GWMS
GATEWAY MODULE SYSTEM

Powerful and Flexible Solution for Industrial IoT and Automation!

Reliable communication, full control!

- ◆ LoRa, Bluetooth, WiFi — Flexible wireless connection
- ◆ CANBus, Modbus, RS232 — Seamless integration for industrial automation
- ◆ USB, PoE — Easy connection
- ◆ LTE & GPS — Mobile connection and location tracking
- ◆ 4 Relay Outputs — Full control in remote control and automation

Powerful, reliable, flexible! Make your industrial processes smarter and more efficient with Demsay Gateway Module System!

Automotive & Logistics

Agriculture

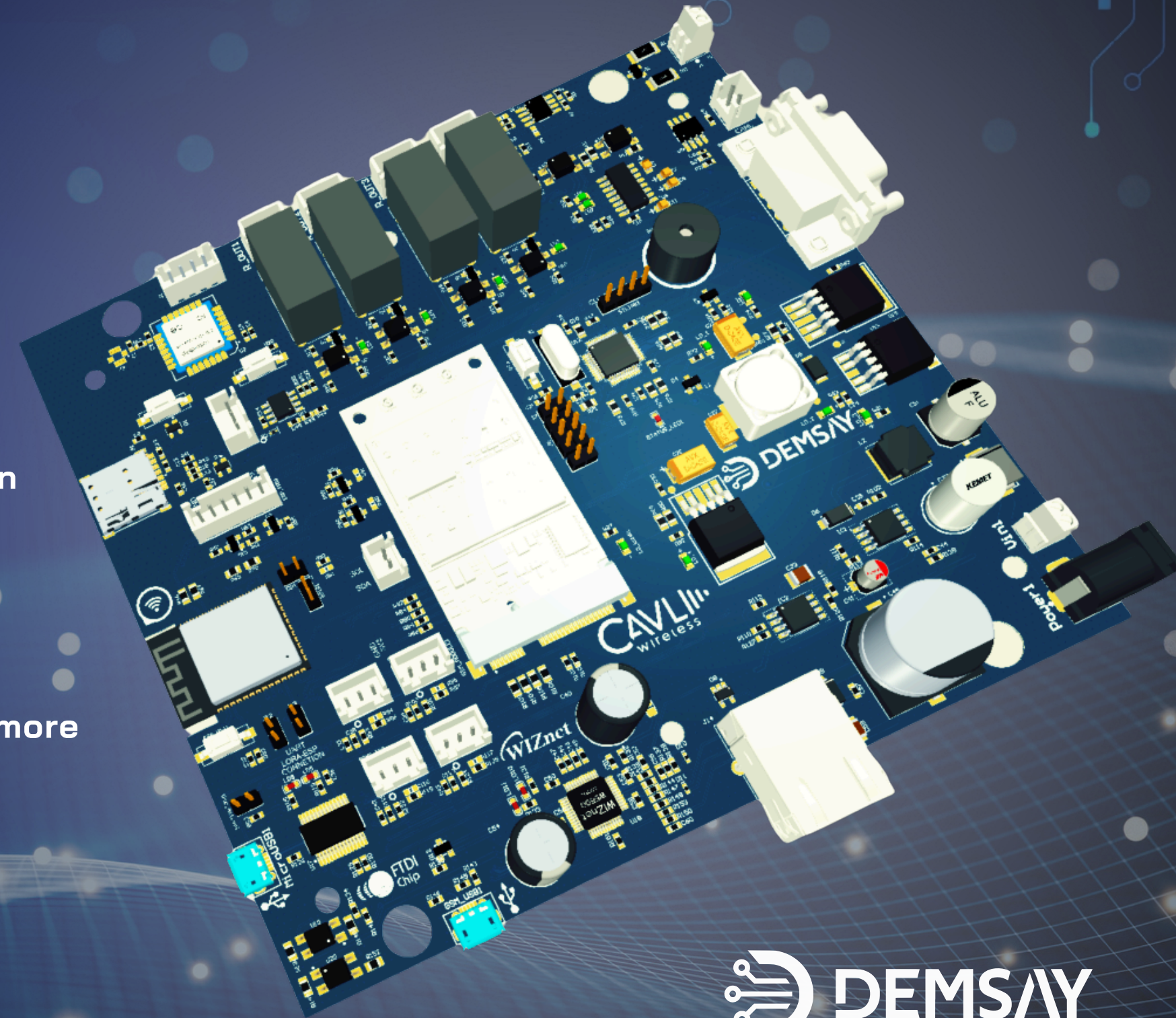Health Care & E-Health

Retail

Smart Home

Smart City

Energy & Utilities

Safety & Security

Manufacturing

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Cavli Mini PCI-E Form GSM Module

Demsay Gateway Module System uses the Cavli Mini PCIe GSM & GPS module for mobile connection and location tracking. This powerful module supports the LTE, 3G and 2G networks, providing wide coverage and reliable data transmission. Thanks to the built-in GNSS support, it provides precise location determination.

