**Arduino Shield Uno GSM/GPRS/SMS**  
**Model: SM5100B-D**

### Descriptions:
- This is an Arduino Shield for SM5100 quad-band GSM/GPRS module. The module is included.
- Two jumpers can be used to select if the SM5100 module is talking to soft serial port, serial port of Arduino, or USB.
- J1 and J2 are used to choose how RX/TX of SM5100B is going to connected to Arduino.
- RX/TX is the RX/TX of SM5100B module.
- MTX/MRX is the TX/RX of Atmega328.
- D3 and D2 are the I/O of Atmega328 if soft serial is used.
- Connect RX to MRX, and remove atmega328, so USB port of Arduino can be used to directly to talk to SM5100B.
- Connect RX to MTX, and keep atmega328, so SM5100B can talk to the MCU.

### Specifications:

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| Temperature range                    | Normal range: -10°C to +55°C (full compliant)  
                                          Storage: -40°C to +85°C |
| Weight                               | < 9g    |
| Physical dimensions                  | 35.0X39.0X2.9 mm (typical) |
| Connection                           | 60 pins |
| Power supply                         | VBAT: 3.3V to 4.2V range, 3.6V typical. |
| Power consumption                    | Off mode: <100uA  
                                          Sleep mode: <2.0mA  
                                          Idle mode: <7.0mA (average)  
                                          Communication mode: 350 mA (average, GSM)  
                                          Communication mode: 2000mA (Typical peak during TX slot, GSM) |
| Li-ion Battery charging management and interface (OPTION) | Li-ion Battery charging management is included. The charger interface is provided on 60-pin connector. (only for 3.7V Li-ion Battery) |
| Frequency bands                      | EGSM900 +GSM850+ DCS1800+PCS1900 |
| Transmit power                       | Class 4 (2W) for EGSM900/GSM850  
                                          Class 1 (1W) for DCS1800/PCS1900 |
| Supported SIM card                   | 3V/1.8V SIM card. (auto recognize) |
| Keyboard interface                   | 4x6 keyboard interface is provided |
| UART0 interface with flow control    | Up to 460 kbps  
                                          Full hardware flow control signals (+3.0V) are provided on 60 pins. |
| UART1 interface without flow control | 2-Wire UART interface  
                                          Up to 460 kbps |
| LCD interface                        | Support standard SPI interface |
Schematics of GPRS/GSM Arduino Shield: