LAUTERBACH
DEVELOPMENT TOOLS

General Commands Reference Guide A

Release 09.2024

MANUAL

General Commands Reference Guide A

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Version 05-Oct-2024

History

14-10-22	Updated description of Analyzer.TraceCLOCK.

AET

Advanced Event Triggering for C5000, C6000 and C7000

AET.CLEAR — Clear AET settings

Format: **AET.CLEAR**

Switches on the AET module and clears all AET settings.

AET.DataTrace — Configure AET data-trace

Format: **AET.DataTrace** *<def>*

<def>:
ON
Read
Write
Address
ReadAddress
WriteAddress
Data
ReadData
WriteData
Limited
ReadLimited
WriteLimited
Only
OFF

Configures which elements are included in the data trace.

AET.DataTrace	Trace of **Program Flow**	Trace **Data Values** of **Read** Accesses	Trace **Data Values** of **Write** Accesses	Trace **Addresses** of **Read** Accesses	Trace **Addresses** of **Write** Accesses
ON	■	■	■	■	■
Read	■	■		■	
Write	■		■		■
Address	■			■	■

AET.DataTrace	Trace of **Program Flow**	Trace **Data Values** of **Read** Accesses	Trace **Data Values** of **Write** Accesses	Trace **Addresses** of **Read** Accesses	Trace **Addresses** of **Write** Accesses
ReadAddress	■			■	
WriteAddress	■				■
Data	■	■	■		
ReadData	■	■			
WriteData	■		■		
Limited					
ReadLimited					
WriteLimited					
Only		■	■	■	■
OFF	■				

AET.GatedClock

Use trace port clock when no data is sent

Format: **AET.GatedClock** [**ON** | **OFF**]

Default: OFF

Turns off the trace port clock when no data is sent.

AET.OFF

Switch AET off

Format: **AET.OFF**

Disables AET functionality.

Format: **AET.ON**

Enables AET functionality.

AET.PATTERN Enable AET pattern generator

Format: **AET.PATTERN** [**ON** | **OFF**]

Allows to manually enable the AET pattern generator for measurements

AET.PortClock Select AET port mode

Refer to **AET.PortMode**

AET.PortMode Select AET port mode

Format: **AET.PortMode** *<mode>*

<mode>: **FCK (default) |**
1/1 | 1/2 | 1/3 | 1/4 |
1/5 | 1/6 | 1/7 | 1/8 |
1/9 | 1/10 | 1/11 | 1/12 |
1/13 | 1/14 | 1/15 | 1/16

Set the AET trace port clock divider

Format:	**AET.PortSize** [**5** | **10** | **10A** | **10E** | **10X** | **10XE** | **10K** | **10KE**]
<mode>:	**5 | 10 10A | 10E |** **10X | 10XE |** **10K | 10KE |**

Set the AET trace port size and mode.

5, 10	Number of trace data signals.
10A, 10E	Variants of “10”. The selected size is the same, but additionally the Debug Resource Manager (DRM) gets configured which maps trace signals to output pins.
10X, 10XE	Variants of “10X” and “10E”. The selected size is the same, but additionally the Debug Resource Manager (DRM) gets configured which maps trace signals to output pins:
10K, 10KE	Variants of “10” and “10E”. The selected size is the same, but additionally the Debug Resource Manager (DRM) gets configured which maps trace signals to output pins.

AET.ReadWriteBreak Control read/write breakpoints

Format:	**AET.ReadWriteBreak** [**ON** | **OFF**]

ON (default)	Setting read/write breakpoints uses AET triggers.
OFF	Setting read/write breakpoints does not use AET triggers.

AET.Register — Display the AET unit registers

Format:	**AET.Register** [*<file>* **/***<option>*]
<option>:	**SpotLight** | **DualPort** | **Track** | **CORE** *<core_number>*

Displays the AET unit registers.

<option>	For a description of the options, see **PER.view**.

