CSO-FFTS IF Processor SCPI commands

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0.1	03.07.06	Kasemann	All	new document

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1 Purpose

The purpose of this document is to provide the user with all SCPI commands to operate the CSO-FFTS IF processor remotely.

2 Applicable documents

AD-01	CSO-MPI-MAN-01	CSO-IF processor User Manual
AD-02	CSO-MPI-DSD-01	CSO-IF processor Design Description
AD-03	CSO-MPI-MAN-02	CSO-FFTS User Manual
AD-04	CSO-MPI-DSD-02	CSO.FFTS Design Description

3 SCPI commands

CSO:IF1:state?	(ENABLED | DISABLED | SHUTDOWN | FAULTED)
CSO:IF1:on	# switch IF on if not overheated
CSO:IF1:off	# switch IF off
CSO:IF1:reset	# switch to remote mode if in manual mode
CSO:IF1:configure	# set commanded parameter
CSO:IF1:CHAIN1:state?	# always ENABLED
CSO:IF1:CHAIN1:input?	# RX1 .. RX6
CSO:IF1:CHAIN1:cmdInput?	
CSO:IF1:CHAIN1:cmdInput	RX1 | RX2 | RX3 | RX4 | RX5 | RX6 (noise generator)
CSO:IF1:CHAIN1:centerFreq?	# [GHz]
CSO:IF1:CHAIN1:cmdCenterFreq?	
CSO:IF1:CHAIN1:cmdCenterFreq <number>	# 4.0 – 8.0 GHz # increments of 50 MHz
CSO:IF1:CHAIN1:Bandwidth?	# [GHz]
CSO:IF1:CHAIN1:cmdBandWidth?	
CSO:IF1:CHAIN1:cmdBandWidth <number>	# 1.0 GHz
CSO:IF1:CHAIN1:level?	# resolution:0.01 dBm
CSO:IF1:CHAIN1:atten?	# 0 - 20 dB
CSO:IF1:CHAIN1:cmdAtten?	
CSO:IF1:CHAIN1:cmdAtten <number>	# no configure needed # 0 - 20 dB
CSO:IF1:CHAIN1:autolevel	# autlevel the IF

Additional SCPI commands **(**for internal use and debugging**):**

CSO:IF1:version?	`# print software version`
CSO:IF1:release?	`# print software release`
CSO:IF1:setTime	`<yyy-mm-dd`**`T`**`hh.mm.ss.nnnn>`
CSO:IF1:setSynth <freq [MHz]>	`# set master synthesizer` `# range: 4000 - 6000 MHz`
CSO:IF1:CHAIN1:setSynth <freq [MHz]>	`# set chain synthesizer` `# range: 8000 - 11000 MHz`

Note: The 3 previous *set* commands do not need an additional configure!

CSO:IF1:VOLTAGE?	`# get internal IF voltages` `# e.g. 15.1 12.0 3.3 -15.3`
CSO:IF1:TEMPERATURE?	`# int. IF temperature [°C]` `# e.g. 32`