

## GM862-GPS HARDWARE DIFFERENCES DECLARATION

### Introduction

We, TELIT Communications S.p.A. declare that the new quad-bands GSM 850/900/1800/1900 terminal equipment type GM862-GPS hardware revision 3, is based on the already tested quad-bands GSM 850/900/1800/1900 terminal equipment type GE864-QUAD hardware revision 1 that should be considered as the 'based model'.

Aim of this document is also that to describe the main hardware differences between the new product GM862-GPS and its based model GE864-QUAD.

### List of differences between GE862-GPS HW Rev. 3 and GE864-QUAD Rev. 1

The following main differences between the new GM862-GPS HW Rev.3 and the already tested GE864-QUAD HW Rev. 1 are declared as follows:

#### **Schematic:**

Schematic page 1

**Added** Transistor Q101 (BC857BL3) with resistor R119 (470 ohm) in base controlled by Pin P9 of U101, collector to M15, N14, K13 pin of U101 and Emitter to VANA supply.

**Added** R114, R115 and R116 for RTC crystal configuration

**Changed** U101 IC uP PMB7860 V 1.1K (was V 1.1D) mass production code

Schematic page 2

**Removed** U202 (was AND gate not mounted)

Schematic page 3

**Added** resistor R309 = 560k ohm form pin 3 Q301 to GND digital pull-down

**Added** resistor R310 = 47k ohm from VCXOEN (PIN 36 U301) to VINT digital pull-up

Schematic page 4

**Added** L414= L415=2.2nH low pass filter

**Added** C414=1pF low pass filter

**Added** C413=33pF DC-block

**Added** GSM RF antenna connector MMCX female COAX SMD SO401 (was PCB pad)

**Changed** L409 = 27nH (was not mounted) ESD-block

**Changed** R407 = not mounted (was 3.3k ohm) power control setting

**Changed** U401 PMB6271 V1.1 (was PMB6271 A1) mass production code

**Removed** C413 (was not mounted) external clock

Schematic page 5

Related to GPS functionality all page 5 of the schematic is added ( see technical manual cod. 1vv0300730\_MAN\_OMOLOG\_GM862-GPS\_r0). The GPS part doesn't affect the functionality of the GSM part.

Schematic page 6

**Added** SO601 SIM CARD connector 8 CT SMT

**Added** SO602 board-to-board 50pin connector

**Added** C601-C649 filter component for EMI/ESD purposes

**Added** R601-R635 filter component for EMI/ESD purposes

**Added** L501-L608 filter component for EMI/ESD purposes

**Added** Q601-Q603 digital I/O

**Other Changes:**

The PCB used on GM862-GPS HW Rev 3 is called CS1187B

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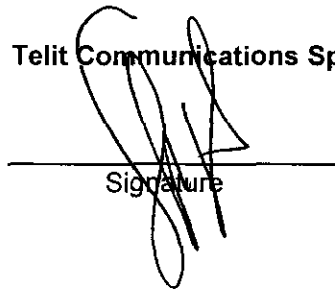
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