AET.RESet — Reset AET settings

Format:	**AET.RESet**

Reset all AET settings to default.

AET.SHADOW — Set AET shadow memory address

Format:	**AET.SHADOW** [*<address>*]

Allows to define a memory area where contents written to the AET units are cached. This is helpful if write-only registers need to be debugged.

Format: **AET.STALL** [**ON** | **OFF**]

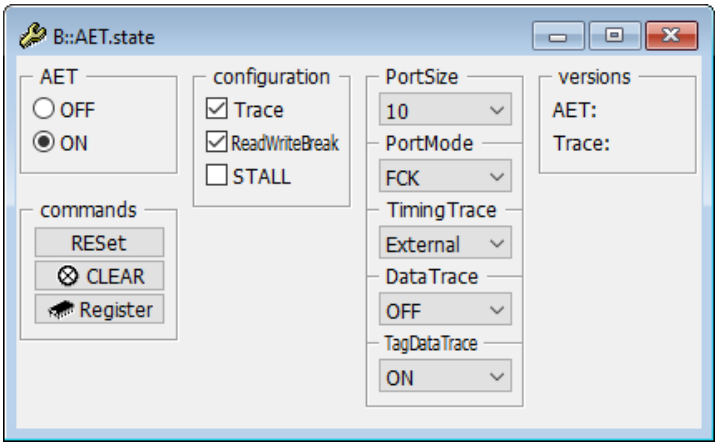
ON Allows the AET unit to stall the processor to prevent an output FIFO overflow. If enabled, the trace will be no longer real time.

OFF (default) Do not allow the AET unit to stall the processor to prevent an output FIFO overflow.

AET.state Display AET settings

Format: **AET.state**

Shows the AET configuration window.



AET.SyncPeriod Set synchronization frequency

Format: **AET.SyncPeriod** [*<packets>*]

Synchronisation and timestamp packets are generated periodically. The command **AET.SyncPeriod** allows to change the number of packets between two timestamps.

Format: **AET.TagDataTrace** *<def>*

<def>: **OFF**
Single
Range
ON

Default: ON

Specifies which data trace packets are tagged with the PC for correlation when a **/TraceData** breakpoint is set.

OFF Data trace packets are not tagged

Single Only data trace packets with addresses aligned to 8bit or 32bit within the **/TraceData** breakpoint are tagged with the PC for correlation.

Range Only data trace packets with addresses covered by the **/TraceData** breakpoint are tagged with the PC for correlation.

On All data trace packets are tagged with the PC for correlation

AET.TimingTrace Select AET trace timestamp information

Format: **AET.TimingTrace** *<mode>*

<mode>: **OFF | External | Detail**

There are three methods to timestamp trace information generated by an AET trace port:

OFF No timestamps are generated.

External (default) The trace information is timestamped with the global TRACE32 timestamp when it is stored into the trace memory of the TRACE32 trace tool.

Detail Timestamp Packets are exported by the AET unit.

Format: **AET.Trace** [**ON** | **OFF**]

ON (default) Trace information is generated. Triggers/external signals are activated as programmed.

OFF No trace information is generated. Only triggers/external signals are activated as programmed.

AET.TraceID

Change the default ID for an AET trace source

Format: **AET.TraceID** *<id>*

By default TRACE32 automatically assigns a trace source ID to all cores with a CoreSight trace source. The command **AET.TraceID** allows to assign an ID to a trace source overriding the defaults.

AET.TracePriority

Define priority of AET

Format: **AET.TracePrioriy** *<priority>*

The CoreSight Trace Funnel combines 2 to 8 ATB input ports to a single ATB output. An arbiter determines the priority of the ATB input port. Port 0 has the highest priority (0) and port 7 the lowest priority (7) by default.

The command **AET.TracePriority** allows to change the default priority of an ATB input port.

