But its party programme today can only provoke a shake of the head. The party has become very radicalised and proclaims party goals that one can only take note of with a shake of the head: withdrawal from the EU, abandoning the euro and similar demands that would certainly make free enterprise impossible.

That is why, whilst the public's dissatisfaction with the current situation is understandable, it is actually unreasonable, because there is too much political rubbish that needs to be cleared away in order to rectify the failures of recent decades, to set things right, and to build on a new, solid foundation.

I can only imagine a government led by and including the AfD as a nightmare scenario. We should therefore be a little more grateful to our government, which is making a sincere effort to clear away the rubbish that litters our streets.

Overall, the citizens of the Federal Republic of Germany have never had it as good as they do today! Therefore, voting for a party like the AfD – which has no government experience whatsoever – out of anger, dissatisfaction and so on would end in chaos.

Wolfgang Endrich

NEWS

Compact edge AI accelerator

With the DX-M1M, DeepX presents a highly optimised AI accelerator in the ultra-compact M.2 2242 (M+B) form factor, specifically tailored to the requirements of modern embedded devices. Despite its small size, the module delivers a remarkable computing performance of 25 TOPS (INT8) with a typical power consumption of just 3 watts.

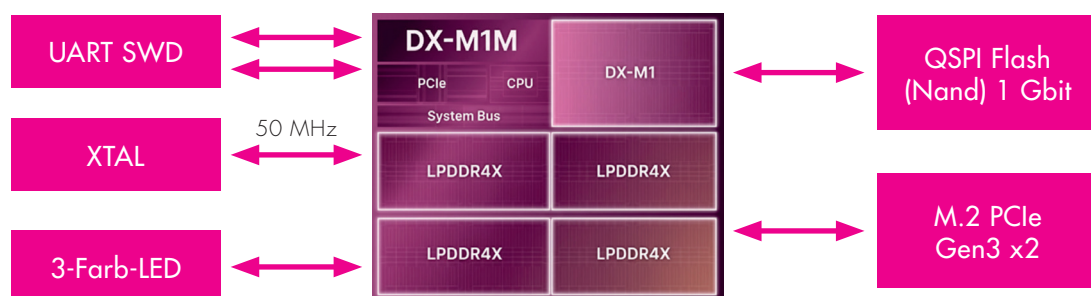
The efficiency-focused design, featuring 2 GB of LPDDR4x and PCIe Gen3 x2, provides exactly the resources required for industrial edge AI processing (e.g. object recognition). As many embedded SoCs are already optimised for a limited number of PCIe lanes, the DX-M1M is the ideal choice.

Low system costs, a compact form factor and a power consumption of just 3 W enable excellent scalability for robotics, drones, smart factories and vision systems.

Thanks to support for x86 and ARM platforms as well as common frameworks such as ONNX and PyTorch, the DX-M1M can be seamlessly integrated into existing embedded Linux environments.



For endrich, DeepX is a strategic partner with whom we are specifically expanding our portfolio as an AI solutions provider. Together with our partner network, we combine AI hardware, embedded platforms, sensor technology, software and integration expertise to create market-ready solutions, supporting our customers not only in selecting the right components but also in implementing their entire edge AI solution.



FEATURES

- **Type:** AI accelerator
- **Interface:** PCIe Gen3 x2
- **Memory:** 2 GB LPDDR4x
- **Host HW:** x86, ARM based architecture

APPLICATIONS

- ADAS, AI dashcams and drones
- Industrial robot arms, autonomous mobile robots and AI CCTV
- Edge servers and AIoT devices

New high temperature ceramic material



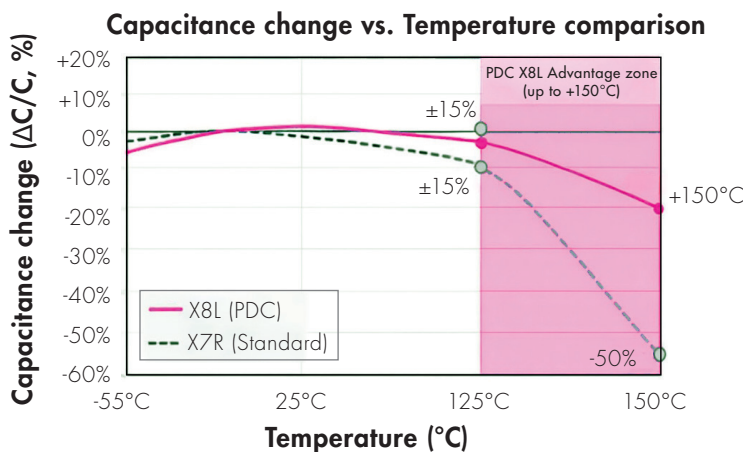
Prosperity Dielectrics Co., Ltd. (PDC) releases the new X8L ceramic material for MLCC capacitors which outperforms the currently available X7* materials, that are specified to +125 °C only. X8L series are suitable for extreme temperatures and offer consistent performance from -55 °C to +150 °C.

