

## Agilent InfiniiVision Series Oscilloscope Command Summary

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**Table 1. Common (\*) Commands Summary**

Command	Query	Options and Query Returns	Dependencies																																
*CLS	n/a	n/a																																	
*ESE <mask>	*ESE?	<p>&lt;mask&gt; ::= 0 to 255; an integer in NR1 format:</p> <p>Bit Weight Name Enables</p> <p>-----</p> <table> <tr> <td>7</td><td>128</td><td>PON</td><td>Power On</td></tr> <tr> <td>6</td><td>64</td><td>URQ</td><td>User Request</td></tr> <tr> <td>5</td><td>32</td><td>CME</td><td>Command Error</td></tr> <tr> <td>4</td><td>16</td><td>EXE</td><td>Execution Error</td></tr> <tr> <td>3</td><td>8</td><td>DDE</td><td>Dev. Dependent Error</td></tr> <tr> <td>2</td><td>4</td><td>QYE</td><td>Query Error</td></tr> <tr> <td>1</td><td>2</td><td>RQL</td><td>Request Control</td></tr> <tr> <td>0</td><td>1</td><td>OPC</td><td>Operation Complete</td></tr> </table>	7	128	PON	Power On	6	64	URQ	User Request	5	32	CME	Command Error	4	16	EXE	Execution Error	3	8	DDE	Dev. Dependent Error	2	4	QYE	Query Error	1	2	RQL	Request Control	0	1	OPC	Operation Complete	
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Command	Query	Options and Query Returns	Dependencies
n/a	*ESR?	<status> ::= 0 to 255; an integer in NR1 format	
n/a	*IDN?	AGILENT TECHNOLOGIES,<model>,<serial number>, X.XX.XX  <model> ::= the model number of the instrument  <serial number> ::= the serial number of the instrument  <X.XX.XX> ::= the software revision of the instrument	
n/a	*LRN?	<learn_string> ::= current instrument setup as a block of data in IEEE 488.2 # format	
*OPC	*OPC?	ASCII "1" is placed in the output queue when all pending device operations have completed.	
n/a	*OPT?	<return_value> ::= 0,0,<license info>  <license info> ::= <All field>, <reserved>, <Factory MS0>, <Upgraded MS0>, <Xilinx FPGA Probe>, <Memory>, <Low Speed Serial>, <Automotive Serial>, <reserved>, <Secure>, <Battery>, <Altera FPGA Probe>, <FlexRay Serial>, <Power Measurements>, <RS-232/UART Serial>, <reserved>, <Segmented Memory>, <Mask Test>, <reserved>  <All field> ::= {0   All}  <reserved> ::= 0  <Factory MS0> ::= {0   MS0}  <Upgraded MS0> ::= {0   MS0}  <Xilinx FPGA Probe> ::= {0   FPG}  <Memory> ::= {0   mem2M   mem8M}  <Low Speed Serial> ::= {0   LSS}  <Automotive Serial> ::= {0   AMS}  <Secure> ::= {0   SEC}  <Battery> ::= {0   BAT} (6000 Series only)  <Altera FPGA Probe> ::= {0   ALT}  <FlexRay Serial> ::= {0   FRS}  <Power Measurements> ::= {0   PWR}  <RS-232/UART Serial> ::= {0   232}  <Segmented Memory> ::= {0   SGM}  <Mask Test> ::= {0   LMT}	6000/7000 Series <sup>1</sup> MSO <sup>3</sup> LSS <sup>4</sup> AMS <sup>5</sup> FRS <sup>6</sup> 232 <sup>7</sup> SGM <sup>8</sup> LMT <sup>9</sup>
*RCL <value>	n/a	<value> ::= {0   1   2   3   4   5   6   7   8   9}	
*RST	n/a	See *RST (Reset)	
*SAV <value>	n/a	<value> ::= {0   1   2   3   4   5   6   7   8   9}	
*SRE <mask>	*SRE?	<mask> ::= sum of all bits that are set, 0 to 255; an integer in NR1 format. <mask> ::= following values:  Bit Weight Name Enables ----- 7      128  OPER Operation Status Reg 6      64   ---- (Not used.)	

Command	Query	Options and Query Returns	Dependencies
		5     32   ESB   Event Status Bit 4     16   MAV   Message Available 3     8     ---- (Not used.) 2     4     MSG   Message 1     2     USR   User 0     1     TRG   Trigger	
n/a	*STB?	<value> ::= 0 to 255; an integer in NR1 format, as shown in the following:  Bit Weight Name "1" Indicates ---- 7     128   OPER   Operation status condition occurred. 6     64   RQS/   Instrument is MSS   requesting service. 5     32   ESB   Enabled event status condition occurred. 4     16   MAV   Message available. 3     8     ---- (Not used.) 2     4     MSG   Message displayed. 1     2     USR   User event condition occurred. 0     1     TRG   A trigger occurred.	
*TRG	n/a	n/a	
n/a	*TST?	<result> ::= 0 or non-zero value; an integer in NR1 format	
*WAI	n/a	n/a	

Table 2. Root (: ) Commands Summary

Command	Query	Options and Query Returns	Dependencies
:ACTivity	:ACTivity?	<return value> ::= <edges>,<levels>  <edges> ::= presence of edges (32-bit integer in NR1 format)  <levels> ::= logical highs or lows (32-bit integer in NR1 format)	
n/a	:AER?	{0   1}; an integer in NR1 format	
:AUToscale [<source>[...,<source>]]	n/a	<source> ::= {CHANnel<n>   DIGital0,...,DIGital15   POD{1   2}}  <source> can be repeated up to 5 times  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:AUToscale:AMODE <value>	:AUToscale:AMODE?	<value> ::= {NORMal   CURRent}	
:AUToscale:CHANnels <value>	:AUToscale:CHANnels?	<value> ::= {ALL   DISPlayed}	
:BLANK [<source>]	n/a	<source> ::= {CHANnel<n>}   FUNCTION   MATH   SBUS   DIGital0,...,DIGital15   POD{1   2}   BUS{1   2}  <n> ::= 1-2 or 1-4 in NR1 format	4-Channel <sup>2</sup> MSO <sup>3</sup>
:CDISplay	n/a	n/a	
:DIGitize [<source>[...,<source>]]	n/a	<source> ::= {CHANnel<n>}   FUNCTION   MATH   SBUS   DIGital0,...,DIGital15   POD{1   2}   BUS{1   2}  <source> can be repeated up to 5 times	4-Channel <sup>2</sup> MSO <sup>3</sup>

Command	Query	Options and Query Returns	Dependencies
		<n> ::= 1-2 or 1-4 in NR1 format	
:HWEenable <n>	:HWEenable?	<n> ::= 16-bit integer in NR1 format	
n/a	:HWERegister:CONDition?	<n> ::= 16-bit integer in NR1 format	
n/a	:HWERegister[:EVENT]?	<n> ::= 16-bit integer in NR1 format	
:MERGE <pixel memory>	n/a	<pixel memory> ::= {PMEMory{0   1   2   3   4   5   6   7   8   9}}	
:MTEenable <n>	:MTEenable?	<n> ::= 16-bit integer in NR1 format	LMT <sup>9</sup>
n/a	:MTERegister[:EVENT]?	<n> ::= 16-bit integer in NR1 format	LMT <sup>9</sup>
:OPEE <n>	:OPEE?	<n> ::= 16-bit integer in NR1 format	
n/a	:OPERRegister:CONDition?	<n> ::= 16-bit integer in NR1 format	
n/a	:OPERRegister[:EVENT]?	<n> ::= 16-bit integer in NR1 format	
:OVLenable <mask>	:OVLenable?	<mask> ::= 16-bit integer in NR1 format as shown: Bit Weight Input ---- 10 1024 Ext Trigger Fault 9 512 Channel 4 Fault 8 256 Channel 3 Fault 7 128 Channel 2 Fault 6 64 Channel 1 Fault 4 16 Ext Trigger OVL 3 8 Channel 4 OVL 2 4 Channel 3 OVL 1 2 Channel 2 OVL 0 1 Channel 1 OVL	
n/a	:OVLRegister?	<value> ::= integer in NR1 format. See OVLenable for <value>	
:PRINT [<options>]	n/a	<options> ::= [<print option>][,...,<print option>] <print option> ::= {COLor   GRAYscale   PRINter0   BMP8bit   BMP   PNG   NOFactors   FACTors} <print option> can be repeated up to 5 times.	
:RUN	n/a	n/a	
n/a	:SERial	<return value> ::= unquoted string containing serial number	
:SINGle	n/a	n/a	
n/a	:STATus? <display>	{0   1} <display> ::= {CHANnel<n>   FUNCTION   MATH   SBUS   DIGital0,...,DIGital15   POD{1   2}   BUS{1   2}} <n> ::= 1-2 or 1-4 in NR1 format	4-Channel <sup>2</sup> MSO <sup>3</sup>
:STOP	n/a	n/a	
n/a	:TER?	{0   1}	
:VIEW <source>	n/a	<source> ::= {CHANnel<n>   PMEMory{0   1   2   3   4   5   6   7   8   9}   FUNCTION   MATH   SBUS   DIGital0,...,DIGital15   POD{1   2}   BUS{1   2}}	4-Channel <sup>2</sup>

