

# Commercial/Industrial Gateway

## GTW810 Hub



The GTW810 HUB 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	1.8GHz
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 up to 1080P
USB	USB 2.0 Type A *2
Micro-USB	OTG
TF-Card	SDIO 3.0
RTC (real-time clock)	Support
Button	Volume+/Volume-/Power(Inside)
Indicator light	User(Programmable)*4 System status*3
	<b>1x Mezzanineboards 40 pin Low-Speed connector</b> <ul style="list-style-type: none"><li>• UART, SPI, I2S, I2C x2, GPIO x12, DC power</li></ul>
Connectivity (inside)	<b>1x Mezzanineboards 60 pin High-Speed connector</b> <ul style="list-style-type: none"><li>• 4L-MIPI DSI, USB, I2C x2, 2L+4L-MIPI CSI</li></ul>
	<b>1x Optional 16-pin Analog expansion connector</b> <ul style="list-style-type: none"><li>• Headset, Speaker, FM antenna</li></ul>
<b>Mechanical properties</b>	
Size (mm)	122mm(L)x70mm(W)x22mm(H)
Power	12V/1.5A
Wide working range	Consumer (0° C to 85° C Tj) Industrial (-40° C to 105° C Tj)
RoHS and Reach compliant	Yes