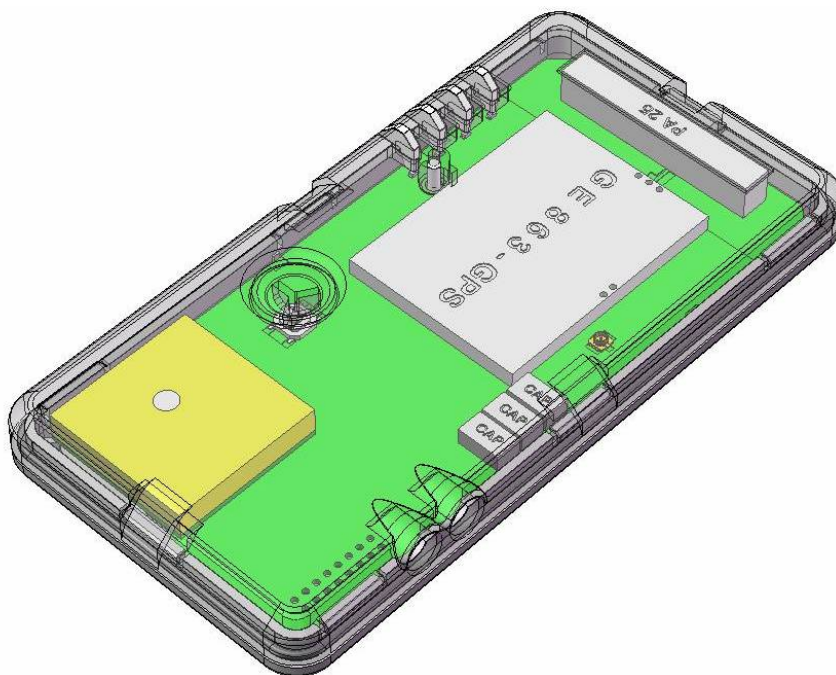


EZcat

Telit Cellular GSM/GPS Engine with optional PIC controller



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EZcat_Hardware Guide_V1.

EZcat Hardware Interface Description
Not Released

Hardware Interface Description

1. Hardware Features of the EZcat

Feature	Implementation
Incorporates Telit GE863 GPS module	The Telit module handles all GSM/GPS processing for, signal and data within the EZcat.
Incorporates PIC18F67J10 Micro controller by MicroChip	Power full micro controller with 128k program memory. Additional E ² memory 256kbit
Frequency bands	Quad band: GSM 850/900/1800/1900MHz
Power supply	Single supply voltage 5V to 30V
Operating temperature	-20°C to +70°C ambient temperature in plastic enclosure)
Physical	Dimensions: 113mm x 56m x 13m Weight: 140g
RoHS, WEEE	All hardware components are fully compliant with the EU RoHS and WEEE Directives
Low energy support	Unit can work on 3ma consumption <ul style="list-style-type: none">• dedicate power supply for micro controller
Communication	RS232 (only Tx, Rx)

2. Interface Description

2.1 Overview

EZcat provides the following connectors for power supply and Interface.

There is 1 cable 4 wires:

Cable 1:

Pin number	Description
1	input power + 5 to 30V
2	GROUND
3	RS232 TX
4	RS232 RX

2.2 Power Supply

The power supply of the EZcat Terminal has to be a single voltage source of POWER 5V-30V capable of providing a peak during an active transmission. The EZcat Terminal is protected from supply voltage reversal. An internal fuse ensures an electrical safety according to EN60950-1. This fuse is not removable. A fast acting fuse 0.8A with melting is necessary to use with the EZcat at a 24V power supply system for vehicles.

2.2.1 Supply voltage requirements

The DC power supply must be connected to the POWER input:

- Input voltage range 5 - 30V DC
- Nominal Voltage 12V DC
- Power Supply current rating: max. 2A @12V
- Power Supply ripple: max. 120mV
- Input current in idle mode: 20mA @ 12V
- Input average current in communication mode: 100mA @ 12V

2.3 RS-232 Interface

The serial interface of the EZcat Terminal is intended for the communication between the GSM module and the host application. This RS-232 interface is a data and control interface for transmitting data, AT commands and providing multiplexed channels. EMC immunity complies with the vehicular environment requirements according to EN 301 489-7. The user interface of the EZcat Terminal is accessible from a Data Terminal Equipment DTE connected to the RS232 interface and it is managed by AT commands according to the GSM 07.07 and 07.05 specification and the supported commands are listed in the AT Commands Reference Guide. Connector type on the terminal is:

- RS-232 through open end 2 wires and GROUND
- Baud rate from 300 to 115.200 bit/s
- Short circuit (to Ground) protection on all outputs.
- Input voltage range: -12V to +12V

2.4 EZcat main Block Diagram

Figure 3 shows a block diagram of a sample configuration that incorporates the EZcat.

