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Technical Document

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VBASE Change Description

UPDATE

version	Date	Nature of modifications	Author
1.0	10/04/07	Creation	RdlT

INTRODUCTION

VBase A has been moved to VBASE B in order to gain strength against electrostatic discharges. Moreover, we have improved Bluetooth module fastening.

1. CHANGES DESCRIPTION

VBASE contains two different PCBs, modem, Bluetooth module and Ethernet plug-it. Just one of the PCBs has been changed.

VBASE A	VBASE B
MER605C	MER605C
INT614B	INT614E
BTv3 Bluetooth module	BTv3 Bluetooth module
SM14 modem	SM14 modem
INT611D (plug-it)	INT611D (plug-it)

Therefore, as modifications only apply to INT614 we'll explain modifications related to this PCB.

INT614 contains power supplies:

- 10V to charge handheld battery
- 3V3 for the electronic

INT614 also includes a led to show the status of the base, a four pins connector to charge battery handheld and communicate with it via contacts, 1 connector to plug MER605 mother board and power supply jack.

1.1 INT614 schematics

VBASE A Schematics
Int614B_schem.pdf

VBASE B Schematics
Int614E_schem.pdf

The only change in the schematics is that we have added ferrites to 4 base contacts. These ferrites should improve base behavior when applying ESD.

1.2 INT614 layout

VBASE A gerbers
Int614B_gerbers.pdf

VBASE B gerbers
Int614E_gerbers.pdf

Layout has completely changed; main difference is that in new int614E PCB there's a gap (there's not any line) around base contacts of 8mm to completely isolate it. INT614E also has 4 layers instead of 2 that has INT614B.
Several holes has been done in order to weld new metallic fastener.

