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endrich NEWS

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Nominated for Product of the Year 2026 Your vote counts!

We are delighted that Endrich has been nominated in the information technology category for the readers' choice award 'Product of the Year 2026' by Elektronik magazine.

Our universal NeoMesh USB gateway is a product that stands for reliable and future-proof IoT solutions. It enables the easy connection of sensor networks to cloud and IT systems, thus supporting modern digital applications. The gateway transforms any PC or industrial controller into a powerful IoT gateway and makes networking child's play.

The gateway can be flexibly integrated into existing system landscapes and impresses with its fast commissioning and stable communication – even in demanding environments.

Whether in industry, smart city projects, environmental monitoring or predictive maintenance: the NeoMesh USB gateway offers a reliable solution for a wide range of applications.

We would like to thank you very much for your trust and support.



Scan QR code or <https://h7.cl/1hkiM>
and vote by 30 January 2026

GD32H75EXX ARM® CORTEX®-M7



The GD32H75Exx device belongs to the high-performance line of GD32 MCU family. It is a new 32-bit general-purpose microcontroller based on the Arm® Cortex®-M7 core with the best cost-performance ratio in terms of enhanced processing capacity, reduced power consumption and peripheral set.

The Arm® Cortex®-M7 processor is a highly efficient highperformance, embedded processor that features low interrupt latency, low-cost debug, and has backwards compatibility with existing Cortex-M profile processors. The GD32H75Exx device also integrates the EtherCAT subdevice controller (ESC). The device operates from a 1.71V to 3.6V power supply and available in -40 °C to +85 °C temperature range for grade 6 devices, -40 °C to +105 °C temperature range for grade 7 devices.

The features make GD32H75Exx devices suitable for a wide range of interconnection and advanced applications, especially in areas such as inverters, stepper drives, IO modules, factory communication modules, servo drive control and so on.

High Performance

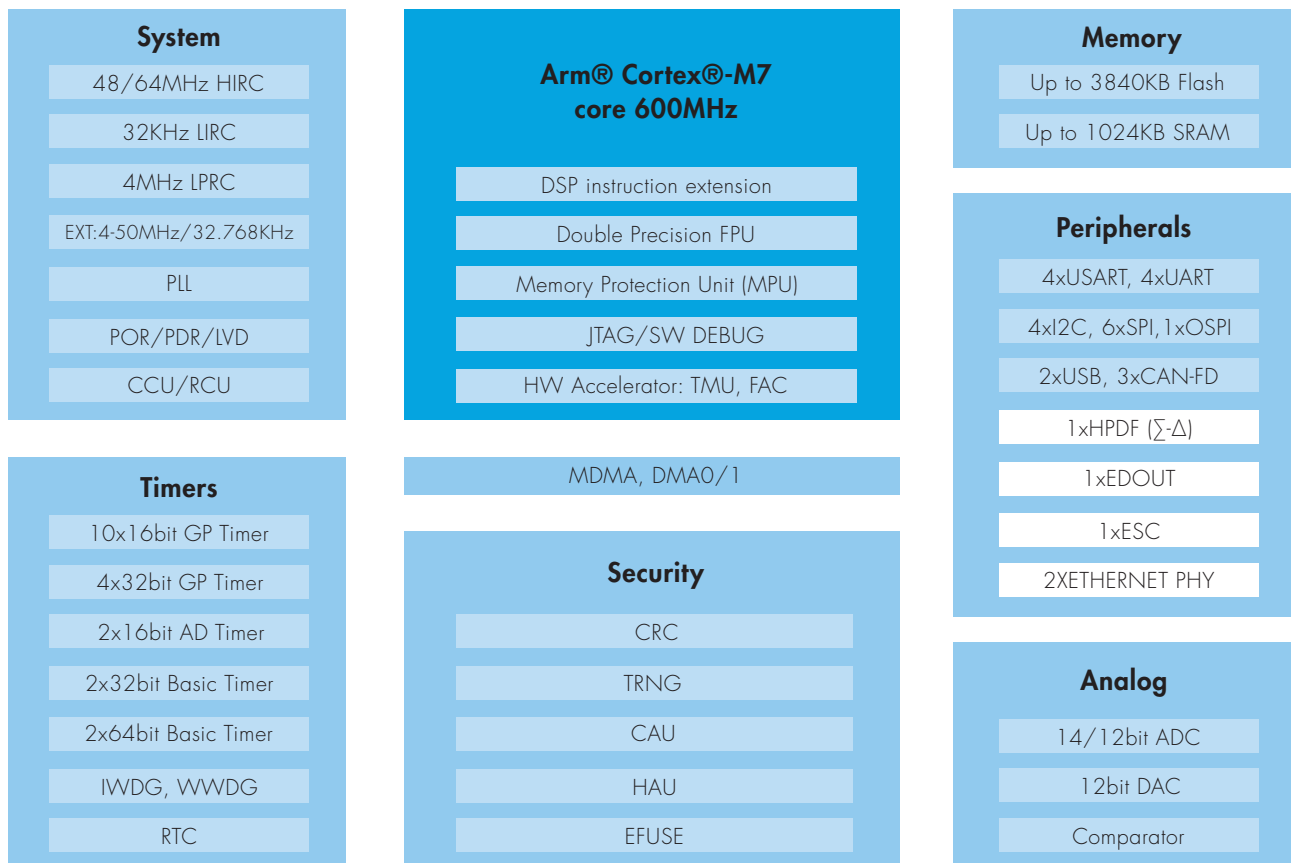
- ARM® Cortex®-M7, 600 MHz
- 1552 DMIPS, CoreMark® 2888
- DSP, double-precision FPU
- Built-in Embedded Trace Macrocell (ETM) providing advanced debugging support
- Integrated trigonometric function accelerator (TMU), filtering algorithm accelerator (FAC)