Command	Query	Options and Query Returns	Dependencies
		<n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>

**Table 3. :ACQUIRE Commands Summary**

Command	Query	Options and Query Returns	Dependencies
n/a	:ACQUIRE:AALias?	{1   0}	
:ACQUIRE:COMPLETE <complete>	:ACQUIRE:COMPLETE?	<complete> ::= 100; an integer in NR1 format	
:ACQUIRE:COUNt <count>	:ACQUIRE:COUNt?	<count> ::= an integer from 2 to 65536 in NR1 format	
:ACQUIRE:DAALias <mode>	:ACQUIRE:DAALias?	<mode> ::= {DISable   AUTO}	
:ACQUIRE:MODE <mode>	:ACQUIRE:MODE?	<mode> ::= {RTIME   ETIME   SEGmented}	SGM <sup>8</sup>
n/a	:ACQUIRE:POINts?	<# points> ::= an integer in NR1 format	
:ACQUIRE:RSIGNAL <ref_signal_mode>	:ACQUIRE:RSIGNAL?	<ref_signal_mode> ::= {OFF   OUT   IN}	
:ACQUIRE:SEGmented:ANALyze	n/a	n/a	SGM <sup>8</sup>
:ACQUIRE:SEGmented:COUNt <count>	:ACQUIRE:SEGmented:COUNt?	<count> ::= an integer from 2 to 250 (5000 Series) or 2 to 2000 (6000/7000 Series) in NR1 format	SGM <sup>8</sup>
:ACQUIRE:SEGmented:INDEX <index>	:ACQUIRE:SEGmented:INDEX?	<index> ::= an integer from 2 to 250 (5000 Series) or 2 to 2000 (6000/7000 Series) in NR1 format	SGM <sup>8</sup>
n/a	:ACQUIRE:SRATE?	<sample_rate> ::= sample rate (samples/s) in NR3 format	
:ACQUIRE:TYPE <type>	:ACQUIRE:TYPE?	<type> ::= {NORMal   AVERage   HRESolution   PEAK}	

**Table 4. :BUS<n> Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:BUS<n>:BIT<m> {{0   OFF}   {1   ON}}	:BUS<n>:BIT<m>?	{0   1}  <n> ::= 1 or 2; an integer in NR1 format  <m> ::= 0-15; an integer in NR1 format	MSO <sup>3</sup>
:BUS<n>:BITS <channel_list>, {{0   OFF}   {1   ON}}	:BUS<n>:BITS?	<channel_list>, {0   1}  <channel_list> ::= (@<m>,<m>:<m> ...) where "," is separator and ":" is range  <n> ::= 1 or 2; an integer in NR1 format  <m> ::= 0-15; an integer in NR1 format	MSO <sup>3</sup>
:BUS<n>:CLEar	n/a	<n> ::= 1 or 2; an integer in NR1 format	MSO <sup>3</sup>
:BUS<n>:DISPlay {{0   OFF}   {1   ON}}	:BUS<n>:DISPlay?	{0   1}  <n> ::= 1 or 2; an integer in NR1 format	MSO <sup>3</sup>

**Table 5. :CALibrate Commands Summary**

Command	Query	Options and Query Returns	Dependencies
n/a	:CALibrate:DATE?	<return value> ::= <day>,<month>,<year>; all in NR1 format	
:CALibrate:LABel <string>	:CALibrate:LABel?	<string> ::= quoted ASCII string up to 32 characters	
:CALibrate:OUTPut <signal>	:CALibrate:OUTPut?	<signal> ::= {TRIGgers   SOURce   DSource   MASK}	
:CALibrate:START	n/a	n/a	
n/a	:CALibrate:STATus?	<return value> ::= ALL,<status_code>,<status_string>  <status_code> ::= an integer status code <status_string> ::= an ASCII status string	
n/a	:CALibrate:SWITCh?	{PROTected   UNPRotected}	
n/a	:CALibrate:TEMPerature?	<return value> ::= degrees C delta since last cal in NR3 format	
n/a	:CALibrate:TIME?	<return value> ::= <hours>,<minutes>,<seconds> all in NR1 format	

**Table 6. :CHANnel<n> Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:CHANnel<n>:BWLimit {{0   OFF}   {1   ON}}	:CHANnel<n>:BWLimit?	{0   1}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:COUpling <coupling>	:CHANnel<n>:COUpling?	<coupling> ::= {AC   DC}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:DISPlay {{0   OFF}   {1   ON}}	:CHANnel<n>:DISPlay?	{0   1}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:IMPedance <impedance>	:CHANnel<n>:IMPedance?	<impedance> ::= {ONEMeg   FIFTy}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:INVert {{0   OFF}   {1   ON}}	:CHANnel<n>:INVert?	{0   1}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:LABel <string>	:CHANnel<n>:LABel?	<string> ::= any series of 10 or less ASCII characters enclosed in quotation marks  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:OFFSet <offset>[suffix]	:CHANnel<n>:OFFSet?	<offset> ::= Vertical offset value in NR3 format [suffix] ::= {V   mV}  <n> ::= 1-2 or 1-4; in NR1 format	
:CHANnel<n>:PROBe <attenuation>	:CHANnel<n>:PROBe?	<attenuation> ::= Probe attenuation ratio in NR3 format  <n> ::= 1-2 or 1-4 in NR1 format	

Command	Query	Options and Query Returns	Dependencies
n/a	:CHANnel<n>:PROBe:ID?	<probe id> ::= unquoted ASCII string up to 11 characters  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:PROBe:SKEW <skew_value>	:CHANnel<n>:PROBe:SKEW?	<skew_value> ::= -100 ns to +100 ns in NR3 format  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:PROBe:SType <signal type>	:CHANnel<n>:PROBe:SType?	<signal type> ::= {DIFFerential   SINGLE}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:PROTection	:CHANnel<n>:PROTection?	{NORM   TRIP}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:RANGE <range>[suffix]	:CHANnel<n>:RANGE?	<range> ::= Vertical full-scale range value in NR3 format  [suffix] ::= {V   mV}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:SCALE <scale>[suffix]	:CHANnel<n>:SCALE?	<scale> ::= Vertical units per division value in NR3 format  [suffix] ::= {V   mV}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:UNITs <units>	:CHANnel<n>:UNITs?	<units> ::= {VOLT   AMPere}  <n> ::= 1-2 or 1-4 in NR1 format	
:CHANnel<n>:VERNier {{0   OFF}   {1   ON}}	:CHANnel<n>:VERNier?	{0   1}  <n> ::= 1-2 or 1-4 in NR1 format	

Table 7. :DIGital&lt;n&gt; Commands Summary

Command	Query	Options and Query Returns	Dependencies
:DIGital<n>:DISPlay {{0   OFF}   {1   ON}}	:DIGital<n>:DISPlay?	{0   1}  <n> ::= 0-15; an integer in NR1 format	MSO <sup>3</sup>
:DIGital<n>:LABel <string>	:DIGital<n>:LABel?	<string> ::= any series of 10 or less ASCII characters enclosed in quotation marks  <n> ::= 0-15; an integer in NR1 format	MSO <sup>3</sup>
:DIGital<n>:POSition <position>	:DIGital<n>:POSition?	<n> ::= 0-15; an integer in NR1 format  <position> ::= 0-7 if display size = large, 0-15 if size = medium, 0-31 if size = small	MSO <sup>3</sup>
:DIGital<n>:SIZE <value>	:DIGital<n>:SIZE?	<value> ::= {SMALL   MEDium   LARGE}	MSO <sup>3</sup>
:DIGital<n>:THReshold <value>[suffix]	:DIGital<n>:THReshold?	<n> ::= 0-15; an integer in NR1 format  <value> ::= {CMOS   ECL   TTL   <user defined value>}  <user defined value> ::= value in NR3 format from -8.00 to +8.00  [suffix] ::= {V   mV   uV}	MSO <sup>3</sup>

**Table 8. :DISPlay Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:DISPlay:CLEAr	n/a	n/a	
:DISPlay:DATA [<format>][,][<area>][,] [<palette>]<display data>	:DISPlay:DATA? [<format>][,][<area>][,] [<palette>]	<format> ::= {TIFF} (command) <area> ::= {GRATicule} (command) <palette> ::= {MONochrome} (command) <format> ::= {TIFF   BMP   BMP8bit   PNG} (query) <area> ::= {GRATicule   SCReen} (query) <palette> ::= {MONochrome   GRAYscale   COLor} (query) <display data> ::= data in IEEE 488.2 # format	
:DISPlay:LABel {{0   OFF}   {1   ON}}	:DISPlay:LABel?	{0   1}	
:DISPlay:LABList <binary block>	:DISPlay:LABList?	<binary block> ::= an ordered list of up to 75 labels, each 10 characters maximum, separated by newline characters	
:DISPlay:PERsistence <value>	:DISPlay:PERsistence?	<value> ::= {MINimum   INFinite}}	
:DISPlay:SOURce <value>	:DISPlay:SOURce?	<value> ::= {PMEMory{0   1   2   3   4   5   6   7   8   9}}	
:DISPlay:VECTors {{1   ON}   {0   OFF}}	:DISPlay:VECTors?	{1   0}	

