

1 USB-Protocol for OCTane (SCPI)

Sub-sys	Parameter	Value	Command	Response
Trigger A	State	off idle arm run	TRIGgerA:STATe OFF	<state> <error></error></state>
	State		TRIGgerA:STATe IDLE	<state> <error></error></state>
	State		TRIGgerA:STATe ARM	<state> <error></error></state>
	State		TRIGgerA:STATe RUN	<state> <error></error></state>
	Mode (freerun)	finite	TRIGgerA:MODE FINite	<mode> <error></error></mode>
	Mode	infinite	TRIGgerA:MODE INFinite	<mode> <error></error></mode>
	Input	USB	TRIGgerA:INput USB	<input/> <error></error>
	Input	external input	TRIGgerA:INput EXTernal	<input/> <error></error>
	Input	Trigger B	TRIGgerA:INput TRIGgerB	<input/> <error></error>
	Input	Trigger C	TRIGgerA:INput TRIGgerC	<input/> <error></error>
	Input	Button	TRIGgerA:INput BUTTon	<input/> <error></error>
	Signal-Rate	1.0e-1 125e3	TRIGgerA:RATE <freq></freq>	<time> <error></error></time>
	Signal-Period	8e-6 10	TRIGgerA:PERIod <time></time>	<time> <error></error></time>
	Vector-Size	1250000	TRIGgerA:SIZE <size></size>	<size> <error></error></size>
Trigger B	State	off idle arm run	TRIGgerB:STATe OFF	<state> <error></error></state>
	State		TRIGgerB:STATe IDLE	<state> <error></error></state>
	State		TRIGgerB:STATe ARM	<state> <error></error></state>
	State		TRIGgerB:STATe RUN	<state> <error></error></state>
	Mode (freerun)	finite	TRIGgerB:MODE FINite	<mode> <error></error></mode>
	Mode	infinite	TRIGgerB:MODE INFinite	<mode> <error></error></mode>
	Input	USB	TRIGgerB:INput USB	<input/> <error></error>
	Input	External	TRIGgerB:INput EXTernal	<input/> <error></error>
	Input	Trigger C	TRIGgerB:INput TRIGgerC	<input/> <error></error>
	Input	Button	TRIGgerB:INput BUTTon	<input/> <error></error>
	Signal-Rate	1.0e-1 125e3	TRIGgerB:RATE <freq></freq>	<time> <error></error></time>
	Signal-Period	8e-6 10	TRIGgerB:PERIod <time></time>	<time> <error></error></time>
	Vector-Size	1250000	TRIGgerB:SIZE <size></size>	<size> <error></error></size>
Trigger C	State	off idle arm run	TRIGgerC:STATe OFF	<state> <error></error></state>
Trigger C	State	off idle arm run	TRIGgerC:STATe IDLE	<state> <error></error></state>
Irigger C	State State	off idle arm run	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM	<state> <error> <state> <error></error></state></error></state>
Irigger C	State State State		TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN	<state> <error> <state> <error> <state> <error></error></state></error></state></error></state>
Trigger C	State State State Mode (freerun)	finite	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite	<state> <error> <state> <error> <state> <error> <mode> <error></error></mode></error></state></error></state></error></state>
Irigger C	State State State Mode (freerun) Mode	finite infinite	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite	<state> <error> <state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error></error></mode></error></mode></error></state></error></state></error></state></error></state>
Irigger C	State State State Mode (freerun) Mode Input	finite infinite USB	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <mode> <error> <input/> <error></error></error></mode></error></mode></error></mode></error></state></error></state></error></state>
Irigger C	State State State Mode (freerun) Mode Input Input	finite infinite USB External	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error></error></error></error></error></mode></error></mode></error></mode></error></state></error></state></error></state>
Irigger C	State State State Mode (freerun) Mode Input Input Input	finite infinite USB External Button	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
Irigger C	State State State Mode (freerun) Mode Input Input Input Signal-Rate	finite infinite USB External Button 1.0e-1 125e3	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <time> <error></error></time></error></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
Irigger C	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period	finite infinite USB External Button 1.0e-1 125e3 8e-6 10	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <timput> <error></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></timput></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <stime> <error> <size> <error></error></size></error></stime></error></time></error></time></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