Analyzer — Trace method Analyzer, recording, and analysis commands

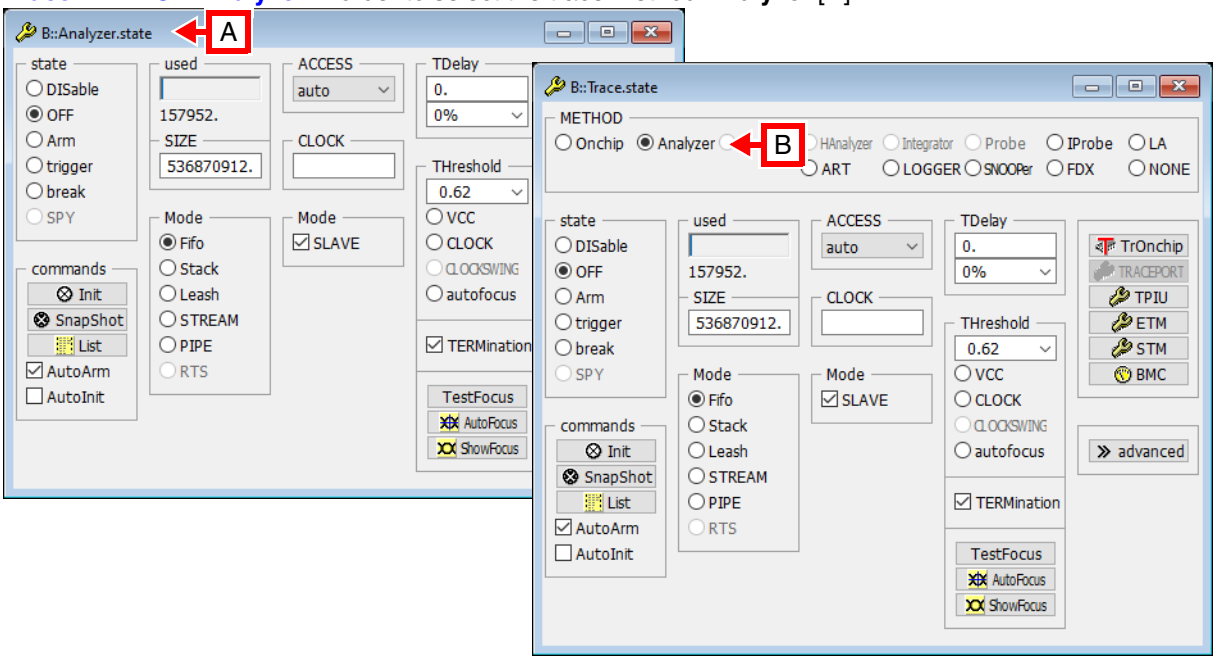
Analyzer is the command group that controls the trace of the following TRACE32 tools:

- **TRACE32 PowerTrace Ethernet, PowerTrace I, PowerTrace II, PowerTrace III, PowerTrace PX, PowerTrace Serial**
- **TRACE32 RiscTrace**
- **TRACE32 Instruction Set Simulator**
- **TRACE32 Font-End to virtual targets supporting trace**

The purpose of the trace method **Analyzer** is to provide a real-time trace to sample the program flow and, depending on the on-chip trace module, also data accesses.

For selecting and configuring the trace method Analyzer, use the TRACE32 command line or a PRACTICE script (*.cmm) or the **Analyzer.state** window [**A**].

Alternatively, use the **Trace.state** window: click the option **Analyzer** or execute the command **Trace.METHOD Analyzer** in order to select the trace method **Analyzer** [**B**].



The chapter **"Analyzer-specific Trace Commands"**, page 22 describes the Analyzer-specific configuration commands. While the chapter **"Generic Analyzer Trace Commands"**, page 29 lists the Analyzer trace analysis and display commands, which are shared with other TRACE32 trace methods.