**Table 9. :EXTErnal Trigger Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:EXTErnal:BWLimit <bwlimit>	:EXTErnal:BWLimit?	<bwlimit> ::= {0   OFF}	
:EXTErnal:IMPedance <value>	:EXTErnal:IMPedance?	<impedance> ::= {ONEMeg   FIFTy}	
:EXTErnal:PROBe <attenuation>	:EXTErnal:PROBe?	<attenuation> ::= probe attenuation ratio in NR3 format	
n/a	:EXTErnal:PROBe:ID?	<probe id> ::= unquoted ASCII string up to 11 characters	
:EXTErnal:PROBe:STYPe <signal type>	:EXTErnal:PROBe:STYPe?	<signal type> ::= {DIFFerential   SINGLE}	
:EXTErnal:PROTection[:CLEAr]	:EXTErnal:PROTection?	{NORM   TRIP}	
:EXTErnal:RANGe <range>[<suffix>]	:EXTErnal:RANGe?	<range> ::= vertical full-scale range value in NR3 format <suffix> ::= {V   mV}	
:EXTErnal:UNITs <units>	:EXTErnal:UNITs?	<units> ::= {VOLT   AMPere}	

**Table 10. :FUNCTion Commands Summary**



Command	Query	Options and Query Returns	Dependencies
:FUNCTION:CENTer <frequency>	:FUNCTION:CENTer?	<frequency> ::= the current center frequency in NR3 format. The range of legal values is from 0 Hz to 25 GHz.	
:FUNCTION:DISPlay {{0   OFF}   {1   ON}}	:FUNCTION:DISPlay?	{0   1}	
:FUNCTION:GOFT:OPERation <operation>	:FUNCTION:GOFT:OPERation?	<operation> ::= {ADD   SUBTract   MULTiply}	
:FUNCTION:GOFT:SOURce1 <source>	:FUNCTION:GOFT:SOURce1?	<source> ::= CHANnel<n>  <n> ::= {1   2   3   4} for 4ch models  <n> ::= {1   2} for 2ch models	
:FUNCTION:GOFT:SOURce2 <source>	:FUNCTION:GOFT:SOURce2?	<source> ::= CHANnel<n>  <n> ::= {{1   2}   {3   4}} for 4ch models, depending on SOURce1 selection  <n> ::= {1   2} for 2ch models	
:FUNCTION:OFFSet <offset>	:FUNCTION:OFFSet?	<offset> ::= the value at center screen in NR3 format.  The range of legal values is +/-10 times the current sensitivity of the selected function.	
:FUNCTION:OPERation <operation>	:FUNCTION:OPERation?	<operation> ::= {ADD   SUBTract   MULTiply   INTEgrate   DIFFerentiate   FFT   SQRT}	
:FUNCTION:RANGe <range>	:FUNCTION:RANGe?	<range> ::= the full-scale vertical axis value in NR3 format.  The range for ADD, SUBT, MULT is 8E-6 to 800E+3. The range for the INTEgrate function is 8E-9 to 400E+3.  The range for the DIFFerentiate function is 80E-3 to 8.0E12 (depends on current sweep speed).  The range for the FFT function is 8 to 800 dBV.	
:FUNCTION:REFerence <level>	:FUNCTION:REFerence?	<level> ::= the value at center screen in NR3 format.  The range of legal values is +/-10 times the current sensitivity of the selected function.	
:FUNCTION:SCALE <scale value>[<suffix>]	:FUNCTION:SCALE?	<scale value> ::= integer in NR1 format  <suffix> ::= {V   dB}	
:FUNCTION:SOURce1 <source>	:FUNCTION:SOURce1?	<source> ::= {CHANnel<n>   GOFT}  <n> ::= {1   2   3   4} for 4ch models  <n> ::= {1   2} for 2ch models  GOFT is only for FFT, INTEgrate, DIFFerentiate, and SQRT operations.	
:FUNCTION:SOURce2 <source>	:FUNCTION:SOURce2?	<source> ::= {CHANnel<n>   NONE}  <n> ::= {{1   2}   {3   4}} for 4ch models, depending on SOURce1 selection  <n> ::= {1   2} for 2ch models	
:FUNCTION:SPAN <span>	:FUNCTION:SPAN?	<span> ::= the current frequency span in NR3 format.  Legal values are 1 Hz to 100 GHz.	

**Table 11. :HARDcopy Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:HARDcopy:AREA <area>	:HARDcopy:AREA?	<area> ::= SCReen	
:HARDcopy:APRinter <active_printer>	:HARDcopy:APRinter?	<active_printer> ::= {<index>   <name>} <index> ::= integer index of printer in list <name> ::= name of printer in list	
:HARDcopy:FACTors {{0   OFF}   {1   ON}}	:HARDcopy:FACTors?	{0   1}	
:HARDcopy:FFEed {{0   OFF}   {1   ON}}	:HARDcopy:FFEed?	{0   1}	
:HARDcopy:INKSaver {{0   OFF}   {1   ON}}	:HARDcopy:INKSaver?	{0   1}	
:HARDcopy:LAYout <layout>	:HARDcopy:LAYout?	<layout> ::= {LANDscape   PORTRait}	
:HARDcopy:PALette <palette>	:HARDcopy:PALette?	<palette> ::= {COLor   GRAYscale   NONE}	
n/a	:HARDcopy:PRINter:LIST?	<list> ::= [<printer_spec>] ... [<printer_spec>] <printer_spec> ::= "<index>,<active>,<name>;" <index> ::= integer index of printer <active> ::= {Y   N} <name> ::= name of printer	
:HARDcopy:STARt	n/a	n/a	

**Table 12. :MARKer Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:MARKer:MODE <mode>	:MARKer:MODE?	<mode> ::= {OFF   MEASurement   MANual   WAVEform}	
:MARKer:X1Position <position>[suffix]	:MARKer:X1Position?	<position> ::= X1 cursor position value in NR3 format  [suffix] ::= {s   ms   us   ns   ps   Hz   kHz   MHz}  <return_value> ::= X1 cursor position value in NR3 format	
:MARKer:X1Y1source <source>	:MARKer:X1Y1source?	<source> ::= {CHANnel<n>   FUNCTion   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= <source>	
:MARKer:X2Position <position>[suffix]	:MARKer:X2Position?	<position> ::= X2 cursor position value in NR3 format  [suffix] ::= {s   ms   us   ns   ps   Hz   kHz   MHz}  <return_value> ::= X2 cursor position value in NR3 format	
:MARKer:X2Y2source <source>	:MARKer:X2Y2source?	<source> ::= {CHANnel<n>   FUNCTion   MATH}  <n> ::= 1-2 or 1-4 in NR1 format	

Command	Query	Options and Query Returns	Dependencies
		<return_value> ::= <source>	
n/a	:MARKer:XDELta?	<return_value> ::= X cursors delta value in NR3 format	
:MARKer:Y1Position <position>[suffix]	:MARKer:Y1Position?	<position> ::= Y1 cursor position value in NR3 format  [suffix] ::= {V   mV   dB}  <return_value> ::= Y1 cursor position value in NR3 format	
:MARKer:Y2Position <position>[suffix]	:MARKer:Y2Position?	<position> ::= Y2 cursor position value in NR3 format  [suffix] ::= {V   mV   dB}  <return_value> ::= Y2 cursor position value in NR3 format	
n/a	:MARKer:YDELta?	<return_value> ::= Y cursors delta value in NR3 format	

**Table 13. :MEASure Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:MEASure:CLEar	n/a	n/a	
:MEASure:COUNter [<source>]	:MEASure:COUNter? [<source>]	<source> ::= {CHANnel<n>   DIGital0,...,DIGital15   EXternal}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= counter frequency in Hertz in NR3 format	MSO <sup>3</sup>
:MEASure:DEFine DELay, <delay spec>	:MEASure:DEFine? DELay	<delay spec> ::= <edge_spec1>,<edge_spec2>  edge_spec1 ::= [<slope>]<occurrence>  edge_spec2 ::= [<slope>]<occurrence>  <slope> ::= {+   -}  <occurrence> ::= integer	
:MEASure:DEFine THResholds, <threshold spec>	:MEASure:DEFine? THResholds	<threshold spec> ::= {STANDARD}   {<threshold mode>,<upper>, <middle>,<lower>}  <threshold mode> ::= {PERcent   ABSolute}	
:MEASure:DELay [<source1>] [,<source2>]	:MEASure:DELay? [<source1>] [,<source2>]	<source1,2> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= floating-point number delay time in seconds in NR3 format	
:MEASure:DUTYcycle [<source>]	:MEASure:DUTYcycle? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= ratio of positive pulse width to period in NR3 format	MSO <sup>3</sup>

