

GR1

GSM/GPRS/GPS

GR1 Card

GSM / GPRS / GPS

Power Supply
on Board

Quad Band

On Board
SIM Holder

2 GPIO Outputs

Audio Outputs

PYTHON
Script Interpreter

RoHS Compliant

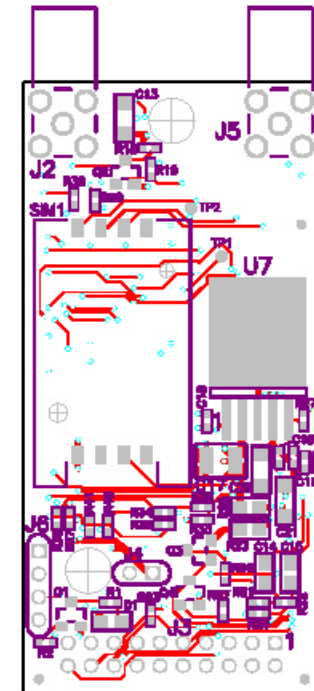
GPS SIRF 3

GLYN
High-Tech Distribution

The GR1 card is a complete GSM/GPRS/GPS solution, based on the Telit GE863-GPS module. The GR1 comes with Python scripting where customer application programs can be stored inside the modem, making the terminal a complete customer solution. The RoHS-compliant GR1 also has a 20 pin connector to provide access to the board power supply, and GE863 serial UART, control lines and GPIO ports. SMA connectors are also provided for the GSM and GPS antennas.

Product Features

- Quad-Band EGSM 850/900/1800/1900 MHz
- Output Power Class 4 (2W) 850/900MHz, Class 1 (1W) 1800/1900MHz
- AT commands according to GSM 07.05, 07.07 and Telit proprietary AT commands
- RoHS compliant
- Supply Voltage Range: 5-14 Vdc
- Power Consumption: power off: 26uA, idle: 4 mA, GPRS(max): 700 mA
- Dimensions: 68 x 33 x 10 mm
- Weight: 35 g (with 1300ma/H battery 60 g)
- Temperature Range: -20 to +70°C
- 2 General Purpose I/O
- 9 pin board connector for UART communication, 300 to 115,000 bps
- SMA female, 50 ohm connector for GSM
- SMA female, 50 ohm connector for GPS
- PYTHON script interpreter engine, 3 MB non-volatile memory for user scripts and data and 1.5 MB RAM for Python engine usage
- GPS High sensitivity for indoor reception up to -159 dBm
- Fast TTFF's at low signal levels. Hot starts less than 2 seconds
- Supports 20-Channel GPS. GPS NMEA 0183 output format



GR1

GSM/GPRS/GPS

GR1 Ver. C 1/8/07

GR1 Card
GSM / GPRS / GPS

PYTHON
application

GPRS, SMS protocol
TCP/IP, UDP selection

Log for GPS location
when GPRS lost
connection

2 GPIO outputs
Audio outputs

All unit based on
PYTHON
Script Interpreter

GPS SIRF III socket
open when receiving
SMS and calls

Unit can launch SMS
for emergency and can
get audio call
automatically

GLYN
High-Tech Distribution

- PYTHON scripts run on Telit GM863-GPS PYTHON Modem
- Transfers GPS information through GPRS to remote IP
- Transfers CELL ID and CELL LOCK information through GPRS to remote IP
- Transfers GPS information to local UART
- Unit has 2 GPIO for remote notification and Audio output
- Setup with SMS command or UART
- GPS information stored when GPRS out
- Unit can send the GPS information in several ways: TCP/IP, UDP, SMS

Sample: what the unit sends to the IP side

DEVICE OEM1

```
*R35827800000547,044C,7DAB,01,01,$GPSACP: 122749.000,3210.8110N,03452.6387E,1.2,79.8,3,185.59,0.72,0.3,090606,06>#
```

+++

```
IMEI,LOCK,CELL,input1input2,output1output2,GPSACP:'>#\r\n'
```

Unit can store GPS information when GPRS is not available (storage 0.5Mbyte)
Stored GPS information will be sent the next time GPRS becomes available

SMS setup protocol:

0:APN,USER,PASSWORD

1:IP ADDRESS,REMOTE PORT

2:MOVE INTERVAL,FIX INTERVAL

3:PHONE_NUM, PHONE_NUM,

4:OUTPUT1,OUTPUT2

RESET

INFO

PHONES

Sample string

0:internetg,0,0

1:62.90.100.169,6005

2:30,120

3:0547516256,0547665754

4:1,1 (output 1 on. output 2 on)

reset

info

get the list of phones in the unit.

5:Activation,Speed,interval,SMS send to mobile

5:1,100,60,Over speed 100Km/h

6:Activation,Speed,interval,SMS send to mobile

6:0,5,10,Car stolen

7:Activation,interval,SMS send to mobile

7:1, 5,emergency

GR1 Card GSM / GPRS / GPS Block Diagram V1.1