Large Memory Space

- Up to 3840 kb flash, 1024 kb SRAM
- Up to 512 kb on-chip tightly coupled memory (TCM)
- 32 kb I-cache, 32 kb D-cache
- Support QSPI/OSPI/EXMC interface external memory expansion

NEWS

GD32H75E Block Diagram



GD32H75E eco system

The GD32H75E series includes two BGA240 package models, supporting internal PHY or bypass mode for flexible configuration based on application needs. The corresponding documentation and software resources are available on GigaDevice's official website for easy access or please contact Endrich for further information. GigaDevice provides a free development environment, GD32 IDE, along with debugging and programming tools like GD-LINK and GD32 all-in-one programmer.

PD POWER SUPPLY

Power Supply with USB-C Power Delivery

Plug-in power supply with USB-C Power Delivery, compact design, high efficiency, and IT and audio standard—ideal for versatile USB applications.

The FRIWO PD power supply – the perfect solution for IT and audio applications (IEC62368-1). High efficiency and reliable performance ensure stable power exactly where it is needed.

The PD power supply can be used in a variety of ways thanks to the different voltages and available power ratings. The primary plug adapters for EU, US/J, UK, and AUS, as well as a pluggable USB-C cable, are already included.

With the wide-range input, this PD power supply can be used practically anywhere in the world and due to its small dimensions, requires very little space at the place of use.

APPLICATIONS

- Smartphones, tablets, displays, laptops
- Handscanner, measuring instruments
- Cameras, microscopes, headsets, radio transmission
- Powerbanks with PD-standard
- Consoles, e-books
available from January 2026



PD Power Supply by Friwo

PROPERTIES

- 100–240 V AC ($\pm 10\%$), 50–60 Hz, $\leq 1,2\text{ A}$ @ full-load; standby $\leq 0,5\text{ W}$
- Voltage: 5 V, 9 V, 12 V, 15V and 20 V
- Power: 15 W, 27 W, 30 W
- PPS-Modi: 5–11 V/3,0 A (30 W limited), 5–16 V/2,0 A (30 W limited)
USB PD 3.1 + PPS conform
- Efficiency: typically up to $\sim 89\%$ (at 20 V); Level DoE VI
- Safety/EMC: protection class 2
- Environment: operation 0...+40 °C; altitude up to 5000 m. storage $-20...+60\text{ °C}$