Command	Query	Options and Query Returns	Dependenci
:MEASure:FALLtime [<source>]	:MEASure:FALLtime? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= time in seconds between the lower and upper thresholds in NR3 format	MSO <sup>3</sup>
:MEASure:FREQuency [<source>]	:MEASure:FREQuency? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= frequency in Hertz in NR3 format	MSO <sup>3</sup>
:MEASure:NWIDth [<source>]	:MEASure:NWIDth? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= negative pulse width in seconds in NR3 format	MSO <sup>3</sup>
:MEASure:OVERshoot [<source>]	:MEASure:OVERshoot? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= the percent of the overshoot of the selected waveform in NR3 format	
:MEASure:PERiod [<source>]	:MEASure:PERiod? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= waveform period in seconds in NR3 format	MSO <sup>3</sup>
:MEASure:PHASe [<source1> [,<source2>]	:MEASure:PHASe? [<source1> [,<source2>]	<source1,2> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= the phase angle value in degrees in NR3 format	
:MEASure:PREShoot [<source>]	:MEASure:PREShoot? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= the percent of preshoot of the selected waveform in NR3 format	
:MEASure:PWIDth [<source>]	:MEASure:PWIDth? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= width of positive pulse in seconds in NR3 format	MSO <sup>3</sup>
n/a	:MEASure:RESults? <results_list>	<results_list> ::= comma-separated list of measurement results	
:MEASure:RISEtime [<source>]	:MEASure:RISEtime? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= rise time in seconds in NR3 format	
:MEASure:SDEViation [<source>]	:MEASure:SDEViation? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format	

Command	Query	Options and Query Returns	Dependenci
		<return_value> ::= calculated std deviation in NR3 format	
:MEASure:SHOW {1   ON}	:MEASure:SHOW?	{1}	
:MEASure:SOURce <source1> [, <source2>]	:MEASure:SOURce?	<source1,2> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15   EXTERNAL}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= {<source>   EXT   NONE}  EXTERNAL is only a valid source for the counter measurement (and <source1>).	MSO <sup>3</sup>
:MEASure:STATistics <type>	:MEASure:STATistics?	<type> ::= {{ON   1}   CURRENT   MEAN   MINimum   MAXimum   STDDev   COUNT}  ON ::= all statistics returned	
:MEASure:STATistics:INCRement	n/a	n/a	
:MEASure:STATistics:RESet	n/a	n/a	
n/a	:MEASure:TEDGE? <slope><occurrence>[, <source>]	<slope> ::= direction of the waveform <occurrence> ::= the transition to be reported  <source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= time in seconds of the specified transition	MSO <sup>3</sup>
n/a	:MEASure:TVALue? <value>, [<slope>]<occurrence> [, <source>]	<value> ::= voltage level that the waveform must cross.  <slope> ::= direction of the waveform when <value> is crossed.  <occurrence> ::= transitions reported.  <return_value> ::= time in seconds of specified voltage crossing in NR3 format  <source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,...,DIGital15}  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:MEASure:VAMPLitude [<source>]	:MEASure:VAMPLitude? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= the amplitude of the selected waveform in volts in NR3 format	
:MEASure:VAVerage [<source>]	:MEASure:VAVerage? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <return_value> ::= calculated average voltage in NR3 format	
:MEASure:VBASe [<source>]	:MEASure:VBASe? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH}  <n> ::= 1-2 or 1-4 in NR1 format  <base_voltage> ::= voltage at the base of the selected waveform in NR3 format	

Command	Query	Options and Query Returns	Dependencies
:MEASure:VMAX [<source>]	:MEASure:VMAX? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= maximum voltage of the selected waveform in NR3 format	
:MEASure:VMIN [<source>]	:MEASure:VMIN? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= minimum voltage of the selected waveform in NR3 format	
:MEASure:VPP [<source>]	:MEASure:VPP? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= voltage peak-to-peak of the selected waveform in NR3 format	
:MEASure:VRATio [<source1>] [,<source2>]	:MEASure:VRATio? [<source1>] [,<source2>]	<source1,2> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= the ratio value in dB in NR3 format	
:MEASure:VRMS [<source>]	:MEASure:VRMS? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= calculated dc RMS voltage in NR3 format	
n/a	:MEASure:VTIME? <vtime>[,<source>]	<vtime> ::= displayed time from trigger in seconds in NR3 format <return_value> ::= voltage at the specified time in NR3 format <source> ::= {CHANnel<n>   FUNCTION   MATH   DIGital0,..,DIGital15} <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:MEASure:VTOP [<source>]	:MEASure:VTOP? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= voltage at the top of the waveform in NR3 format	
:MEASure:XMAX [<source>]	:MEASure:XMAX? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= horizontal value of the maximum in NR3 format	
:MEASure:XMIN [<source>]	:MEASure:XMIN? [<source>]	<source> ::= {CHANnel<n>   FUNCTION   MATH} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= horizontal value of the maximum in NR3 format	

Table 14. :MTESt Commands Summary

Command	Query	Options and Query Returns	Dependencies
:MTESt:AMASk:CREate	n/a	n/a	LMT <sup>9</sup>

**Table 15. :POD<n> Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:POD<n>:DISPlay {0   OFF}   {1   ON}}	:POD<n>:DISPlay?	{0   1}  <n> ::= 1-2 in NR1 format	MSO <sup>3</sup>
:POD<n>:SIZE <value>	:POD<n>:SIZE?	<value> ::= {SMALL   MEDium   LARGe}	MSO <sup>3</sup>
:POD<n>:THReshold <type>[suffix]	:POD<n>:THReshold?	<n> ::= 1-2 in NR1 format  <type> ::= {CMOS   ECL   TTL   <user defined value>}  <user defined value> ::= value in NR3 format  [suffix] ::= {V   mV   uV}	MSO <sup>3</sup>

**Table 16. :RECall Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:RECall:FIleName <base_name>	:RECall:FIleName?	<base_name> ::= quoted ASCII string	
:RECall:IMAGe[:START] [<file_spec>]	n/a	<file_spec> ::= {<internal_loc>   <file_name>}  <internal_loc> ::= 0-9; an integer in NR1 format  <file_name> ::= quoted ASCII string	
:RECall:MASK[:START] [<file_spec>]	n/a	<file_spec> ::= {<internal_loc>   <file_name>}  <internal_loc> ::= 0-3; an integer in NR1 format  <file_name> ::= quoted ASCII string	LMT <sup>9</sup>
:RECall:PWD <path_name>	:RECall:PWD?	<path_name> ::= quoted ASCII string	
:RECall:SETup[:START] [<file_spec>]	n/a	<file_spec> ::= {<internal_loc>   <file_name>}  <internal_loc> ::= 0-9; an integer in NR1 format  <file_name> ::= quoted ASCII string	

**Table 17. :SAVE Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:SAVE:FIleName <base_name>	:SAVE:FIleName?	<base_name> ::= quoted ASCII string	
:SAVE:IMAGe[:START] [<file_spec>]	n/a	<file_spec> ::= {<internal_loc>   <file_name>}  <internal_loc> ::= 0-9; an integer in NR1 format  <file_name> ::= quoted ASCII string	
n/a	:SAVE:IMAGe:AREA?	<area> ::= {GRAT   SCR}	
:SAVE:IMAGe:FACTors {0   OFF}   {1   ON}}	:SAVE:IMAGe:FACTors?	{0   1}	
:SAVE:IMAGe:FORMat <format>	:SAVE:IMAGe:FORMat?	<format> ::= {TIFF   {BMP   BMP24bit}   BMP8bit   PNG   NONE}	

Command	Query	Options and Query Returns	Dependencies
:SAVE:IMAGE:IGColors { {0   OFF}   {1   ON} }	:SAVE:IMAGE:IGColors?	{0   1}	
:SAVE:IMAGE:PALETTE <palette>	:SAVE:IMAGE:PALETTE?	<palette> ::= {COLOR   GRAYscale   MONochrome}	
:SAVE:MASK[:START] [<file_spec>]	n/a	<file_spec> ::= {<internal_loc>   <file_name>} <internal_loc> ::= 0-3; an integer in NR1 format <file_name> ::= quoted ASCII string	LMT <sup>9</sup>
:SAVE:PWD <path_name>	:SAVE:PWD?	<path_name> ::= quoted ASCII string	
:SAVE:SETup[:START] [<file_spec>]	n/a	<file_spec> ::= {<internal_loc>   <file_name>} <internal_loc> ::= 0-9; an integer in NR1 format <file_name> ::= quoted ASCII string	
:SAVE:WAVEform[:START] [<file_name>]	n/a	<file_name> ::= quoted ASCII string	
:SAVE:WAVEform:FORMat <format>	:SAVE:WAVEform:FORMat?	<format> ::= {ALB   ASCiixy   CSV   BINary   NONE}	
:SAVE:WAVEform:LENGth <length>	:SAVE:WAVEform:LENGth?	<length> ::= 100 to max. length; an integer in NR1 format	
:SAVE:WAVEform:SEGmented <option>	:SAVE:WAVEform:SEGmented?	<option> ::= {ALL   CURRent}	SGM <sup>8</sup>