Source-A	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered</size></time>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <imput> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <mode> <error></error></mode></error></mode></error></mode></error></mode></error></time></error></time></error></imput></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached</size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <erro< th=""></erro<></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE SINGleshot</size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <imput> <error> <time> <error> <mode> <err< th=""></err<></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></time></error></imput></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:FUNCtion:SHAPe RAMP</size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <stime> <error> <mode> <error> <mode> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <mode> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error></error></func></error></func></error></mode></error></mode></error></mode></error></mode></error></func></error></mode></error></mode></error></mode></error></mode></error></mode></error></stime></error></time></error></time></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary</size></time></freq>	<state> <error> <state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <mode> <error> <func> <error></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></func></error></func></error></mode></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:RAMP:RATIO <ratio></ratio></size></time></freq>	<state> <error> <state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <ratio> <error> <mode> <error> <ratio> <error> <func> <error> <func> <error> <func> <error> <func> <error> <ratio> <error> <ratio> <error> <ratio> <error> <ratio> <error></error></ratio></error></ratio></error></ratio></error></ratio></error></func></error></func></error></func></error></func></error></ratio></error></mode></error></ratio></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></time></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:RAMP:RATIO <ratio> SOURceA:ARBitrary:LOAD</ratio></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <imput> <error> <imput> <error> <imput> <error> <mode> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <func> <error> <func> <error> <func> <error> <count> <error> <ratio> <error> <ratio> <error> <count> <error> <count> <error> </error></count></error></count></error></ratio></error></ratio></error></count></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></mode></error></imput></error></imput></error></imput></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load Arb val	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:MODE SINGleshot SOURceA:FUNCtion:SHAPe RAMP SOURceA:RAMP:RATIO <ratio> SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""></idx,></ratio></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <erro< th=""></erro<></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load Arb val Amplitude	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 0.00020.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:MODE SINGleshot SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:AMPlitude <ampl></ampl></idx,></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <func> <error> <func> <error> <amode> <error> <func> <error> <func> <error> <func> <error> <amode> <error> <ratio> <error> <amode> <error> <ratio> <error> <amode> </amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></amode></error></amode></error></amode></error></amode></error></amode></error></amode></error></amode></error></ratio></error></amode></error></ratio></error></amode></error></func></error></func></error></func></error></amode></error></func></error></func></error></func></error></func></error></mode></error></mode></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Function Function Symmetry Arb load Arb val Amplitude Offset	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 0.00020.000 ±10.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIOd <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:MODE SINGleshot SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:AMPlitude <ampl> SOURceA:FUNCtion:OFFset <offs></offs></ampl></idx,></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <func> <error> <func> <error> <func> <error> <ratio> <error> <ratio> <error> <count> <error> <count> <error> <didx, val=""> <error> <ampl> <error> <offs> <error> <offs> <error></error></offs></error></offs></error></ampl></error></didx,></error></count></error></count></error></ratio></error></ratio></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load Arb val Amplitude Offset High	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 0.00020.000 ±10.000 ±10.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:RAMP:RATIO <ratio> SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:OFFset <offs> SOURceA:FUNCtion:HIgh <high></high></offs></idx,></ratio></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <func> <error> <mode> <error> <mode> <error> <func> <error> <mode> <error> <func> <error> <mode> <erro< th=""></erro<></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></mode></error></func></error></mode></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load Arb val Amplitude Offset High Low	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 0.00020.000 ±10.000 ±10.