FRIWO

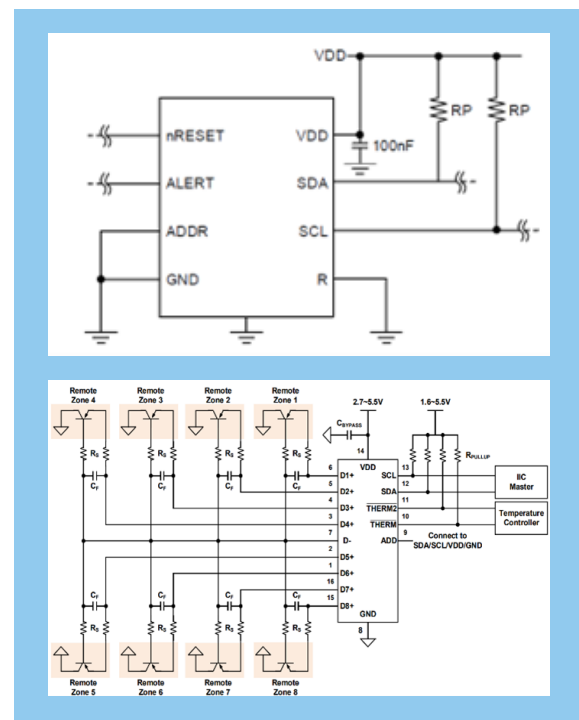
DISCOVER THE DIGITAL TEMPERATURE SENSORS OF GIGADEVICE



Our supplier GigaDevice delivers advanced digital temperature sensors engineered for precision and reliability, designed to meet a wide spectrum of accuracy requirements. These sensors support multiple communication interfaces – including analog, I²C and SMBus – for effortless integration into your system.

The GD30TS002T is GigaDevice's high-accuracy digital temperature sensor featuring advanced signal processing, two selectable I²C addresses, and communication speeds up to 1 MHz with a typical accuracy of $\pm 0.2^{\circ}\text{C}$. Its compact WLCSP package (1.38 mm $\times$ 1.81 mm) enables easy integration into diverse applications. A wide supply voltage range (2.4 V–5.5 V) ensures broad compatibility.

The GD30TS308T is a high-precision, low-power digital temperature sensor supporting SMBus and I²C. It measures local temperature and up to 8 remote diodes, ideal for monitoring MCUs, GPUs, and FPGAs. Each channel offers programmable thresholds, hysteresis, and correction features, with alarms for over-temperature conditions. Accuracy is $\pm 0.5^{\circ}\text{C}$ (local) and $\pm 1^{\circ}\text{C}$ (remote), resolution 0.0078°C , and range -55°C to $+150^{\circ}\text{C}$. It operates on 2.7 V–5.5 V and comes in a compact 3 mm $\times$ 3 mm 16-pin QFN package.



Explore our full range of digital temperature sensors – contact us to find the perfect solution for your needs!

APPLICATIONS

- General system thermal management
- Thermal protection
- Consumer electronics
- White goods
- Industrial controls
- Medical systems

FEATURES

- **Unmatched accuracy:**
ensure precise temperature monitoring in any environment
- **Versatile connectivity:**
seamlessly integrate with your existing infrastructure
- **Proven reliability:**
trusted across industries for consistent performance

HAPTIC SIGNALING USING VIBRATION MOTORS



Haptic feedback systems are becoming increasingly important in modern device architectures. In industrial control units, medical technology devices, and smart home or smart product applications, vibration motors in particular provide a precise and instant perceptible feedback. They enhance operational reliability, improve user interaction and complement visual or acoustic indicators with a tactile component.

ROLE OF HAPTIC FEEDBACK IN SAFETY- AND FUNCTIONAL-CRITICAL SYSTEMS

In environments with high acoustic or visual load – such as production facilities, logistics centers, industrial workshops or clinical diagnostics – purely visual or acoustic indicators are often insufficient. By addressing one more human sense, vibration motors provide a robust form of signal perception in these settings. They also enhance interaction in smart home and smart product solutions by improving the user experience on capacitive control panels and reducing operating errors through clearly defined tactile feedback.

OVERVIEW OF TECHNOLOGICAL VARIANTS

Coin-Type

Featuring a flat, fully enclosed design with minimal installation height, these motors offer high integration capability, vibration-resistant construction, and quiet, energy-efficient operation. Typical applications include mobile handheld terminals, measurement devices, discrete alert systems, compact control units and wearables.

Cylindrical Vibration Motors

With their high vibration output, robust mechanics, and high variety of models, they are particularly suited for machine control panels, portable inspection devices, warning systems, sensor alert systems and handheld equipment. Also available as fully encapsulated version.

Linear Vibration Motors

Linear vibration motors are ideal for high-precision feedback due to their extremely fast response time, precise controllability and consistent output. They are therefore used in touch surfaces of control systems, haptic feedback in medical devices and smartphones.