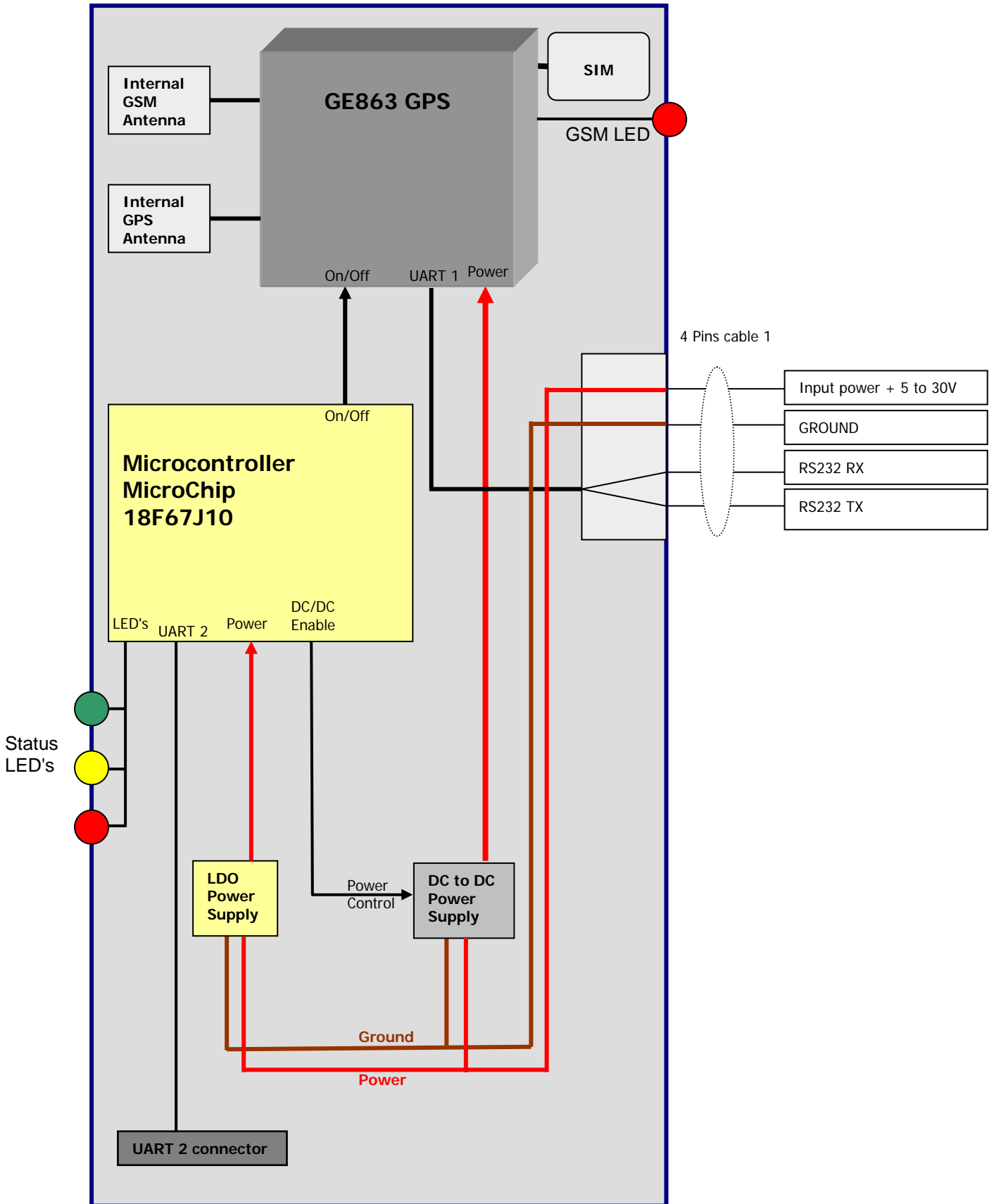


Figure 3: EZcat Block diagram

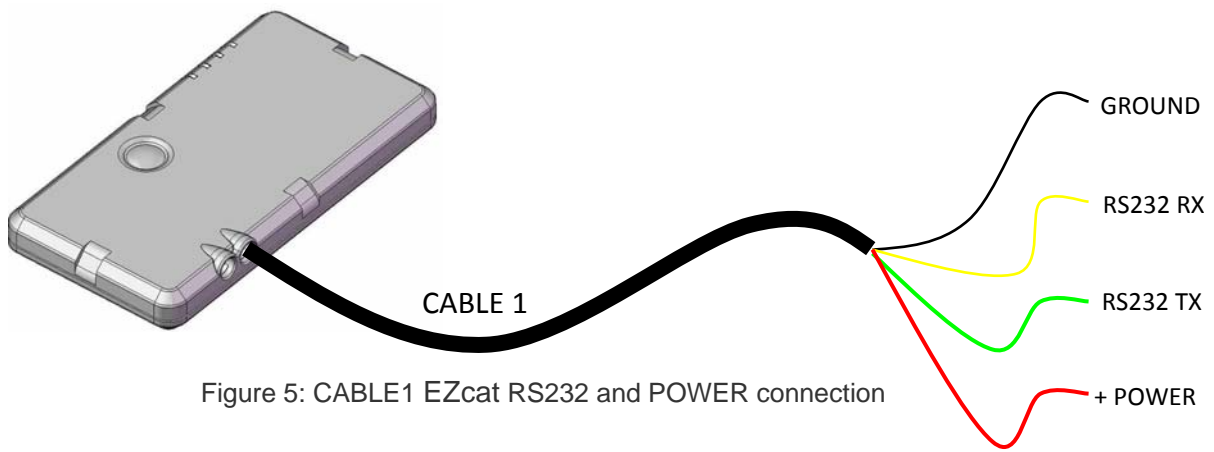


Figure 5: CABLE1 EZcat RS232 and POWER connection