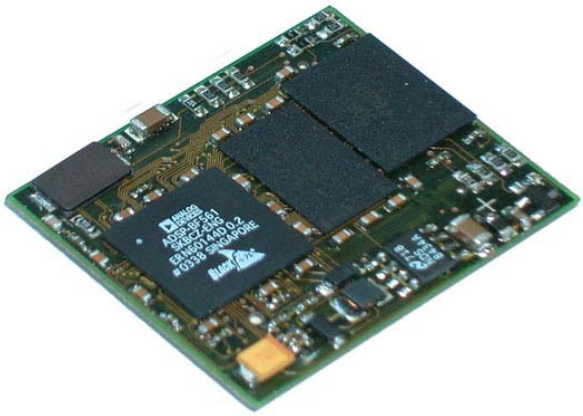
BLUE TECHNIX



Command Reference

BLACKSheep V0.4.8

www.tinyboards.com

Maximum Power at Minimum Size

Contact

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Table of Contents

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Warnings
Due to technical requirements components may contain dangerous substances

The Core Boards and Development systems contain ESD (electrostatic discharge) sensitive devices. Electro-static charges readily accumulate on the human body and equipment and can discharge without detection. Permanent damage may occur on devices subjected to high-energy discharges. Proper ESD precautions are recommended to avoid performance degradation or loss of functionality. Unused core boards and development boards should be stored in the protective shipping package.

1 Command Reference

The command listed below can be used with special parameters. Please choose one of them.

Example: example [par1] [par2] means: example par1 or example par2

Typing in –h as a parameter for each command it shows a short usage message.

Please be aware that all commands are case sensitive.

- **cd**

  This command changes the working directory within the file system.

- **chub [baudrate]**

  This command changes the UART baudrate. E.g. “chub 115200”. Make sure your terminal program is supporting the new baudrate! Changing baudrate may result in a lost of serial communication!

- **exec [filename]**

  This command loads and executes the filename specified. The hex-file has to be compiled and linked with the VisualDSP++ environment. It has to be a valid Intel hex loader file from a VDSP++ project (File extension “*.ldr*”). Make “ls” to see the correct filename (case sensitive) before using the “exec” command.

- **flash [-rsdev] [-qry] [hex-filename {-a –b}] [-ff] [-rsapp]**

  Use one of the following parameters.

  -rsdev erases the entire flash device

  -qry shows the vendor and manufacturer id

  hex-filename {-a –b}

  flashes the file with the hex-filename. The file must have a valid Intel hex file format. Use the –a switch to flash the file as an application. You can load thos application with the loadff command. The –a option flashes the application on the first free address in flash. With the –b flash option you can flash the file as a boot version. The BF533 then boots this application instead of the BLACKSheep. BE AWARE THAT FLASHING A FILE WITH THE –b OPTION OVERWRITES THE BLACKSHEEP CODE! Flashing with the –b option enabled is only possible, after a rsdev command that erases the entire flash. After a reset the BLACKSheep code looks for valid applications in flash and tries an autoboot after a certain timeout, if no key is pressed.

-ff	shows if any application is in flash and gives you the first free address in flash.
-rsapp	erases all applications in flash without erasing the BLACKSheep itself.

- **getimg [filename] [-qvga] [-vga] [-a] [-b]**

  This command captures a picture from the camera if installed, and stores the image as a windows bitmap either on a SD card if there is one installed, or on the RAM disk, with the given filename. You can transfer this file to the host pc, using the "xmt" command.

  -*qvga* : Optional parameter. Sets the camera in QVGA mode (320*240 pixel)

  -*vga* : Optional parameter. Sets the camera in VGA mode (640*480 pixel)

  -*a* : Optional parameter. Capturing an image from PPI1.

  -*b* : Optional parameter. Capturing an image from PPI2. (Not working on CM-BF533)

  If no additional parameter is specified, the command takes a picture from PPI1, without changing the resolution of the camera.

- **scr subaddress value [-a] [-b]**

  Writes "value" in the register with the address "subaddress" into the camera on PPI1 (switch -a) or into the camera on PPI2 (switch -b). If no camera is specified writes the value into the camera on PPI1. All parameters are 8bit hex values.

- **rcr subaddress [-a] [-b]**

  This command reads and prints out the value from register "subaddress" either from camera on PPI1 (switch –a) or camera on PPI2 (switch –b). All parameters are 8bit hex values. If no camera is specified the command reads from the camera on PPI1.

- **gms**

  Have fun with a tiny tetris game (looks better with the terminal program included in the support CD)

- **help, list**

  Shows all available commands

- **lasterr**

  Shows the returned error value of the last executed command

- **loadff [nr of application]**

  (Load from flash) Loads and executes a application from flash. The application given as parameter is loaded. Loadff 1 loads the first application, loaddff 2 the second and so one. The BLACKSheep code located in the flash can't be loaded in this way.

- **ls**

This command shows all files in current directory either on the SD card or the RAM disk.

- **pf [-set FLAG] [-clr FLAG] [-tgl FLAG]**

  This command sets (*set*), clears (*clr*) or toggles (*tgl*) the GPIO specified. The flag number represents the GPIO. For example use “pf set 3” to set the led installed on the evalboard (“pf set 3” for the BF-533; “pf set 8” for the BF-561).

- **pwd**

  This command shows the current working directory.

- **test [flash] [sdram]**

  This is a simple hardware test program.

- **testall**

  Full hardware test program.

- **ver**

  Shows the version number of BLACKSheep.

- **view [filename]**

  Shows the content of the file specified.

- **xmr [filename]**

  This command is usesd for an XModem transfer from the host PC to the coremodule.

  First you have to start the transfer on the BLACKSheep and than you have to activate the XModem transmit mode on your terminal program.

- **xmt [filename]**

  Used for a filetransfer via XModem protocol to the host PC.

  First you have to start the transfer on the BLACKSheep and than you have to activate the XModem receive mode on your terminal program, e.g. for the Hyper Terminal:

  Transfer → Receive File

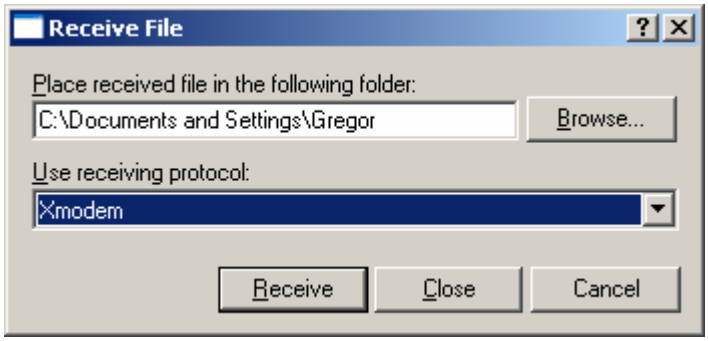

Figure 1-1: Receive File

Then press ‘receive’ and type in the local file name.

2 Revision History

2005-06-28	Release Version No. 1.0

A List of Figures and Tables