**Table 18. :SBUS Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:SBUS:BUSDoctor:ADDReSS <value>	:SBUS:BUSDoctor:ADDReSS?	<value> ::= <field value>, <field value>, <field value>, <field value> <field value> ::= integer from 0-255 in NR1 format	FRS <sup>6</sup>
:SBUS:BUSDoctor:BAUDRate <baudrate>	:SBUS:BUSDoctor:BAUDRate?	<baudrate> ::= {2500000   5000000   10000000}	FRS <sup>6</sup>
:SBUS:BUSDoctor:CHANnel <channel>	:SBUS:BUSDoctor:CHANnel?	<channel> ::= {A   B}	FRS <sup>6</sup>
:SBUS:BUSDoctor:MODE <mode>	:SBUS:BUSDoctor:MODE?	<mode> ::= {ASYNchronous   SYNChronous   PC}	FRS <sup>6</sup>
n/a	:SBUS:CAN:COUNT:ERRor?	<frame_count> ::= integer in NR1 format	AMS <sup>5</sup>
n/a	:SBUS:CAN:COUNT:OVERload?	<frame_count> ::= integer in NR1 format	AMS <sup>5</sup>
:SBUS:CAN:COUNT:RESet	n/a	n/a	AMS <sup>5</sup>
n/a	:SBUS:CAN:COUNT:TOTal?	<frame_count> ::= integer in NR1 format	AMS <sup>5</sup>
n/a	:SBUS:CAN:COUNT:UTILization?	<percent> ::= floating-point in NR3 format	AMS <sup>5</sup>



Command	Query	Options and Query Returns	Dependencies
:SBUS:DISPlay {{0   OFF}   {1   ON}}	:SBUS:DISPlay?	{0   1}	4-Channel <sup>2</sup>
n/a	:SBUS:FLEXray:COUNT:NULL?	<frame_count> ::= integer in NR1 format	FRS <sup>6</sup>
:SBUS:FLEXray:COUNT:RESet	n/a	n/a	FRS <sup>6</sup>
n/a	:SBUS:FLEXray:COUNT:SYNC?	<frame_count> ::= integer in NR1 format	FRS <sup>6</sup>
n/a	:SBUS:FLEXray:COUNT:TOTal?	<frame_count> ::= integer in NR1 format	FRS <sup>6</sup>
:SBUS:IIC:ASize <size>	:SBUS:IIC:ASize?	<size> ::= {BIT7   BIT8}	LSS <sup>4</sup>
:SBUS:LIN:PARity {{0   OFF}   {1   ON}}	:SBUS:LIN:PARity?	{0   1}	AMS <sup>5</sup>
:SBUS:MODE <mode>	:SBUS:MODE?	<mode> ::= {IIC   SPI   CAN   LIN   FLEXray}	4-Channel <sup>2</sup> LSS <sup>4</sup> AMS <sup>5</sup> FRS <sup>6</sup>
:SBUS:SPI:WIDTh <word_width>	:SBUS:SPI:WIDTh?	<word_width> ::= integer 4-16 in NR1 format	LSS <sup>4</sup>
:SBUS:UART:BASE <base>	:SBUS:UART:BASE?	<base> ::= {ASCIi   BINary   HEX}	232 <sup>7</sup>
n/a	:SBUS:UART:COUNT:ERRor?	<frame_count> ::= integer in NR1 format	232 <sup>7</sup>
:SBUS:UART:COUNT:RESet	n/a	n/a	232 <sup>7</sup>
n/a	:SBUS:UART:COUNT:RXFRames?	<frame_count> ::= integer in NR1 format	232 <sup>7</sup>
n/a	:SBUS:UART:COUNT:TXFRames?	<frame_count> ::= integer in NR1 format	232 <sup>7</sup>
:SBUS:UART:FRAMing <value>	:SBUS:UART:FRAMing?	<value> ::= {OFF   <decimal>   <nondecimal>}  <decimal> ::= 8-bit integer in decimal from 0-255 (0x00-0xff)  <nondecimal> ::= #Hnn where n ::= {0,...,9   A,...,F} for hexadecimal  <nondecimal> ::= #Bnn...n where n ::= {0   1} for binary	232 <sup>7</sup>

Table 19. :SYSTEM Commands Summary

Command	Query	Options and Query Returns	Dependencies
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Command	Query	Options and Query Returns	Dependencies
:SYSTem:DATE <date>	:SYSTem:DATE?	<date> ::= <year>,<month>,<day>  <year> ::= 4-digit year in NR1 format  <month> ::= {1,...,12   JANuary   FEBruary   MARch   APRil   MAY   JUNE   JULy   AUGust   SEPtember   OCTober   NOVember   DECember}  <day> ::= {1,...31}	
:SYSTem:DSP <string>	n/a	<string> ::= up to 254 characters as a quoted ASCII string	
n/a	:SYSTem:ERRor?	<error> ::= an integer error code  <error string> ::= quoted ASCII string.  See "Error Messages" in <i>Programmer's Reference</i> .	
:SYSTem:LOCK	:SYSTem:LOCK?	<value> ::= {{1   ON}   {0   OFF}}	
:SYSTem:PROTection:LOCK	:SYSTem:PROTection:LOCK?	<value> ::= {{1   ON}   {0   OFF}}	
:SYSTem:SEtUp <setup_data>	:SYSTem:SEtUp?	<setup_data> ::= data in IEEE 488.2 # format.	
:SYSTem:TIME <time>	:SYSTem:TIME?	<time> ::= hours,minutes,seconds in NR1 format	

Table 20. :TIMebase Commands Summary

Command	Query	Options and Query Returns	Dependencies
:TIMebase:MODE <value>	:TIMebase:MODE?	<value> ::= {MAIN   WINDow   XY   ROLL}	
:TIMebase:POSiTion <pos>	:TIMebase:POSiTion?	<pos> ::= time from the trigger event to the display reference point in NR3 format	
:TIMebase:RANGe <range_value>	:TIMebase:RANGe?	<range_value> ::= 5 ns through 500 s in NR3 format	
:TIMebase:REFClock {0   OFF}   {1   ON}}	:TIMebase:REFClock?	{0   1}	
:TIMebase:REFerence {LEFT   CENTER   RIGHT}	:TIMebase:REFerence?	<return_value> ::= {LEFT   CENTER   RIGHT}	
:TIMebase:SCALE <scale_value>	:TIMebase:SCALE?	<scale_value> ::= scale value in seconds in NR3 format	
:TIMebase:VERNier {0   OFF}   {1   ON}}	:TIMebase:VERNier?	{0   1}	
:TIMebase:WINDow:POSiTion <pos>	:TIMebase:WINDow:POSiTion?	<pos> ::= time from the trigger event to the delayed view reference point in NR3 format	
:TIMebase:WINDow:RANGe <range_value>	:TIMebase:WINDow:RANGe?	<range value> ::= range value in seconds in NR3 format for the delayed window	
:TIMebase:WINDow:SCALE <scale_value>	:TIMebase:WINDow:SCALE?	<scale_value> ::= scale value in seconds in NR3 format for the delayed window	

Table 21. General :TRIGger Commands Summary

Command	Query	Options and Query Returns	Dependencies
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Command	Query	Options and Query Returns	Dependencies
:TRIGger:HFRject { {0   OFF}   {1   ON} }	:TRIGger:HFRject?	{0   1}	
:TRIGger:HOLDoff <holdoff_time>	:TRIGger:HOLDoff?	<holdoff_time> ::= 60 ns to 10 s in NR3 format	
:TRIGger:MODE <mode>	:TRIGger:MODE?	<mode> ::= {EDGE   GLITCh   PATtern   CAN   DURATION   IIC   EBURst   LIN   SEquence   SPI   TV   USB   FLEXray   UART}  <return_value> ::= {<mode>   <none>}  <none> ::= query returns "NONE" if the :TIMEbase:MODE is ROLL or XY	
:TRIGger:NREject { {0   OFF}   {1   ON} }	:TRIGger:NREject?	{0   1}	
:TRIGger:PATtern <value>, <mask> [, <edge source>, <edge>]	:TRIGger:PATtern?	<value> ::= integer in NR1 format or <string>  <mask> ::= integer in NR1 format or <string>  <string> ::= "0xn timer"; n ::= {0,...,9   A,...,F} (# bits = # channels)  <edge source> ::= {CHANnel<n>   EXternAl   NONE} for DSO models  <edge source> ::= {CHANnel<n>   DIGital0,...,DIGital15   NONE} for MSO models  <edge> ::= {POSitive   NEGative}  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:SWEEP <sweep>	:TRIGger:SWEEP?	<sweep> ::= {AUTO   NORMAL}	

Table 22. :TRIGger:CAN Commands Summary

Command	Query	Options and Query Returns	Depen
:TRIGger:CAN:PATtern:DATA <value>, <mask>	:TRIGger:CAN:PATtern:DATA?	<value> ::= 64-bit integer in decimal, <nondecimal>, or <string> (with Option AMS)  <mask> ::= 64-bit integer in decimal, <nondecimal>, or <string>  <nondecimal> ::= #Hnn...n where n ::= {0,...,9   A,...,F} for hexadecimal  <nondecimal> ::= #Bnn...n where n ::= {0   1} for binary  <string> ::= "0xnn...n" where n ::= {0,...,9   A,...,F} for hexadecimal	AMS <sup>5</sup>
:TRIGger:CAN:PATtern:DATA:LENGth <length>	:TRIGger:CAN:PATtern:DATA:LENGth?	<length> ::= integer from 1 to 8 in NR1 format (with Option AMS)	AMS <sup>5</sup>
:TRIGger:CAN:PATtern:ID <value>, <mask>	:TRIGger:CAN:PATtern:ID?	<value> ::= 32-bit integer in decimal, <nondecimal>, or <string> (with Option AMS)  <mask> ::= 32-bit integer in decimal, <nondecimal>, or <string>  <nondecimal> ::= #Hnn...n where n ::= {0,...,9   A,...,F} for hexadecimal  <nondecimal> ::= #Bnn...n where n ::= {0   1} for binary	AMS <sup>5</sup>

