Datenblatt

GSM / GPRS / GNSS / Bluetooth HAT für Raspberry Pi

Artikel-Nr.:	RPI-GSMHAT
Hersteller:	Waveshare
Herkunftsland:	China
Zolltarifnummer:	85176200
Gewicht:	0.129 kg

Übersicht
This is a handy, low power Raspberry Pi HAT which features multi communication functionalities: GSM, GPRS, GNSS and Bluetooth. It allows your Pi to easily make a telephone call, send messages, connect to wireless Internet, global position, transfer data via Bluetooth, and so on.

Eigenschaften

General

- Raspberry Pi connectivity, compatible with Raspberry Pi 2B/3B/Zero/Zero W
- Supports SMS, phone call, GPRS, DTMF, HTTP, FTP, MMS, email, etc.
- Support GPS, COMPASS, Glonass, LBS base station positioning, omni-positioning
- Bluetooth 3.0, supports data transferring through Bluetooth
- Onboard USB TO UART converter CP2102 for UART debugging
- 6x LEDs for indicating the module working status
- SIM card slot for 1.8V/3V SIM card
- RTC with backup battery holder
- Baudrate auto detection (1200bps ~115200bps)
- Control via AT commands (3GPP TS 27.007, 27.005, and SIMCOM enhanced AT Commands)
- Supports SIM application toolkit: GSM 11.14 Release 99
- Comes with development resources and manual (examples for Raspberry Pi/Arduino/STM32)

GSM/GPRS

- Band
  - GSM 850/EGSM 900/DCS 1800/PCS 1900 MHz
  - Quad-band auto search
  - Compliant to GSM phase 2/2+
- Emitting power
  - Class 4 (2W @ GSM 850/EGSM 900 MHz)
  - Class 1 (1W @ DCS 1800/PCS 1900 MHz)
- GPRS connectivity
  - GPRS multi-slot class 12 (default)
  - GPRS multi-slot class 1~12 (configurable)
  - GPRS data feature
  - Downlink speed: max 85.6kbps
  - Uplink speed: max 85.6kbps

Alle hier aufgeführten Namen und Zeichen sind Eigentum des jeweiligen Herstellers. Druckfehler, Änderungen & Irrtümer vorbehalten.

    - Coding schemes: CS-1CS-2CS-3CS-4
    - Supports PAP (Password Authentication Protocol) for PPP connection
    - Supports PBCCH
    - Supports USSD
- SMS
    - Supports: MT/MO/CB/Text/PDU mode
    - SMS storage: SIM card
- Audio
    - Voice encode/decode mode: Half RateFull RateEnhanced Full RateAdaptive muti rate
    - Supports echo cancellation
    - Supports noise reduction

GNSS

- Receiver type
    - 33 tracking channels
    - 99 acquisition channels
    - GPS L1 C/A code
- Sensitivity
    - Tracking: -165 dBm
    - Cold starts : -148 dBm
- Time-To-First-Fix
    - Cold starts : 28s (typ.)
    - Hot starts : < 1s
    - Warm starts: 26s
- Accuracy
    - Horizontal position : <2.5m CEP

Bluetooth

- Integrates AT commands
    - Compliant to Bluetooth specification 3.0 + EDR
    - Supports SPP, OPP, HFP/HSP, etc.

Misc

- Operating voltage: 5V
- Operating temperature: -40°C ~ 85°C
- Storage temperature: -45°C ~ 90°C
- Dimensions: 30.2mm x 65mm

Lieferumfang

- GSM/GPRS/GNSS HAT x1
- GSM Antenna x1
- GPS External Antenna (B) x1
- Bluetooth Antenna x1
- USB type A plug to micro plug cable x1
- RPi screws pack (2pcs) x1

Dokumentation / Downloads

- https://www.waveshare.com/wiki/GSM/GPRS/GNSS_HAT

Weitere Bilder:

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