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:STATe RUN TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE TRIGgered SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:AMPlitude <ampl> SOURceA:FUNCtion:OFFset <offs> SOURceA:FUNCtion:HIgh <high> SOURceA:FUNCtion:LOw <low></low></high></offs></ampl></idx,></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <idx, val=""> <error> <idx, val=""> <error> <idx, val=""> <error> <input/> <error> <idx, val=""> <error> <ix, val=""> <error> <idx, val=""> <error> <ix, val=""> <error> <idx, val=""> <error> <idx, val=""> <error> <ix, val=""> <error> <ix, td="" val<=""></ix,></error></ix,></error></idx,></error></idx,></error></ix,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></ix,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></idx,></error></error></idx,></error></idx,></error></idx,></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load Arb val Amplitude Offset High Low Constant	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 0.00020.000 ±10.000 ±10.000 ±10.000 ±10.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE TRIGgered SOURceA:MODE SINGleshot SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:AMPlitude <ampl> SOURceA:FUNCtion:HIgh <high> SOURceA:FUNCtion:LOw <low> SOURceA:FUNCtion:LOw <low> SOURceA:VOLTage:LEVel <volts></volts></low></low></high></ampl></idx,></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <count> <error> <idx, val=""> <error> <idx, val=""> <error> <offs> <error> <omple> <error> <omple> <error> <error> <error> <error< th=""></error<></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></omple></error></omple></error></offs></error></idx,></error></idx,></error></count></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
Source-A	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Function Function Symmetry Arb load Arb val Amplitude Offset High Low Constant Timeout	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 ±10.000 ±10.000 ±10.000 ±10.000 11000ms	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:PERIod <time> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE DETached SOURceA:MODE SINGleshot SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:AMPlitude <ampl> SOURceA:FUNCtion:HIgh <high> SOURceA:FUNCtion:LOw <low> SOURceA:FUNCtion:LOw <low> SOURceA:PULSe:WIDth <time></time></low></low></high></ampl></idx,></size></time></time>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <idx, val=""> <error> <idx, val=""> <error> <idx, val=""> <error> <offs> <error> <low> <error> <input/> <error> <func> <error> <func> <error> <input/> <err< th=""></err<></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></func></error></func></error></error></low></error></offs></error></idx,></error></idx,></error></idx,></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>
	State State State Mode (freerun) Mode Input Input Input Signal-Rate Signal-Period Vector-Size Mode Mode Mode Function Function Symmetry Arb load Arb val Amplitude Offset High Low Constant	finite infinite USB External Button 1.0e-1 125e3 8e-6 10 1250000 triggered detached singleshot Ramp Arbitrary 0 100 - ±10.000 0.00020.000 ±10.000 ±10.000 ±10.000 ±10.000	TRIGgerC:STATe IDLE TRIGgerC:STATe ARM TRIGgerC:MODE FINite TRIGgerC:MODE INFinite TRIGgerC:MODE INFinite TRIGgerC:INput USB TRIGgerC:INput EXTernal TRIGgerC:INput BUTTon TRIGgerC:RATE <freq> TRIGgerC:PERIod <time> TRIGgerC:SIZE <size> SOURceA:MODE TRIGgered SOURceA:MODE TRIGgered SOURceA:MODE SINGleshot SOURceA:FUNCtion:SHAPe RAMP SOURceA:FUNCtion:SHAPe ARBitrary SOURceA:ARBitrary:LOAD SOURceA:ARBitrary:VALUe <idx, val=""> SOURceA:FUNCtion:AMPlitude <ampl> SOURceA:FUNCtion:HIgh <high> SOURceA:FUNCtion:LOw <low> SOURceA:FUNCtion:LOw <low> SOURceA:VOLTage:LEVel <volts></volts></low></low></high></ampl></idx,></size></time></freq>	<state> <error> <state> <error> <state> <error> <mode> <error> <mode> <error> <input/> <error> <time> <error> <time> <error> <mode> <error> <mode> <error> <mode> <error> <func> <error> <count> <error> <idx, val=""> <error> <idx, val=""> <error> <offs> <error> <low> <error> <low> <error> <low> <error> <ovolts> <error> <evolts> <error> <error< th=""></error<></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></error></evolts></error></ovolts></error></low></error></low></error></low></error></offs></error></idx,></error></idx,></error></count></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></func></error></mode></error></mode></error></mode></error></time></error></time></error></error></error></error></error></error></error></error></mode></error></mode></error></state></error></state></error></state>