1.3 INT614 part list

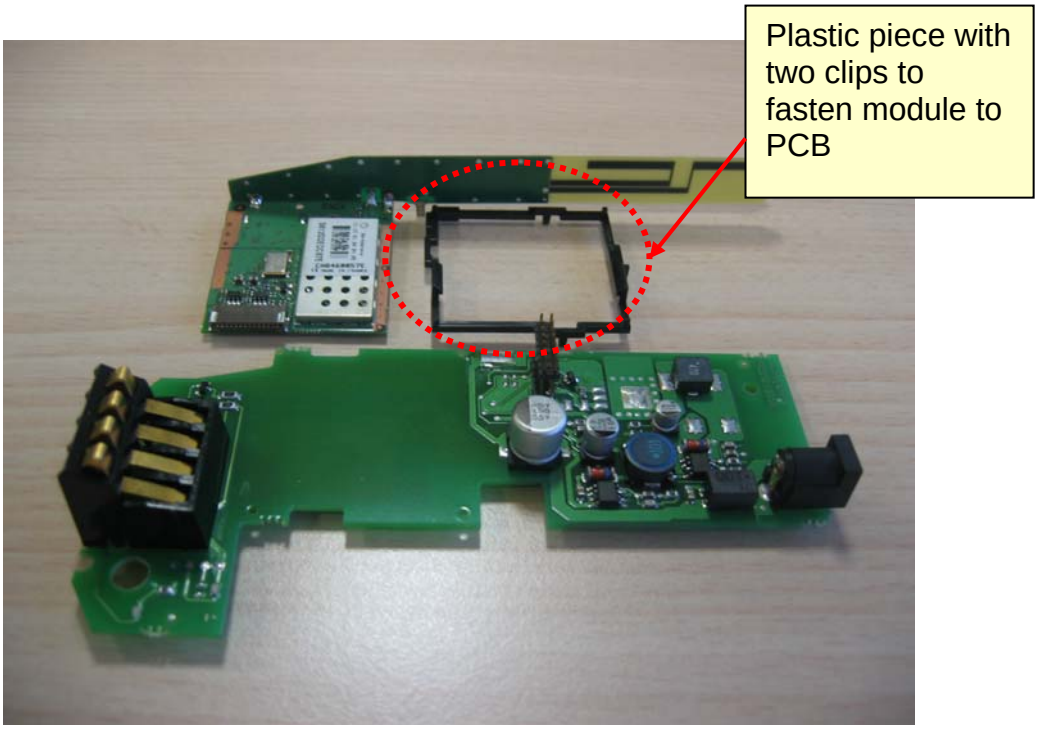
VBASE A part list
Int614B_partList.pdf

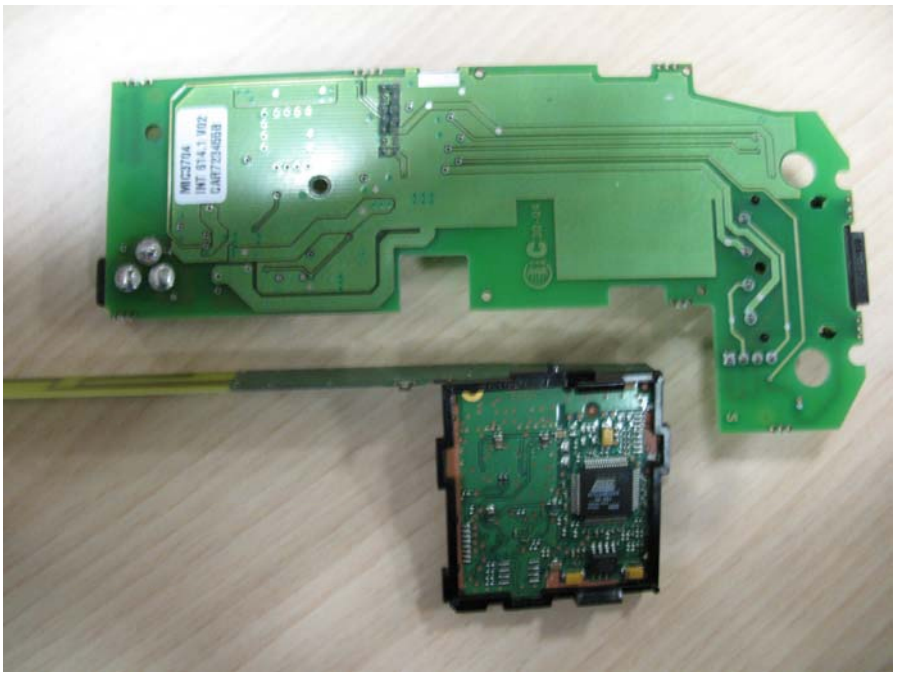
VBASE B part list
Int614E_partList.pdf

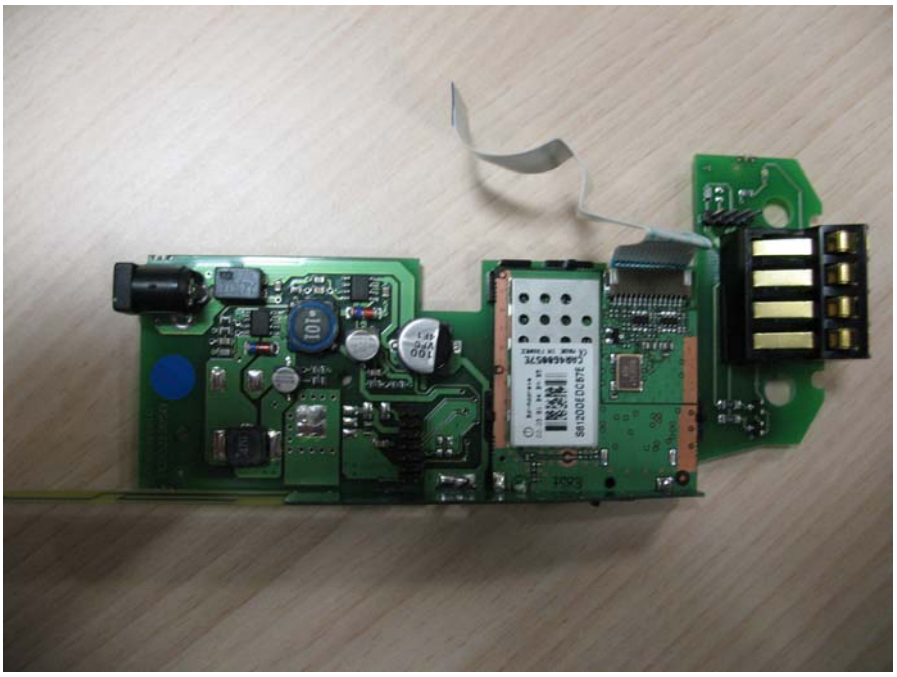
Only modification commented above: 4 ferrites added

1.4 Bluetooth module fastener

VBASE A fastener







VBASE B fastener