

Commercial/Industrial Gateway

GTW810L



The GTW810L is a refined version of the single board computer product developed by Geniatech based on the NXP I.Mx 8M Mini platform. The i.MX 8M Mini is NXP's first embedded multi-core applications processor built using advanced 14LPC FinFET process technology, providing high speed and improved power efficiency. With commercial and industrial level qualification and backed by NXP's product longevity program, the i.MX 8M Mini family can be used in any general purpose industrial and IoT applications.

Multi-core Processing

4xCortex-A53 core up to 1.8GHz per core
32KB L1-I Cache/ 32 kB L1-D Cache
512 kB L2 Cache
1x Cortex-M4 core up to 400MHz
16 kB L1-I Cache/ 16 kB L2-D Cache

Balance of consumption and performance

- Support for high-performance scenarios
- Supports low power scenarios

OS Support

Yocto(Linux) (By default)
Android 9.0
Windows 10 IoT Core

Customization

- Hardware interface functions
- Software functions.
- Structure design
Design for You, Manufactured by Us

Scalability

- Support Lora-wan protocol, EU868MHz/US915MHz/CN470MHz
- Support ZigBee3.0, Z-Wave700
- Support BLE5.0, wM-Bus(EU)
- Support 4G/LTE (EU/AU/US/CN) etc.

Excellent audio and visual function

A variety of audio interfaces are available, including I2S, AC97, TDM and S/PDIF

Wide range of applications

- Smart Home
- Audio field
- Entertainment
- Advertising machine
- Edge Computing
- Gateway

Enterprise service

Provide comprehensive quality assurance, technical support and mass production services

Geniatech



Product Specification

Processor	Quad core ARM Cortex A53(64bit) Cortex M4
CPU Frequency	1.2GHz
RAM	2GB LPDDR4(1-4GB Optional)
ROM	8GB eMMC5.1(8-128GB Optional)
OS	Linux(Yocto), Free RTOS,MCU
WLAN	Wi-Fi 5 dual band 2.4GHz/5GHz
	Bluetooth 4.1(integration)
	Separate Bluetooth Support :BT4.0(optional)
Ethernet	RJ45-100/1000 MHz
Security	Encryption IC Support
Display	HDMI V1.4 Type A
USB	USB 2.0 Type A *2
Micro-USB	OTG
TF-Card	SDIO 3.0
RTC (real-time clock)	Support
Button	Volume+/Volume-/Power
Indicator light	User(Programmable)*4
	System status*3
Connectivity	1x Mezzanineboards 40 pin Low-Speed connector • UART, SPI, I2S, I2C x2, GPIO x12, DC power
	1x Mezzanineboards 60 pin High-Speed connector • 4L-MIPI DSI, USB, I2C x2, 2L+4L-MIPI CSI
	1x Optional 16-pin Analog expansion connector • Headset, Speaker, FM antenna
Mechanical properties	
Size (mm)	160*145*37
Net weight (g)	About 750
Power	12V/1.5A
Wide working range	Consumer (0° C to 95° C Tj)
	Industrial (-40° C to 105° C Tj)
RoHS and Reach compliant	Yes