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·	Mode	trig det single	SOURceB:MODE SINGleshot	<mode> <error></error></mode>
	Function	Ramp	SOURceB:FUNCtion:SHAPe RAMP	<func> <error></error></func>
	Function	Arbitrary	SOURceB:FUNCtion:SHAPe ARBitrary	<func> <error></error></func>
	Symmetry	0 100	SOURceB:RAMP:RATIO <ratio></ratio>	<ratio> <error></error></ratio>
	Arb load	-	SOURceB:ARBitrary:LOAD	<count> <error></error></count>
	Arb val	±10.000	SOURceB:ARBitrary:VALUe <idx, val=""></idx,>	<idx, val=""> <error></error></idx,>
	Amplitude	0.00020.000	SOURceB:FUNCtion:AMPlitude <ampl></ampl>	<ampl> <error></error></ampl>
	Offset	±10.000	SOURceB:FUNCtion:OFFset <offs> <offs> <er< td=""></er<></offs></offs>	
	High	±10.000	SOURceB:FUNCtion:Hlgh <high></high>	<high> <error></error></high>
	Low	±10.000	SOURceB:FUNCtion:LOw <low></low>	<low> <error></error></low>
	Constant	±10.000	SOURceB:VOLTage:LEVel <volts></volts>	<volts> <error></error></volts>
	Timeout	11000ms	SOURceB:PULSe:WIDth <time></time>	<time> <error></error></time>
Relays	Galvo	close open read	ROUTe: <close open state?> GAL</close open state?>	<state> <error></error></state>
	SLD	close open read	ROUTe: <close open state?> SLD</close open state?>	<state> <error></error></state>
	AIM	close open read	ROUTe: <close open state?> AIM</close open state?>	<state> <error></error></state>
	CAM	close open read	ROUTe: <close open state?> CAM</close open state?>	<state> <error></error></state>
I2C	mode	OFF	I2C::MODE OFF	<mode> <error></error></mode>
	mode	USB	I2C::MODE USB	<mode> <error></error></mode>
	mode	slave-action	I2C::MODE SLAVeaction	<mode> <error></error></mode>
	write	0 255	I2C::WRITe <val></val>	<val> <error></error></val>
	read	0 255	I2C::READ	<val> <error></error></val>
UART	mode	OFF	UART:MODE OFF	<mode> <error></error></mode>
	mode	USB	UART:MODE USB	<mode> <error></error></mode>
	mode	slave-IRQ	UART:MODE SLAVeaction	<mode> <error></error></mode>
	write	0 255	UART:WRITe <val></val>	<val> <error></error></val>
	read	0 255	UART:READ	<val> <error></error></val>
DIO	mode	OFF	DIGIO:MODE OFF	<val> <error></error></val>
	mode	input	DIGIO:MODE IN	<val> <error></error></val>
	mode	output	DIGIO:MODE OUT	<val> <error></error></val>
	write	0 65535	DIGIO:WRIte <val></val>	<val> <error></error></val>
	read	0 65535	DIGIO:READ	<val> <error></error></val>
AnalogIN	mode	OFF	ANAlog0 1 2 3:MODE OFF	<val> <error></error></val>
	mode	USB	ANAlog0 1 2 3:MODE USB	<val> <error></error></val>
	mode	triggered	ANAlog0 1 2 3:MODE TRIGA	<val> <error></error></val>
	mode	triggered	ANAlog0 1 2 3:MODE TRIGB	<val> <error></error></val>
	mode	triggered	ANAlog0 1 2 3:MODE TRIGC	<val> <error></error></val>
	read	0 4095	ANAlog0 1 2 3:READ	<val> <error></error></val>
System	CRCmode	OFF	SYStem:CRC16 OFF	<state> <error></error></state>
	CRCmode	on	SYStem:CRC16 ON	<state> <error></error></state>
	ShutDown	-	SYStem:POWerdown	POWD <error></error>
	ListSCPI	-	SYStem:LISt	t> <error></error>
	RESEt	-	SYStem:RESEt	RESE <error></error>
	RESTart	-	SYStem:RESTart	REST <error></error>
	Verbosity	OFF	SYStem:VERBose OFF	<mode> <error></error></mode>
	Verbosity	on	SYStem:VERBose ON	<mode> <error></error></mode>
	Watchdog	OFF	SYStem:WATchdog OFF	<mode> <error></error></mode>
		011	_	·
	Watchdog Time	on 11000ms	SYStem:WATchdog ON SYStem:WATchdog <time></time>	<mode> <error> <time> <error></error></time></error></mode>

