

**Example:** FORM:SREG HEX  
The register content is returned as a hexadecimal number.

## 6.8 HCOpy Subsystem

The HCOpy subsystem contains the commands to generate a hardcopy of the display.

### Example: Store a hard copy of the display

The following example lists commands to configure and execute a hard copy to an automatic named file.

```
// *****
// Hard copy settings
// *****
:HCOPY:DEVIce:LANGUage PNG
:HCOPY:FILE:NAME:AUTO:STATe 1
// defines the output format
// sets the instrument to automatically create output file names

// *****
// Configure hard copy options, set automatic naming rules
// An automatically generated file name consists of:
// <Prefix><YYYY><MM><DD><Number>.<Format>
// *****
:HCOPY:DEVIce:LANGUage BMP
// defines output format *.bmp
:HCOPY:REGion DIALog
// selects the region to be copied
:HCOPY:FILE:AUTO:DIR "usb/HCopy"
// sets destination directory of automatic named file to "/usb/HCopy"
:HCOPY:FILE:NAME:AUTO:FILE:PREFix:STATe 1
:HCOPY:FILE:NAME:AUTO:FILE:PREFix:"hardcopy"
:HCOPY:FILE:NAME:AUTO:FILE:YEAR:STATe 1
:HCOPY:FILE:NAME:AUTO:FILE:MONTH:STATe 1
// uses automatic naming prefix
// sets automatic naming prefix to "hardcopy"
// uses automatic naming date parameters year and month

// *****
// Execute and transfer the hard copy
// *****
:HCOPY:EXECute
:HCOPY:DATA
// generates a hard copy
// transfers the hard copy to the remote client
:HCOPY:FILE:AUTO:FILE?
// queries the automatic file name
```

```
// response: "hardcopy1607001.bmp"
:HCOPY:FILE:AUTO:NUMBer?
// queries the number in the automatic file name
// response: "001"
:HCOPY:FILE:AUTO?
// queries the path and file name of the automatically generated file
// response: "/usb/HCopy/hardcopy1607001.bmp"

:HCOPY:DATA?.....300
:HCOPY:IMAGe:FORMat..... 300
:HCOPY:DEVIce:LANGuage.....300
:HCOPY[:EXECute]..... 301
:HCOPY:FILE[:NAME].....301
:HCOPY:FILE[:NAME]:AUTO?.....301
:HCOPY:FILE[:NAME]:AUTO:DIRectory..... 301
:HCOPY:FILE[:NAME]:AUTO:DIRectory:CLEar..... 302
:HCOPY:FILE[:NAME]:AUTO:FILE?..... 302
:HCOPY:FILE[:NAME]:AUTO[:FILE]:DAY:STATe.....302
:HCOPY:FILE[:NAME]:AUTO[:FILE]:MONTH:STATe.....302
:HCOPY:FILE[:NAME]:AUTO[:FILE]:YEAR:STATe..... 302
:HCOPY:FILE[:NAME]:AUTO[:FILE]:NUMBer?.....302
:HCOPY:FILE[:NAME]:AUTO[:FILE]:PREFix..... 303
:HCOPY:FILE[:NAME]:AUTO[:FILE]:PREFix:STATe.....303
:HCOPY:FILE[:NAME]:AUTO:STATe.....303
:HCOPY:REGIon..... 303
```

---

**:HCOPY:DATA?**

Transfers the hardcopy data directly as an NByte stream to the remote client.

**Return values:**

<Data>                      block data

**Example:**                      See [Example "Store a hard copy of the display"](#) on page 299.

**Usage:**                        Query only

---

**:HCOPY:IMAGe:FORMat <Format>****:HCOPY:DEVIce:LANGuage <Language>**

Selects the graphic format for the hard copy. You can use both commands alternatively.

**Parameters:**

<Language>                      BMP | JPG | XPM | PNG  
                                  \*RST:        PNG

**Example:**                      See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:**        See ["File Options"](#) on page 125

---

**:HCOPY[:EXECute]**

Generates a hard copy of the current display. The output destination is a file.