SMD Vibration Motors

These miniature motors, designed for automated PCB assembly, are ideal for high-volume production and highly practical due to their compact dimensions. They are used in diagnostic modules, compact wearables and IoT nodes.

CONCLUSION

Vibration motors are essential functional components in modern technical devices. With a wide range of available form factors, varied application requirements can be met with precision. A careful selection of technology and motor type ensures that haptic signals are delivered reliably, efficiently and in line with the needs of the application.

PAM3CAN36 ESD PROTECTION DIODE FOR CAN BUS LINES



The ESD protection diode PAM3CAN36 was developed for 36V CAN bus systems, to withstand pulse powers up to 80W in a molded JEDEC SOT-23 package, to offer low clamping voltage and to be in compliance with the IEC 61000-4-2, -4 and -5 standards. The new PAM3CAN36 from ProTek Devices is a diode specifically designed to protect two CAN bus lines in automotive applications from electrostatic discharges and other electrical transients.

This component features 80 W of pulse power per line (typical with 8/20 μ s waveform), as well as low clamping voltage, low capacitance and low leakage current, making it an effective solution for noise- and interference-sensitive systems.

The PAM3CAN36 diode meets and exceeds the requirements of IEC 61000-4-2 for ESD, withstanding up to ± 8 kV contact and ± 15 kV air, as well as IEC 61000-4-4 (EFT) with 40 A at 5/50 ns and IEC 61000-4-5 (surge) with 1.5 A at 8/20 μ s.

In addition, it is qualified to the AEC-Q101 standard for automotive applications and is compliant with RoHS and REACH directives, ensuring its suitability for current and future automotive designs.

ELECTRICAL CHARACTERISTICS PER LINE @25°C

Part Number	Device Marking	Rated Stand-Off Voltage [V]	Breakdown Voltage [V] @ 5mA			Clamping Voltage [V] @ $I_p = 1.0A$		Leakage Current [μ A] @ V_{WM}		Off-State Capacitance [pF] @0Vdc 250KHz/1MHz		Off-State Capacitance [pF] @2.5V 1MHz	
			Min	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max
PAM3CAN36	P6C	36	37	42	47	52	56	0.01	0.05	4.5	6	4	5

FEATURES

- AEC-Q101 qualified
- **Compatible with IEC 61000-4-2 (ESD):**
 ± 8 kV contact, ± 15 kV air
- **Compatible with IEC 61000-4-4 (EFT):**
40 A, 5/50 ns
- **Compatible with IEC 61000-4-5 (Surge):**
1.5 A, 8/20 μ s
- 80 W peak pulse power per line ($t_p = 8/20 \mu$ s)
- Two lines of protection
- Low clamping voltage
- Low capacitance
- Low leakage current
- RoHS & REACH compliant

ULTRASONIC FLOW SENSOR MODULES FOR IOT APPLICATIONS



The new UFM-02 is a complete, fully calibrated flow measurement unit including a spool piece with standard pipe fittings, twin ultrasonic transducers, and a high-precision measurement circuit based on a ScioSense ultrasonic flow converter chip. In the UFM-02, average operating current has been reduced to 50 µA, low enough to enable applications to run for years on a standard primary battery.

The UFM-02 module is available at launch with a thread size of 0.5" and an inner diameter (ID) of 13.3 mm and a module with a thread of 1" (23.7 mm ID). Additional variants will be added with a thread of 3/8" (11.2 mm ID) and 1.5" (36.3mm ID). The smallest thread size handles a maximum flow rate of 20 l per minute, and the largest, up to 450 l per minute.

The ultrasonic measurement technology in the UFM-02 contains no turbines or other moving parts. This offers two valuable advantages:

- Reliability and long operating lifetime, with no risk of mechanical failure
- High sensitivity to weak flows, allowing the sensor to accurately detect leakage. In its smallest, 3/8" thread size, the UFM-02 can measure flows as slow as 0.03 l per minute

The UFM-02 modules are available with a choice of two cable connections:

- A four-wire pulse interface cable provides a simple output signal with up to 450 pulses per liter
- A 10-wire SPI cable, which provides digital data including total volume of liquid flow in cubic meters, filtered flow rate in liters/hour, and a measurement of the liquid's temperature

Applications

Industrial flow meters, boilers, cooling systems, building ventilation, petrol distribution, sanitary equipment, solar panels, pump regulation, agricultural applications, irrigation, beverage dispensers.



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