Command	Query	Options and Query Returns	Depen
		<string> ::= "0xnn...n" where n ::= {0,...,9   A,...,F} for hexadecimal	
:TRIGger:CAN:PATtern:ID:MODE <value>	:TRIGger:CAN:PATtern:ID:MODE?	<value> ::= {STANDARD   EXTENDED} (with Option AMS)	AMS <sup>5</sup>
:TRIGger:CAN:SAMPlepoint <value>	:TRIGger:CAN:SAMPlepoint?	<value> ::= {60   62.5   68   70   75   80   87.5} in NR3 format	
:TRIGger:CAN:SIGNAL:BAUDrate <baudrate>	:TRIGger:CAN:SIGNAL:BAUDrate?	<baudrate> ::= integer from 10000 to 1000000 in 100 b/s increments	
:TRIGger:CAN:SOURce <source>	:TRIGger:CAN:SOURce?	<source> ::= {CHANnel<n>   EXTERNAL} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:CAN:TRIGger <condition>	:TRIGger:CAN:TRIGger?	<condition> ::= {SOF   DATA   ERROR   IDData   IDEither   IDRemote   ALLerrors   OVERload   ACKerror}	AMS <sup>5</sup>

Table 23. :TRIGger:DURation Commands Summary

Command	Query	Options and Query Returns	Dependencie
:TRIGger:DURation:GREATERthan <greater_than_time>[suffix]	:TRIGger:DURation:GREATERthan?	<greater_than_time> ::= floating-point number in NR3 format  [suffix] ::= {s   ms   us   ns   ps}	
:TRIGger:DURation:LESSthan <less_than_time>[suffix]	:TRIGger:DURation:LESSthan?	<less_than_time> ::= floating-point number in NR3 format  [suffix] ::= {s   ms   us   ns   ps}	
:TRIGger:DURation:PATtern <value>, <mask>	:TRIGger:DURation:PATtern?	<value> ::= integer or <string>  <mask> ::= integer or <string>  <string> ::= "0xxxxxxxx" n ::= {0,...,9   A,...,F}	
:TRIGger:DURation:QUALifier <qualifier>	:TRIGger:DURation:QUALifier?	<qualifier> ::= {GREATERthan   LESSthan   INRange   OUTRange   TIMEout}	
:TRIGger:DURation:RANGE <less_than_time>[suffix], <greater_than_time>[suffix]	:TRIGger:DURation:RANGE?	<less_than_time> ::= 15 ns to 10 seconds in NR3 format  <greater_than_time> ::= 10 ns to 9.99 seconds in NR3 format  [suffix] ::= {s   ms   us   ns   ps}	

Table 24. :TRIGger:EBURst Commands Summary

Command	Query	Options and Query Returns	Dependencies
:TRIGger:EBURst:COUNT <count>	:TRIGger:EBURst:COUNT?	<count> ::= integer in NR1 format	6000/7000 Series <sup>1</sup>
:TRIGger:EBURst:IDLE <time_value>	:TRIGger:EBURst:IDLE?	<time_value> ::= time in seconds in NR3 format	6000/7000 Series <sup>1</sup>

Command	Query	Options and Query Returns	Dependencies
:TRIGger:EBURst:SLOPe <slope>	:TRIGger:EBURst:SLOPe?	<slope> ::= {NEGative   POSitive}	6000/7000 Series <sup>1</sup>

**Table 25. :TRIGger[:EDGE] Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:TRIGger[:EDGE]:COUPling {AC   DC   LF}	:TRIGger[:EDGE]:COUPling?	{AC   DC   LF}	
:TRIGger[:EDGE]:LEVel <level> [,<source>]	:TRIGger[:EDGE]:LEVel? [<source>]	For internal triggers, <level> ::= .75 x full-scale voltage from center screen in NR3 format.  For external triggers, <level> ::= ±(external range setting) in NR3 format.  For digital channels (MSO models), <level> ::= ±8 V.  <source> ::= {CHANnel<n>   EXTErnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15   EXTErnal } for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger[:EDGE]:REJect {OFF   LF   HF}	:TRIGger[:EDGE]:REJect?	{OFF   LF   HF}	
:TRIGger[:EDGE]:SLOPe <polarity>	:TRIGger[:EDGE]:SLOPe?	<polarity> ::= {POSitive   NEGative   EITHER   ALTErnate}	
:TRIGger[:EDGE]:SOURce <source>	:TRIGger[:EDGE]:SOURce?	<source> ::= {CHANnel<n>   EXTErnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15   EXTErnal} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>

**Table 26. :TRIGger:FLEXray Commands Summary**

Command	Query	Options and Query Returns	De
:TRIGger:FLEXray:ERRor:TYPE <error_type>	:TRIGger:FLEXray:ERRor:TYPE?	<error_type> ::= {ALL   CODE   TSS   HCRC   FCRC   END   BOUNDary   IDLE   SYMBol   SLOT   NULL   SOS   FID   CCOUNT   PLEnghth}	FF
:TRIGger:FLEXray:FRAME:CCBase <cycle_count_base>	:TRIGger:FLEXray:FRAME:CCBase?	<cycle_count_base> ::= integer from 0-63	FF
:TRIGger:FLEXray:FRAME:CCRepetition <cycle_count_repetition>	:TRIGger:FLEXray:FRAME:CCRepetition?	<cycle_count_repetition> ::= {ALL   <rep #>}  <rep #> ::= integer from 2-64	FF
:TRIGger:FLEXray:FRAME:ID <frame_id>	:TRIGger:FLEXray:FRAME:ID?	<frame_id> ::= {ALL   <frame #>}  <frame #> ::= integer from 1-2047	FF
:TRIGger:FLEXray:FRAME:TYPE <frame_type>	:TRIGger:FLEXray:FRAME:TYPE?	<frame_type> ::= {NORMal   STARTup   NULL   SYNC   NSTArtup   NNULL   NSYNc}	FF

Command	Query	Options and Query Returns	De
:TRIGger:FLEXray:TIME:CBASe <cycle_base>	:TRIGger:FLEXray:TIME:CBASe?	<cycle_base> ::= integer from 0-63	FF
:TRIGger:FLEXray:TIME:CREPetition <cycle_repetition>	:TRIGger:FLEXray:TIME:CREPetition?	<cycle_repetition> ::= {ALL   <rep #>} <rep #> ::= integer from 2-64	FF
:TRIGger:FLEXray:TIME:SEGment <segment_type>	:TRIGger:FLEXray:TIME:SEGment?	<segment_type> ::= {STATic   DYNamic   SYMBol   IDLE}	FF
:TRIGger:FLEXray:TIME:SLOT <slot_type>, <slot_id>	::TRIGger:FLEXray:TIME:SLOT?	<slot_type> ::= {ALL   EMPTY} <slot_id> ::= {ALL   <slot #>} <slot #> ::= integer from 1-2047	FF
:TRIGger:FLEXray:TRIGger <condition>	:TRIGger:FLEXray:TRIGger?	<condition> ::= {FRAME   TIME   ERRor}	FF

Table 27. :TRIGger:GLITCh Commands Summary

Command	Query	Options and Query Returns	Dependencies
:TRIGger:GLITCh:GREaterthan <greater_than_time>[suffix]	:TRIGger:GLITCh:GREaterthan?	<greater_than_time> ::= floating-point number in NR3 format  [suffix] ::= {s   ms   us   ns   ps}	
:TRIGger:GLITCh:LESSthan <less_than_time>[suffix]	:TRIGger:GLITCh:LESSthan?	<less_than_time> ::= floating-point number in NR3 format  [suffix] ::= {s   ms   us   ns   ps}	
:TRIGger:GLITCh:LEVel <level> [<source>]	:TRIGger:GLITCh:LEVel?	For internal triggers, <level> ::= .75 x full-scale voltage from center screen in NR3 format.  For external triggers (DSO models), <level> ::= ±(external range setting) in NR3 format.  For digital channels (MSO models), <level> ::= ±8 V.  <source> ::= {CHANnel<n>   EXTErnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:GLITCh:POLarity <polarity>	:TRIGger:GLITCh:POLarity?	<polarity> ::= {POSitive   NEGative}	
:TRIGger:GLITCh:QUALifier <qualifier>	:TRIGger:GLITCh:QUALifier?	<qualifier> ::= {GREaterthan   LESSthan   RANGE}	
:TRIGger:GLITCh:RANGE <less_than_time>[suffix], <greater_than_time>[suffix]	:TRIGger:GLITCh:RANGE?	<less_than_time> ::= 15 ns to 10 seconds in NR3 format  <greater_than_time> ::= 10 ns to 9.99 seconds in NR3 format  [suffix] ::= {s   ms   us   ns   ps}	
:TRIGger:GLITCh:SOURce <source>	:TRIGger:GLITCh:SOURce?	<source> ::= {CHANnel<n>   EXTErnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15}	MSO <sup>3</sup>