Cavli Mini PCIe Module Features:

✅ **LTE Support** – Reliable connection with wide network compatibility

✅ **GNSS Support** – Precise location tracking with GPS

✅ **Mini PCIe Form Factor** – Easy integration and flexible use

✅ **Low Power Consumption** – Energy efficient mobile connection

✅ **Strong Industrial Design** – Robust structure suitable for IoT and automation projects

With the Cavli Mini PCIe module, Demsay Gateway Module System offers an ideal solution for all industrial applications requiring remote monitoring, mobile data transmission and location tracking!

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Espressif Systems ESP32-S3 Module

Demsay Gateway Module System uses the ESP32-S3 module for powerful wireless communication and AI-supported processing capacity. It provides high-speed and flexible connection with WiFi 4 (802.11 b/g/n) and Bluetooth 5 (BLE + Classic) support, while providing superior performance in machine learning and AI applications thanks to its AI accelerator and vector processing capabilities.

ESP32-S3 Module Features:

✅ **WiFi 4 (802.11 b/g/n, 2.4 GHz) — High-speed wireless connection**

✅ **Bluetooth 5.0 (BLE + Classic) — Improved range and low power consumption**

✅ **Dual Core Xtensa LX7 Processor (240 MHz) — High processing power and efficient data processing**

✅ **AI-Enabled Vector Processing Unit (VPU) — Optimized artificial intelligence accelerator for machine learning and signal processing**

✅ **Low Power Modes & ULP (Ultra Low Power) Support — Energy efficiency for IoT and smart devices**

✅ **Advanced I/O Interfaces — Versatile connectivity options such as SPI, I2C, I2S, UART, PWM, ADC, USB-OTG**

✅ **Strong Cryptography & Security Features — SHA, RSA, AES and secure boot support**

ESP32-S3 with Demsay Gateway Module System, industrial IoT, smart automation and AI supported It provides a powerful, secure and flexible solution for wireless applications!

Seeed Studio LoRa-E5 Module

Demsay Gateway Module System uses the Seeed Studio LoRa-E5 module for long-range and low-power wireless communication. This powerful module, which is compatible with LoRaWAN® protocol, is built on STMicroelectronics' STM32WLE5 chip and operates in Sub-GHz band, it provides a wide coverage with low power consumption.

Seeed Studio LoRa-E5 Module Features:
✅ **LoRaWAN® & FSK Modulation — Long-range and reliable wireless communication**
✅ **STM32WLE5 Chipset — Integrated LoRa radio and powerful processor**
✅ **Sub-GHz Frequency Support — Compatible with regional bands such as 868 MHz (Europe), 915 MHz (America)**
✅ **Low Power Consumption — Ideal for battery-powered IoT applications**
✅ **High Sensitivity & Wide Coverage — Stable connection even in harsh environments**

With Seeed Studio LoRa-E5 module, Demsay Gateway Module System provides an energy-efficient and powerful solution for IoT and industrial automation applications that require long-distance wireless communication!

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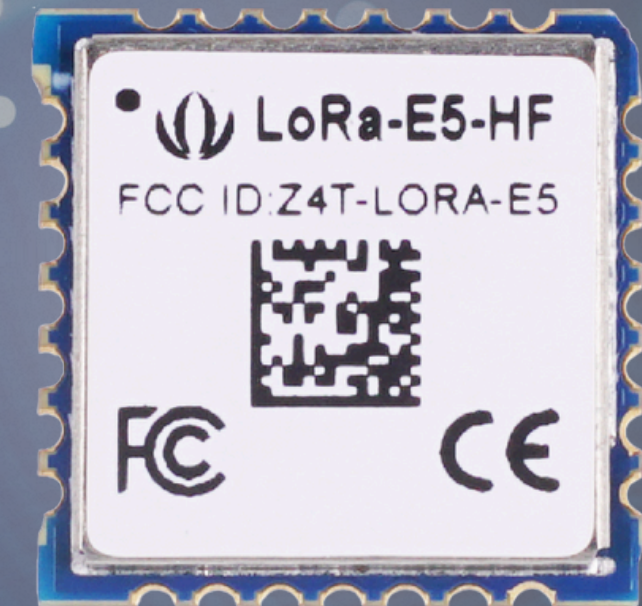
Geehy APM32F103 MCU

Demsay Gateway Module System uses Geehy APM32F103 microcontroller to provide high-performance and low-power processing power. Based on ARM Cortex-M3, this processor is optimized for industrial automation, IoT and embedded systems.

Geehy APM32F103 Microcontroller Features:

✅ ARM Cortex-M3 Core (72 MHz) — Powerful processing capacity and high efficiency
✅ 128 KB Flash, 20 KB SRAM — Fast processing capability with sufficient memory capacity
✅ Multiple Communication Interfaces — UART, SPI, I2C, CAN, USB and GPIO support
✅ Low Power Consumption — Ideal for battery-powered IoT applications
✅ Wide Operating Voltage (2.0V - 3.6V) — Easy integration into different hardware

Geehy APM32F103 and Demsay Gateway Module System maximize your system performance by providing fast, reliable and energy-efficient processing power in industrial IoT and automation projects!