Tabelle 1: OCTane USB-Protocol, commands

Sub-sys	Parameter	possible messages	occurence	
Trigger A B C	State	TrigX idling armed running	sent on every state change	
Trigger A B C	Input	-200	error, if button in use	П
Trigger A B C	Signal-Rate	-200	error, if out-of-range	
Trigger A B C	Signal-Period	-200	error, if out-of-range	
Trigger A B C	Vector-Size	-200	error, if out-of-range	



Source A B	Arb load	-200	error, if not in Arb-mode	
Source A B	Arb val	VectorX complete	if sufficient amount of values was sent	
Source A B	Arb val	-200	error, if out-of-range	
Source A B	Arb val	-200	error, if exeeds vector-size	
Source A B	Symmetry	-200	error, if out-of-range	
Source A B	Amplitude	-200	error, if out-of-range	
Source A B	Offset	-200	error, if out-of-range	
Source A B	High	-200	error, if out-of-range	
Source A B	Low	-200	error, if out-of-range	
Source A B	Constant	-200	error, if out-of-range	
Source A B	Timeout	-200	error, if out-of-range	
AIN	input value	AINx: <value></value>	sent on every corresp. Trigger	
DIN	input value	DIN: <value></value>	sent on every DIO:READ-Command	
UART	input value	UART: <value></value>	sent on every corresp. Trigger	
I2C	input value	I2C: <value></value>	sent on every corresp. Trigger	

Tabelle 2: OCTane USB-Protocol, responses

Command	Description	Action	Return
*CLS	Clear Status Command		
*ESE	Standard Event Status Enable Command		
*ESE?	Standard Event Status Enable Query	-	
*ESR?	Standard Event Status Register Query	-	
*IDN?	Identification Query	-	ID-String
*OPC	Operation Complete Command		
*OPC?	Operation Complete Query	-	
*RST	Reset Command		
*SRE	Service Request Enable Command		
*SRE?	Service Request Enable Query	-	
*STB?	Read Status Byte Query	-	Status Byte
*TST?	Self-Test Query	-	
*WAI	Wait-to-Continue Command		

Tabelle 3: IEEE 488.2 mandatory commands

Command	Description	Action	Return
*AAD	Accept Address Command		
*CAL?	Calibration Query		
*DDT	Define Device Trigger Command		
*DDT?	Define Device Trigger Query		
*DLF	Disable Listener Function Command		
*DMC	Define Macro Command	not imp'd	
*EMC	Enable Macro Command	not imp'd	
*EMC?	Enable Macro Query	not imp'd	
*GMC?	Get Macro Contents Query		
*IST?	Individual Status Query		
*LMC?	Learn Macro Query	not imp'd	
*LRN?	Learn Device Setup Query		
*OPT?	Option Identification Query		
*PCB	Pass Control Back		
*PMC	Purge Macros Command	not imp'd	
*PRE	Parallel Poll Enable Register Command		
*PRE?	Parallel Poll Enable Register Query		
*PSC	Power-On Status Clear Command		
*PSC?	Power-On Status Clear Query		
*PUD	Protected User Data Command		
*PUD?	Protected User Data Query		



*RCL	Recall Command		
*RDT	Resource Description Transfer Command		
*RDT?	Resource Description Transfer Query		
*SAV	Save Command		
*TRG	Trigger Command		
*RMC	Remove Individual Macro Command	not imp'd	
*SDS	Save Default Device Settings Command		

Tabelle 4: IEEE 488.2 optional commands