Troubleshooting
with particular chipsets

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1   Introduction

This document describes what particular strategies should be adopted when getting troubles with some chipsets, in particular:

1) Intel(R) 5 Series/3400 Series

2) ATI RS400/200 Host Bridge

2   Issue description

In some machines mounting the above mentioned chipsets some problems when acquiring images that require a high usb trafic speed have been detected. In such cases users can get "SCANNER COMMUNICATION" or "DEVICE NOT RESPONDING" errors, or can experience a very low frame rate (current versus nominal ratio) or, in case of rolled fingerprint acquisitions, "COMPOSITION SLOW" diagnostic message.

It seems that the chipset has some problems with the management of the Bulk USB protocol (see for example the http://support.microsoft.com/kb/978789/en-us document), used by the Green Bit scanners.

These issue has been solved by enabling a particular Bulk transfer mode ("Bulk 1024" instead of the standard "Bulk 512"). Note that this mode is not standard, so it could happen that it's not supported. In such case, please contact Green Bit support: support@greenbit.com

3 Steps required for solving the issue

When the errors above described are frequently met, Green Bit recommends the followings:

1) Check the chipset type:

   - in Windows: in the Device Manager, expand the USB Controller item and see the type of Enhanced Host

   - in Linux: tipe "lspci" in a terminal and read the PCI Bridge controller

   if it corresponds to one of the above listed chipsets, it's almost sure that the problem is related to the issue described in this document. In this case go on with the step number 2, otherwise contact the Green Bit support (support@greenbit.com)

2) If the device is provided with the .ini file (see MultiScan Overview document, in the section referring to the device itself to verify if it's provided), set the "EnableBulk1024Transfer" item to 1 and try again to see whether the problem disappears. Otherwise go to the step number 3.

3) If you're reading this, may be it's necessary to update the scanner firmware. It's a very delicate operation, therefore ask the Green Bit support (support@greenbit.com) for the necessary tool, describing the problem. VERY IMPORTANT: the tool for fw upgrade is available on Windows systems only.

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