Geehy
APM32F103

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FTDI FT232 USB-TTL Converter

The Demsay Gateway Module System uses the FTDI FT232 USB-TTL converter to provide reliable data transmission between USB and serial communication. This popular chip provides easy UART (RS232) connectivity over USB, enabling seamless communication with microcontrollers, industrial systems and IoT applications.

FTDI FT232 Features:

✅ USB 2.0 Support — High speed and stable data transmission

✅ UART Communication — Serial communication between 300 Baud - 3 Mbaud speed

✅ Internal EEPROM — Customizable USB device information

✅ 3.3V & 5V Compatibility — Flexible use with wide voltage support

✅ Internal TX/RX LED Drivers — Internal LED control showing data transmission status

✅ Driver Support — Compatible with Windows, MacOS and Linux

With FTDI FT232, Demsay Gateway Module System provides a fast and reliable serial communication solution over USB, providing easy integration for IoT and industrial applications!

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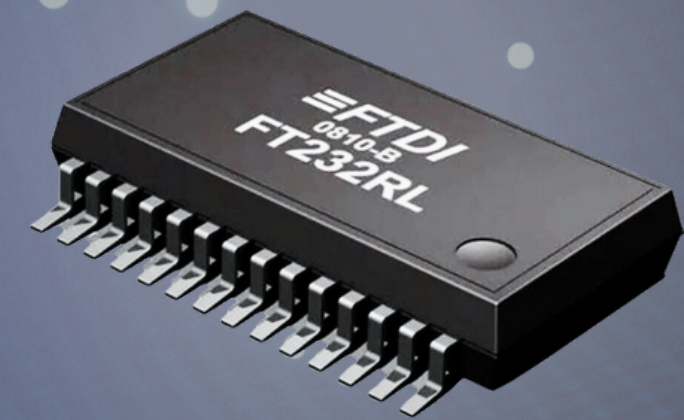
WIZnet W5500

Demsay Gateway Module System uses WIZnet W5500 Ethernet module to provide stable and fast Ethernet connection. W5500, which has hardware-based TCP/IP stack, provides a high-performance and low-power network solution, providing an ideal connection infrastructure for IoT, automation and industrial applications.

WIZnet W5500 Features:

✅ **Hardware-Based TCP/IP Stack** — Fast and reliable network connection with minimum processor load

✅ **10/100 Mbps Ethernet Support** — Uninterrupted communication with wide bandwidth

✅ **SPI Interface** — Easy integration with microcontrollers

✅ **8 Independent Socket Support** — Multiple connection management at the same time

✅ **Low Power Consumption** — Optimized structure for IoT and low-energy applications

✅ **Automatic MAC & IP Address Management** — Easy network configuration

WIZnet W5500 and Demsay Gateway Module System provide fast, reliable and energy-efficient Ethernet communication in industrial automation and IoT projects, providing trouble-free data transmission!

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CANBus, ModBus RS232 Communication

Demsay Gateway Module System uses ChipAnalog integrated circuits to provide high reliability and stability in industrial communication protocols. Thanks to CANBus, Modbus and RS232 support, it enables seamless integration of the system with different industrial automation and communication infrastructures.

ChipAnalog Communication Solutions Features:

✅ **CANBus Support** — Reliable and long-distance communication in accordance with ISO 11898-2 standard
✅ **Modbus RTU & ASCII Compatible** — Flexible and stable communication with industrial devices
✅ **RS232 Serial Communication** — Reliable, long-distance and low-latency data transmission
✅ **High Noise Resistance** — Design resistant to EMI and noise
✅ **Low Power Consumption** — Energy efficiency for IoT and automation systems
✅ **Wide Operating Voltage Range** — Power flexibility compatible with different systems

With these powerful communication solutions provided by ChipAnalog, Demsay Gateway Module System offers a high-performance and reliable communication infrastructure in industrial automation, smart systems and IoT projects!

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Synzen Antenna

Demsay Gateway Module System uses Synzen's high-performance GSM & GPS antennas for mobile connectivity and precise location tracking. With its compact, low-power and high-gain structure, Synzen antennas provide uninterrupted communication in industrial IoT, automation and telemetry applications.

Synzen GSM & GPS Antenna Features:
✅ Dual Band Support (GSM & GNSS) — Compatible with LTE, 3G, 2G and GNSS systems
✅ High Gain & Sensitivity — Strong signal reception and stable connection
✅ Compact & Lightweight Design — Ideal solution for devices with space constraints
✅ Low Power Consumption — Energy-efficient mobile communication
✅ Wide GNSS Compatibility — GPS, GLONASS, BeiDou, Galileo support
✅ Environmental Durability — EMI and interference resistant structure for industrial environments

With Synzen antenna solutions, Demsay Gateway Module System offers high performance, reliable signal reception and wide coverage in applications requiring mobile connectivity and location tracking!

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