The material is developed and produced at PDC's factory in-house to ensure maximum quality control and makes PDC the only Taiwanese MLCC maker with true vertical integration. All items are made in Taiwan, going through rigorous quality control and are certified for use in the automotive applications: Fully AEC-Q200 qualified.

Available items range from 1206 – 1210 size with rated voltages (WVDC) from 10 V – 100 V and can reach capacitance values from 1.0 uF to 10 uF. Don't hesitate to contact us to talk about your capacitor needs, even if exceeding these specifications, since the portfolio is enhanced gradually.

X8L Series MLCC: Superior high-temperature stability

Designed for critical automotive and industrial applications



Key Insight: X8L maintains critical capacitance where X7R fails.

Over +125 °C, X7R loses significant performance.

PDC X8L ensures mission-critical operation.

X8L. (TCC: +15 % / -40 % from +40 %)

FEATURES

- **Suitable for extreme temperatures:** Consistent performance from -55 °C to +150 °C
- **Innovation:** Ceramic powder developed in-house at PDC for maximum quality control and a high degree of vertical integration
- **Quality/Reliability:** Certified for use in the automotive applications: AEC-Q200 qualified

APPLICATIONS

- Engine control units (ECU)
- ADAS sensors & radar
- Battery management (BMS)
- DC/DC converters
- Powertrain systems
- EV charging modules

NEWS

VECO's Teardrop Micro Speaker

Space Optimization Technology Tailored for Smart Glasses

As wearable devices become increasingly thin and lightweight, limited acoustic space has become a key challenge.

VECO's Teardrop Micro Speaker features an innovative asymmetrical design that fits seamlessly into smart glasses temples, delivering an optimal balance of sound quality and compact size.

At its core, the custom diaphragm design increases the effective vibration area by 20 - 30 % compared to conventional speakers, resulting in improved bass performance and clearer vocals.

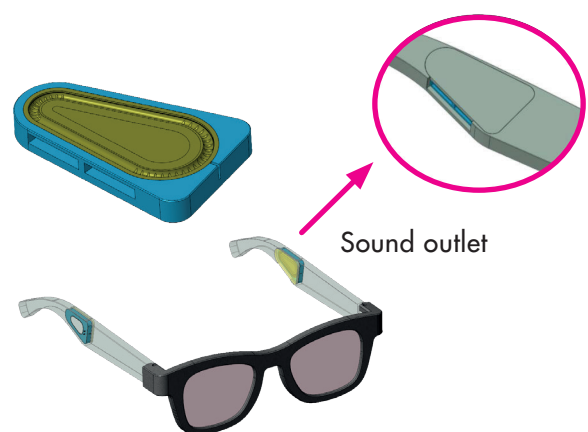
In addition, directional audio technology guides sound precisely toward the user's ear, reducing leakage while enhancing privacy and maintaining environmental awareness.



VECO PN	L	W	H	Magnet	Ohm	Fo (Hz)	Rated Power	SPL (Rated Power/0.1 m/on baffle)
P234133-4C-033-1	23.4	13.3	3.3	Single	4	330	0.03 W	76

FEATURES

- **Space optimization:** Seamlessly fits smart glasses temple geometry
- **Custom diaphragm:** Enlarged vibration area (+20 - 30 %) for enhanced sound output
- **Directional audio:** Focused sound delivery with reduced leakage
- **Privacy & safety:** Clear communication while maintaining environmental awareness
- **Optimized acoustic volume:** Maximizes performance within ultra-compact enclosures



APPLICATIONS

- Smart glasses and AR/VR headsets
- Premium wearable audio devices
- Compact micro-acoustic applications



Embedded vision systems and intelligent components for image processing

The integration of MIPI technology enables seamless connectivity and high-speed data transmission, making it a fundamental component of modern imaging systems. As customer preferences increasingly shift towards enhanced visual experiences, understanding the dynamics of this market is crucial for players wishing to capitalise on upcoming trends and opportunities.

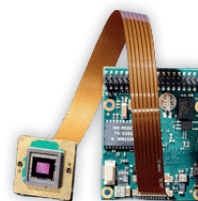
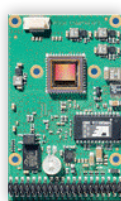
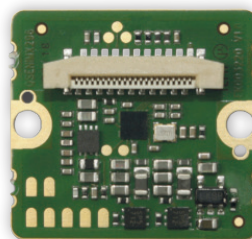
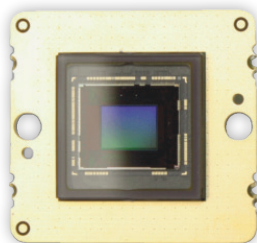
Several key factors are driving the market for MIPI camera modules. The growing popularity of smartphones, the number of which reached an astonishing 6.8 billion units in 2026, is a major factor.