Command	Query	Options and Query Returns	Dependencies
		for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	

**Table 28. :TRIGger:IIC Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:TRIGger:IIC:PATtern:ADDReSS <value>	:TRIGger:IIC:PATtern:ADDReSS?	<value> ::= integer or <string> <string> ::= "0xnn" n ::= {0,...,9   A,...,F}	
:TRIGger:IIC:PATtern:DATA <value>	:TRIGger:IIC:PATtern:DATA?	<value> ::= integer or <string> <string> ::= "0xnn" n ::= {0,...,9   A,...,F}	
:TRIGger:IIC:PATtern:DATA2 <value>	:TRIGger:IIC:PATtern:DATA2?	<value> ::= integer or <string> <string> ::= "0xnn" n ::= {0,...,9   A,...,F}	
:TRIGger:IIC[:SOURce]:CLOCk <source>	:TRIGger:IIC[:SOURce]:CLOCk?	<source> ::= {CHANnel<n>   EXTeRnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:IIC[:SOURce]:DATA <source>	:TRIGger:IIC[:SOURce]:DATA?	<source> ::= {CHANnel<n>   EXTeRnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:IIC:TRIGger:QUALifier <value>	:TRIGger:IIC:TRIGger:QUALifier?	<value> ::= {EQUAL   NOTequal   LESSthan   GREATERthan}	
:TRIGger:IIC:TRIGger[:TYPE] <type>	:TRIGger:IIC:TRIGger[:TYPE]?	<type> ::= {START   STOP   READ7   READEprom   WRITe7   WRITe10   NACKnowledge   ANACKnowledge   R7Data2   W7Data2   REStart}	

**Table 29. :TRIGger:LIN Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:TRIGger:LIN:ID <value>	:TRIGger:LIN:ID?	<value> ::= 7-bit integer in decimal, <nondecimal>, or <string> from 0-63 or 0x00-0x3f (with Option AMS)  <nondecimal> ::= #Hnn where n ::= {0,...,9   A,...,F} for hexadecimal  <nondecimal> ::= #Bnn...n where n ::= {0   1} for binary  <string> ::= "0xnn" where n ::= {0,...,9   A,...,F} for hexadecimal	AMS <sup>5</sup>
:TRIGger:LIN:SAMPlepoint <value>	:TRIGger:LIN:SAMPlepoint?	<value> ::= {60   62.5   68   70   75   80   87.5} in NR3 format	
:TRIGger:LIN:SIGNAL:BAUDrate <baudrate>	:TRIGger:LIN:SIGNAL:BAUDrate?	<baudrate> ::= integer from 2400 to 625000 in 100 b/s increments	

Command	Query	Options and Query Returns	Dependenc
:TRIGger:LIN:SOURce <source>	:TRIGger:LIN:SOURce?	<source> ::= {CHANnel<n>   EXTErnal} for DSO models <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:LIN:STANdard <std>	:TRIGger:LIN:STANdard?	<std> ::= {LIN13   LIN20}	
:TRIGger:LIN:SYNCbreak <value>	:TRIGger:LIN:SYNCbreak?	<value> ::= integer = {11   12   13}	
:TRIGger:LIN:TRIGger <condition>	:TRIGger:LIN:TRIGger?	<condition> ::= {SYNCbreak   ID}	AMS <sup>5</sup>

Table 30. :TRIGger:SEquence Commands Summary

Command	Query	Options and Query Returns	Dependenc
:TRIGger:SEquence:COUNT <count>	:TRIGger:SEquence:COUNT?	<count> ::= integer in NR1 format	6000/7000 Series <sup>1</sup>
:TRIGger:SEquence:EDGE{1 2} <source>, <slope>	:TRIGger:SEquence:EDGE{1 2}?	<source> ::= {CHANnel<n>   EXTErnal} for the DSO models <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for the MSO models <slope> ::= {POSitive   NEGative} <n> ::= 1-2 or 1-4 in NR1 format <return_value> ::= query returns "NONE" if edge source is disabled	6000/7000 Series <sup>1</sup> MSO <sup>3</sup>
:TRIGger:SEquence:FIND <value>	:TRIGger:SEquence:FIND?	<value> ::= {PATTErn1,ENTERed   PATTErn1,EXITed   EDGE1   PATTErn1,AND,EDGE1}	6000/7000 Series <sup>1</sup>
:TRIGger:SEquence:PATTErn{1 2} <value>, <mask>	:TRIGger:SEquence:PATTErn{1 2}?	<value> ::= integer or <string> <mask> ::= integer or <string> <string> ::= "0xn timer" n ::= {0,...,9   A,...,F}	6000/7000 Series <sup>1</sup>
:TRIGger:SEquence:RESet <value>	:TRIGger:SEquence:RESet?	<value> ::= {NONE   PATTErn1,ENTERed   PATTErn1,EXITed   EDGE1   PATTErn1,AND,EDGE1   PATTErn2,ENTERed   PATTErn2,EXITed   EDGE2   TIMer} Values used in find and trigger stages not available. EDGE2 not available if EDGE2,COUNT used in trigger stage.	6000/7000 Series <sup>1</sup>
:TRIGger:SEquence:TIMer <time_value>	:TRIGger:SEquence:TIMer?	<time_value> ::= time from 10 ns to 10 seconds in NR3 format	6000/7000 Series <sup>1</sup>
:TRIGger:SEquence:TRIGger <value>	:TRIGger:SEquence:TRIGger?	<value> ::= {PATTErn2,ENTERed   PATTErn2,EXITed   EDGE2   PATTErn2,AND,EDGE2   EDGE2,COUNT   EDGE2,COUNT,NREFind}	6000/7000 Series <sup>1</sup>



**Table 31. :TRIGger:SPI Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:TRIGger:SPI:CLOCK:SLOPe <slope>	:TRIGger:SPI:CLOCK:SLOPe?	<slope> ::= {NEGative   POSitive}	
:TRIGger:SPI:CLOCK:TIMEout <time_value>	:TRIGger:SPI:CLOCK:TIMEout?	<time_value> ::= time in seconds in NR1 format	
:TRIGger:SPI:FRAMing <value>	:TRIGger:SPI:FRAMing?	<value> ::= {CHIPselect   NOTChipselect   TIMEout}	
:TRIGger:SPI:PATtern:DATA <value>, <mask>	:TRIGger:SPI:PATtern:DATA?	<value> ::= integer or <string>  <mask> ::= integer or <string>  <string> ::= "0xnnnnnn" where n ::= {0,...,9   A,...,F}	
:TRIGger:SPI:PATtern:WIDTh <width>	:TRIGger:SPI:PATtern:WIDTh?	<width> ::= integer from 4 to 32 in NR1 format	
:TRIGger:SPI:SOURce:CLOCK <source>	:TRIGger:SPI:SOURce:CLOCK?	<value> ::= {CHANnel<n>   EXTErnal} for the DSO models  <value> ::= {CHANnel<n>   DIGital0,...,DIGital15} for the MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:SPI:SOURce:DATA <source>	:TRIGger:SPI:SOURce:DATA?	<value> ::= {CHANnel<n>   EXTErnal} for the DSO models  <value> ::= {CHANnel<n>   DIGital0,...,DIGital15} for the MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>
:TRIGger:SPI:SOURce:FRAME <source>	:TRIGger:SPI:SOURce:FRAME?	<value> ::= {CHANnel<n>   EXTErnal} for the DSO models  <value> ::= {CHANnel<n>   DIGital0,...,DIGital15} for the MSO models  <n> ::= 1-2 or 1-4 in NR1 format	MSO <sup>3</sup>

**Table 32. :TRIGger:TV Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:TRIGger:TV:LINE <line number>	:TRIGger:TV:LINE?	<line number> ::= integer in NR1 format	
:TRIGger:TV:MODE <tv mode>	:TRIGger:TV:MODE?	<tv mode> ::= {FIEld1   FIEld2   AFIElds   ALINes   LINE   VERTical   LFIeld1   LFIeld2   LALTernate   LVERTical}	
:TRIGger:TV:POLarity <polarity>	:TRIGger:TV:POLarity?	<polarity> ::= {POSitive   NEGative}	
:TRIGger:TV:SOURce <source>	:TRIGger:TV:SOURce?	<source> ::= {CHANnel<n>}  <n> ::= 1-2 or 1-4 integer in NR1 format	
:TRIGger:TV:STANdard <standard>	:TRIGger:TV:STANdard?	<standard> ::= {GENeric   NTSC   PALM   PAL   SECam   {P480L60HZ   P480}   {P720L60HZ   P720}   {P1080L24HZ   P1080}   P1080L25HZ   {I1080L50HZ   I1080}   I1080L60HZ}	

