![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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GS2200M Starter Kit Board (SKB)

PRODUCT OVERVIEW

The GS2200M Starter Kit Board (SKB) is an easy to use evaluation and development platform for GS2200Mxx-based designs. It is equipped with Arduino-compatible and Pmod-compatible connectors to support solderless prototyping. The SKB is configurable to operate as either a host or shield/peripheral.

The SKB includes temperature and light sensors, software accessible buttons and LEDs, built-in power consumption measurement features, a USB-serial interface for debugging and firmware programming, a JTAG debug interface, and pre-loaded reference software to speed your evaluation and development effort.

The SKB is Apple HomeKit compatible. It provides a site for Apple MFi licensees to install an Apple Authentication Coprocessor chip. GainSpan's HomeKit ADKs are available separately.

The SKB can be powered from the USB port, two AA batteries, an Arduino host, or a bench power supply.
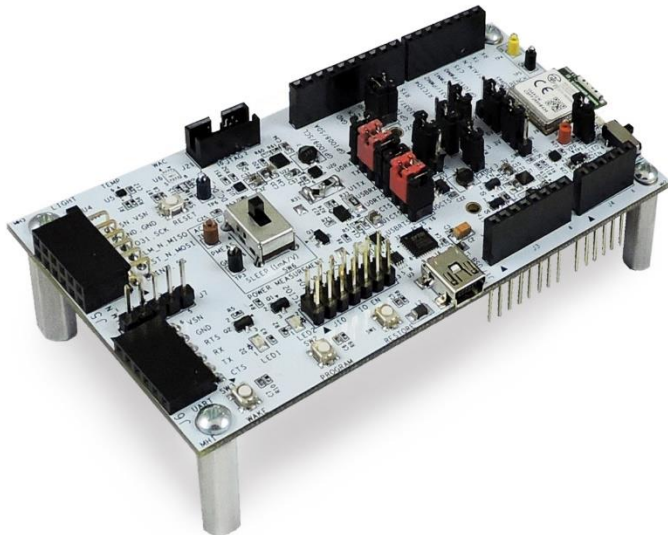
BENEFITS:

- Easy to use evaluation and development platform for GS2200Mxx-based designs
- Supports development of either host-less or hosted designs
- Arduino™ compatible (host or shield)
- Pmod™ compatible (host or peripheral)
- Built-in temperature and light sensors
- Apple® HomeKit™ compatible
- Built-in development support features
- Flexible powering options
- Pre-loaded temperature and light sensing reference application

FEATURES:

- GS2200MIZ Ultra-low Power Wi-Fi CERTIFIED® 802.11b/g/n Mini-Module
- Arduino compatible interface with UART, SPI, I2C, GPIO, ADC and PWM support (host or shield support)
- Pmod-compatible UART, SPI and I2C interfaces (host or peripheral)
- Intelligent, ultra-low power temperature and light sensors with alarms to wake-up the GS2200M on threshold crossing events
- Built-in power measurement circuitry for easy power consumption measurement and optimization
- Three software accessible buttons and two software controlled LEDs
- Built-in USB serial debug and flash programming port
- JTAG debugger interface
- Power from USB, 2-AA batteries, Arduino host, or a bench supply
- Built-in battery gauge circuit

SUPPORTS BOTH HOST-LESS AND HOSTED DESIGNS

The SKB can be used as a development platform for both host-less and hosted designs. In a host-less design, your application firmware runs on the GS2200M module. In a hosted design, your application firmware runs on an adjacent host microcontroller. In both cases, you leverage the extensive set of Wi-Fi and TCP/IP-based network services provided by the GS2200M module.

For host-less designs, you develop your application firmware using GainSpan's GS2000 Software Development Kit (SDK) and may leverage one or more of GainSpan's Application Development Kits (ADKs) to accelerate your time to market. The Temperature and Light Sensor ADK embedded firmware, which is pre-installed on the SKB, is included in the GS2000 SDK.

For hosted designs, you develop your application firmware on a host microcontroller of your choosing, interfacing it to the GS2200M module via a UART, SPI or SDIO port. Your application interfaces with GainSpan's Serial-to-Wi-Fi (S2W) firmware running on the GS2200M module using "AT" commands. The AT commands enable you to leverage the many networking services provided by the GS2200M module via high-level, easy to use modem-style commands. GainSpan's SDK Builder website enables you to generate S2W firmware customized to your requirements, eliminating the time and cost involved in using a locally installed SDK to do this.

SPECIFICATIONS

FEATURE	DESCRIPTION
Wireless Module	GS2200MIZ 802.11b/g/n Mini-Module with Integrated Chip Antenna
Arduino Connector	Arduino Uno-compatible. Supports UART, SPI, I2C, GPIO, SAR ADC, Sigma-Delta ADC, PWM and GPIO interfaces. Jumper configurable to serve as host or shield.
SPI Connector	Pmod Type 2A compatible. Jumper configurable to serve as master or slave.
UART Connector	Pmod Type 4 compatible. Jumper configurable to serve as host or peripheral.
I2C Connector	Pmod I2C compatible with additional alarm pin
User Interface	Hardware defined function: Power switch, power LED, reset button, USB activity LED Software defined function: one alarm button, two general purpose buttons, two LEDs
Sensors	Intelligent, ultra-low power temperature and light sensors with threshold alarms
Power Measurement	Built-in module power consumption measurement circuit. Outputs voltage proportional to module current consumption. Supports two ranges – 0-400mA and 0-500uA for measuring active and sleep currents, respectively. Includes scope/DMM attachment test points.
Battery Gauge	Built-in battery gauge circuit to measure battery level. Jumper enabled.
USB Serial Port	Mini-USB serial port for debugging and flash programming from development PC
JTAG Connector	ARM Cortex 10-pin JTAG connector for firmware debug probe
Power Source	USB, 2-AA batteries, Arduino host (+5V), or bench supply via jumper selection. Includes bench supply attachment test points.
Apple Authentication Co-processor	Includes site (footprint) for Apple MFi licensees to install an Apple Authentication Coprocessor chip

ORDERING INFORMATION

ITEM	PART NUMBER	DESCRIPTION
GS2200M Starter Kit Board	GS2200MIZ-SKB	Evaluation and development board for GS2200Mxx-based designs

GainSpan.