According to the International Telecommunication Union (ITU), almost 80% of mobile phone users use their devices to take photographs, which highlights the need for advanced camera technologies. Furthermore, advances in sensor technologies such as CMOS (Complementary Metal-Oxide-Semiconductor) sensors have improved image quality.

CMOS image sensor is a semiconductor device with CMOS technology that converts incoming light into a digital image. This type of image sensor is called an Active Pixel Sensor (APS).

There are broadly two types of CMOS image sensors. One uses rolling shutters that capture images by line-sequential scanning and the other adopts global shutters that take images in the focal plane in one shot.

While the rolling shutter causes distortion in the images of fast-moving objects, the global shutter is able to capture a high-speed moving image without focal plane distortion by capturing the entire object before output. It is also easy to synchronize with flash in, for example, machine vision inspection processes, enabling to improve the takt time.



NEWS

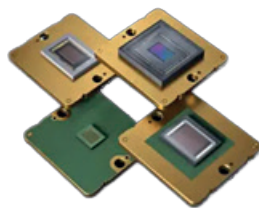
Other types of CMOS image sensors are:

- **Polarization Image Sensor:** Pixel technology that has several different angle polarizer formed on chip during the semiconductor process allowing highly accurate alignment with pixel
- **Ultraviolet (UV) Image Sensor:** By combining UV lighting and UV-compatible lenses, cameras equipped with UV image sensors can provide special visual information which ordinary cameras for visible light imaging cannot
- **Wide-band and high-sensitivity SWIR image sensor:** Combination of compound semiconductor InGaAs photodiodes and Silicon readout circuits through Cu-Cubonding
- In addition to imaging in X and Y directions, ToF image sensors also acquire the Z-direction information, enabling 3D sensing
- **Event-based Vision Sensor (EVS):** Realizes high-speed, low latency data output by detecting luminance changes, which each pixel senses asynchronously and only outputting the differential data after combining with the coordinate and time information
- **Multispectral Image Sensor:** Capture multiple wavelengths of light simultaneously, from visible light to near-infrared light

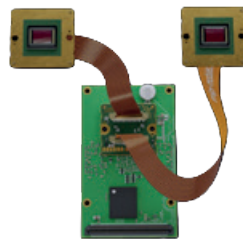
Vision Components develops and produces MIPI camera modules, Embedded Vision Systems and 3D camera sensors for the highest demands. They have proven themselves in numerous applications worldwide for 30 years. From the invention of the first industry-ready smart camera to current technologies such as edge computing and artificial intelligence.

This market is segmented based on various end-user industries:

- **Consumer Electronics:** High demand for camera modules in smartphones and tablets
- **Healthcare:** Growing sector with increasing use in medical imaging technologies
- **Automotive:** Expanding rapidly with the incorporation of cameras in vehicles
- **Manufacturing:** Used for quality control and automation processes in industries
- **Retail:** Implemented for surveillance and security purposes in stores



MIPI
Camera modules

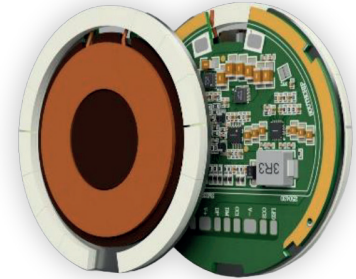


Embedded
vision systems



3D
Camera systems

SM232A 25W WLC Module



The SM232A module is a 25 W wireless power transmitter designed for applications using Qi wireless charging standards. It converts input power from sources such as DC supplies, USB-PD, or HVDCP into wireless energy, which is then transferred to compatible receiver devices via a coil.

The module integrates a high-power Qi protocol IC (SC96019) which integrates high resolution full bridge controller, full bridge power MOSFETs, multiple channels ASK demodulation circuit, multiple channels ADCs, multiple GPIO ports, Q value detection circuit and so on.

It also includes a buck-boost converter (SC8723B) to regulate and adjust the input voltage to meet different power requirements.

It supports multiple Qi power profiles, including BPP (up to 5 W) and MPP (up to 25 W), automatically adapting the output depending on the connected device and input capability.

For system integration, the module provides an I2C interface, allowing external control, configuration and monitoring. Additionally, it includes several protection features such as foreign object detection (FOD), overcurrent protection (OCP), overtemperature protection (OTP) and low-voltage protection (LVP) to ensure safe operation.

APPLICATIONS

- Qi power profile compatible smartphones
- Other devices that use the wireless Qi power profile

FEATURES

- 25 W max power output
- Support for BPP and MPP (up to 25 W)
- 5 V - 20 V input voltage range
- Integrated buck-boost converter
- Support for USB PD3.0 and HVDCP
- Integrated protection features (FOD, OCP, OTP, LVP)



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