**Table 33. :TRIGger:UART Commands Summary**

Command	Query	Options and Query Returns	Dependencies
:TRIGger:UART:BASE <base>	:TRIGger:UART:BASE?	<base> ::= {ASCIi   HEX}	232 <sup>7</sup>
:TRIGger:UART:BAUDrate <baudrate>	:TRIGger:UART:BAUDrate?	<baudrate> ::= integer from 1200 to 3000000 in 100 b/s increments	232 <sup>7</sup>
:TRIGger:UART:BITOrder <bitorder>	:TRIGger:UART:BITOrder?	<bitorder> ::= {LSBFirst   MSBFirst}	232 <sup>7</sup>
:TRIGger:UART:BURSt <value>	:TRIGger:UART:BURSt?	<value> ::= {OFF   1 to 4096 in NR1 format}	232 <sup>7</sup>
:TRIGger:UART:DATA <value>	:TRIGger:UART:DATA?	<value> ::= 8-bit integer from 0-255 (0x00-0xff) in decimal, <hexadecimal>, <binary>, or <quoted_string> format  <hexadecimal> ::= #Hnn where n ::= {0,...,9   A,...,F} for hexadecimal  <binary> ::= #Bnn...n where n ::= {0   1} for binary  <quoted_string> ::= any of the 128 valid 7-bit ASCII characters (or standard abbreviations)	232 <sup>7</sup>
:TRIGger:UART:IDLE <time_value>	:TRIGger:UART:IDLE?	<time_value> ::= time from 1 us to 10 s in NR3 format	232 <sup>7</sup>
:TRIGger:UART:PARity <parity>	:TRIGger:UART:PARity?	<parity> ::= {EVEN   ODD   NONE}	232 <sup>7</sup>
:TRIGger:UART:POLarity <polarity>	:TRIGger:UART:POLarity?	<polarity> ::= {HIGH   LOW}	232 <sup>7</sup>
:TRIGger:UART:QUALifier <value>	:TRIGger:UART:QUALifier?	<value> ::= {EQUAL   NOTequal   GREaterthan   LESSthan}	232 <sup>7</sup>
:TRIGger:UART:SOURce:RX <source>	:TRIGger:UART:SOURce:RX?	<source> ::= {CHANnel<n>   EXTErnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	232 <sup>7</sup> MSO <sup>3</sup>
:TRIGger:UART:SOURce:TX <source>	:TRIGger:UART:SOURce:TX?	<source> ::= {CHANnel<n>   EXTErnal} for DSO models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for MSO models  <n> ::= 1-2 or 1-4 in NR1 format	232 <sup>7</sup> MSO <sup>3</sup>
:TRIGger:UART:TYPE <value>	:TRIGger:UART:TYPE?	<value> ::= {RSTArt   RSTOp   RDATa   RD1   RD0   RDX   PARityerror   TSTArt   TSTOp   TDATa   TD1   TD0   TDX}	232 <sup>7</sup>
:TRIGger:UART:WIDTh <width>	:TRIGger:UART:WIDTh?	<width> ::= {5   6   7   8   9}	232 <sup>7</sup>

**Table 34. :TRIGger:USB Commands Summary**

Command	Query	Options and Query Returns	Dependencies
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Command	Query	Options and Query Returns	Dependencies
:TRIGger:USB:SOURce:DMINus <source>	:TRIGger:USB:SOURce:DMINus?	<source> ::= {CHANnel<n>   EXTERNAL} for the D50 models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for the MS0 models  <n> ::= 1-2 or 1-4 in NR1 format	6000/7000 Series <sup>1</sup> MSO <sup>3</sup>
:TRIGger:USB:SOURce:DPLus <source>	:TRIGger:USB:SOURce:DPLus?	<source> ::= {CHANnel<n>   EXTERNAL} for the D50 models  <source> ::= {CHANnel<n>   DIGital0,...,DIGital15} for the MS0 models  <n> ::= 1-2 or 1-4 in NR1 format	6000/7000 Series <sup>1</sup> MSO <sup>3</sup>
:TRIGger:USB:SPEed <value>	:TRIGger:USB:SPEed?	<value> ::= {LOW   FULL}	6000/7000 Series <sup>1</sup>
:TRIGger:USB:TRIGger <value>	:TRIGger:USB:TRIGger?	<value> ::= {SOP   EOP   ENTersuspend   EXITsuspend   RESet}	6000/7000 Series <sup>1</sup>

Table 35. :WAVEform Commands Summary

Command	Query	Options and Query Returns	Dependencies
:WAVEform:BYTeorder <value>	:WAVEform:BYTeorder?	<value> ::= {LSBFirst   MSBFirst}	
n/a	:WAVEform:COUNt?	<count> ::= an integer from 1 to 65536 in NR1 format	
n/a	:WAVEform:DATA?	<binary block length bytes>,<binary data>  For example, to transmit 1000 bytes of data, the syntax would be: #800001000<1000 bytes of data><NL>  8 is the number of digits that follow  00001000 is the number of bytes to be transmitted  <1000 bytes of data> is the actual data	
:WAVEform:FORMat <value>	:WAVEform:FORMat?	<value> ::= {WORD   BYTE   ASCII}	
:WAVEform:POINts <# points>	:WAVEform:POINts?	<# points> ::= {100   250   500   1000   <points_mode>} if waveform points mode is NORMAl  <# points> ::= {100   250   500   1000   2000 ... 8000000 in 1-2-5 sequence   <points_mode>} if waveform points mode is MAXimum or RAW  <points_mode> ::= {NORMAl   MAXimum   RAW}	
:WAVEform:POINts:MODE <points_mode>	:WAVEform:POINts:MODE?	<points_mode> ::= {NORMAl   MAXimum   RAW}	
n/a	:WAVEform:PREAmble?	<preamble_block> ::= <format NR1>,<type NR1>,<points NR1>,<count NR1>,<xincrement NR3>,<xorigin NR3>,<xreference NR1>,<yincrement NR3>,<yorigin NR3>,<yreference NR1>  <format> ::= an integer in NR1 format:	

Command	Query	Options and Query Returns	Dependencies
		<ul style="list-style-type: none"> <li>• 0 for BYTE format</li> <li>• 1 for WORD format</li> <li>• 2 for ASCII format</li> </ul> <p>&lt;type&gt; ::= an integer in NR1 format:</p> <ul style="list-style-type: none"> <li>• 0 for NORMAl type</li> <li>• 1 for PEAK detect type</li> <li>• 2 for AVERAge type</li> <li>• 3 for HRESolution type</li> </ul> <p>&lt;count&gt; ::= Average count, or 1 if PEAK detect type or NORMAl; an integer in NR1 format</p>	
n/a	:WAVEform:SEGmented:COUNT?	<count> ::= an integer from 2 to 250 (5000 Series) or 2 to 2000 (6000/7000 Series) in NR1 format	SGM <sup>8</sup>
n/a	:WAVEform:SEGmented:TTAG?	<time_tag> ::= in NR3 format	SGM <sup>8</sup>
:WAVEform:SOURce <source>	:WAVEform:SOURce?	<p>&lt;source&gt; ::= {CHANnel&lt;n&gt;   FUNCTION   MATH   SBUS   POD{1   2}   BUS{1   2}}</p> <p>&lt;n&gt; ::= 1-2 or 1-4 in NR1 format</p>	4-Channel <sup>2</sup> MSO <sup>3</sup>
:WAVEform:SOURce:SUBSource <subsource>	:WAVEform:SOURce:SUBSource?	<subsource> ::= {NONE   RX}   TX}	232 <sup>7</sup>
n/a	:WAVEform:TYPE?	<return_mode> ::= {NORM   PEAK   AVER   HRES}	
:WAVEform:UNSigned {0   OFF}   {1   ON}	:WAVEform:UNSigned?	{0   1}	
:WAVEform:VIEW <view>	:WAVEform:VIEW?	<view> ::= {MAIN}	
n/a	:WAVEform:XINcrement?	<return_value> ::= x-increment in the current preamble in NR3 format	
n/a	:WAVEform:XORigin?	<return_value> ::= x-origin value in the current preamble in NR3 format	
n/a	:WAVEform:XREference?	<return_value> ::= 0 (x-reference value in the current preamble in NR1 format)	
n/a	:WAVEform:YINcrement?	<return_value> ::= y-increment value in the current preamble in NR3 format	
n/a	:WAVEform:YORigin?	<return_value> ::= y-origin in the current preamble in NR3 format	
n/a	:WAVEform:YREference?	<return_value> ::= y-reference value in the current preamble in NR1 format	

**Table 36. Command Dependencies Descriptions**

<sup>1</sup>6000/7000 Series — requires a 6000 Series or 7000 Series oscilloscope. MSO, memory, FPGA probe, and serial options can be added. The 6000 Series oscilloscope battery option is an order-time only option.

<sup>2</sup>4-Channel — requires a 4-channel oscilloscope. Highlighted syntax is only valid on 4-channel oscilloscope models when a serial decode option has been licensed.

<sup>3</sup>MSO — requires a mixed-signal oscilloscope.

<sup>4</sup>LSS — requires the low-speed serial option for a 4-channel oscilloscope.

<sup>5</sup>AMS — requires the automotive serial option for a 4-channel oscilloscope.

<sup>6</sup>FRS — requires the FlexRay serial option for a 4-channel, mixed-signal oscilloscope.

<sup>7</sup>232 — requires the RS-232/UART serial option for a 4-channel, mixed-signal oscilloscope.

<sup>8</sup>SGM — requires the segmented memory option.

<sup>9</sup>LMT — requires the mask test option.