The data is written into the file selected/created with the `HCOPY:FILE` commands.

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Usage:** Event

**Manual operation:** See ["Save"](#) on page 126

---

**:HCOPY:FILE[:NAME] <Name>**

Determines the file name and path to save the hard copy, provided automatic naming is disabled.

**Note:** If you have enabled automatic naming, the instrument automatically generates the file name and directory.

**Parameters:**

<Name> string

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:** See ["File Info"](#) on page 124

---

**:HCOPY:FILE[:NAME]:AUTO?**

Queries path and file name of the hard copy file, if you have enabled *Automatic Naming*.

**Return values:**

<Auto> string

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Usage:** Query only

**Manual operation:** See ["File Options"](#) on page 125

---

**:HCOPY:FILE[:NAME]:AUTO:DIRectory <Directory>**

Determines the path to save the hard copy, if you have enabled *Automatic Naming*.

If the directory does not exist, the instrument automatically generates a new directory, using the instrument name and `/var/user/` by default.

**Parameters:**

<Directory> string  
\*RST: `/var/user/`

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:** See ["File Options"](#) on page 125

---

**:HCOPY:FILE[:NAME]:AUTO:DIRectory:CLEar**

Deletes all files with extensions \*.bmp, \*.jpg, \*.png and \*.xpm in the directory set for automatic naming.

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Usage:** Event

**Manual operation:** See ["File Options"](#) on page 125

---

**:HCOPY:FILE[:NAME]:AUTO:FILE?**

Queries the name of the automatically named hard copy file.

An automatically generated name consists of:

<Prefix><YYYY><MM><DD><Number>.<Format>.

You can activate each component separately, to individually design the file name.

**Return values:**

<File> string

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Usage:** Query only

**Manual operation:** See ["File Info"](#) on page 124

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**:HCOPY:FILE[:NAME]:AUTO[:FILE]:DAY:STATe <State>****:HCOPY:FILE[:NAME]:AUTO[:FILE]:MONTH:STATe <State>****:HCOPY:FILE[:NAME]:AUTO[:FILE]:YEAR:STATe <State>**

Uses the date parameters (day, month or year) for the automatic naming. You can activate each parameter separately.

**Parameters:**

<State> 0 | 1 | OFF | ON

\*RST: 1

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:** See ["File Options"](#) on page 125

---

**:HCOPY:FILE[:NAME]:AUTO[:FILE]:NUMBer?**

Queries the number that is used as part of the file name for the next hard copy in automatic mode.

At the beginning, the count starts at 0. The R&S SMB searches the specified output directory for the highest number in the stored files. It increases this number by one to achieve a unique name for the new file.

The resulting auto number is appended to the resulting file name with at least three digits.

**Return values:**

<Number> integer  
 Range: 0 to 999999  
 \*RST: 0

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Usage:** Query only

**Manual operation:** See ["File Options"](#) on page 125

**:HCOPy:FILE[:NAME]:AUTO[:FILE]:PREFix** <Prefix>

Defines the prefix part in the automatic file name. The usage of the prefix is activated with command `HCOP:FILE:AUTO:PREF:STAT 1`

**Parameters:**

<Prefix> string

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:** See ["File Options"](#) on page 125

**:HCOPy:FILE[:NAME]:AUTO[:FILE]:PREFix:STATe** <State>

Uses the prefix for the generation of the automatic filename, provided *Automatic Naming* is activated.

**Parameters:**

<State> 0 | 1 | OFF | ON  
 \*RST: 1

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:** See ["File Options"](#) on page 125

**:HCOPy:FILE[:NAME]:AUTO:STATe** <State>

Activates automatic naming of the hard copy files.

**Parameters:**

<State> 0 | 1 | OFF | ON  
 \*RST: 1

**Example:** See [Example "Store a hard copy of the display"](#) on page 299.

**Manual operation:** See ["Automatic Naming"](#) on page 124

**:HCOPy:REGion** <Region>

Selects the area to be copied.

You can create a snapshot of the screen or an active dialog.