See also

- Trace.METHOD
- 'Release Information' in 'Legacy Release History'

Analyzer.Mode — Set the trace operation mode

Format: **Analyzer.Mode** [*<mode>*]

<mode>:

Fifo
Stack
Leash
STREAM
PIPE
RTS

SLAVE [**ON** | **OFF**]
PrePost [**ON** | **OFF**]
PostTrace
PrePost [**ON** | **OFF**]
Prestore [**ON** | **OFF**] (deprecated) **Use ETM.DataTracePrestore instead.**
Poststore

BusTrace
ClockTrace
FLowTrace
RawTrace

MasterBrk [**ON** | **OFF**]
SlaveBrk [**ON** | **OFF**]

Selects the trace operation mode. The most common operation modes are:

Fifo — If the trace is full, new records will overwrite older records. The trace records always the last cycles before the break.

Stack — If the trace is full recording will be stopped. The trace always records the first cycles after starting the trace.

Leash — Stops the program execution when trace is nearly full.

STREAM

The trace data is immediately conveyed to a file on the host after it was placed into the trace. This procedure extends the size of the trace memory to up to several T Frames.

STREAM mode can only be used together with the Analyzer mode for the following TRACE32 trace tools:

- PowerTrace Serial
- PowerTrace II / PowerTrace III

TRACE32 POWERTRACE/ ETHERNET supports STREAM mode for some trace protocols. If it is not supported, the command Trace.Mode STREAM is blocked.

STREAM mode can only be used if the average data rate at the trace port does not exceed the maximum transmission rate of the host interface in use. Peak loads at the trace port are intercepted by the trace memory, which can be considered to be operating as a large FIFO.

The streaming file is placed into the TRACE32 temp directory (**OS.PresentTemporaryDirectory()**) by default and is named *<trace32_instance_id>***streama.t32** (**OS.ID()**). If you explicitly want to specify a location for the streaming file use the command **<trace>.STREAMFILE** *<file>*.

Note that the contents of the streaming file are in a proprietary format and not intended for use in external applications. See **Trace.EXPORT** for details on how to export trace data for external applications.

Please be aware that the streaming file is deleted as soon as you de-select the STREAM mode or when you quit TRACE32.

PIPE

The trace data is immediately conveyed to the host and distributed to user-defined trace sinks. Not supported with PowerTrace Ethernet 256/512MB. See **<trace>.PipeWRITE**.

RTS

The RTS radio button is only an indicator that shows if Real-time Profiling is enabled. For enabling RTS use the command **RTS.ON**.

Further operation modes:

BusTrace	Bus trace mode.
ClockTrace	Clock trace mode.
FlowTrace	Flow trace mode.
SLAVE [**ON** | **OFF**]	**ON** (default): Ties the trace to the execution of the program, i.e. trace and the filter/trigger work only during user program execution (very rarely used command). **OFF**: Separates the trace from the program execution, i.e. trace is recording even when the program execution is stopped (rarely used).

See also

■ <trace>.Mode ■ COVerage.METHOD

▲ 'Release Information' in 'Legacy Release History'

Analyzer.PIPECompression — Enable compression in PIPE mode

Format: **Analyzer.PIPECompression** [**ON** | **OFF**]

Default: OFF.

Enables compression in **PIPE** mode (**Analyzer.Mode PIPE**).

Analyzer.Program — Program trigger unit

Format: **Analyzer.Program** [*<file>*]

Opens an editor window, which is used for programming the trigger unit for Nexus MPC5xxx. The program entry in the window is guided by softkeys and the online-help system. To program the trace press the **Compile** button. After successful programming, the file name will be displayed in the trace status window. The default file name is the file currently used by the trigger unit. The file name default extension is ***.ts**. This command can be executed by clicking the **Edit** button in the trace state window. If the state of the trace is

ARM and this command is executed, the state is switched to **OFF** before programming the trigger unit, automatically. Refer to **"Complex Trigger Unit for Nexus MPC5xxx"** (app_ctu_mpc5xxx.pdf) for more information.

See also

■ SETUP.EDITOR

▲ 'Release Information' in 'Legacy Release History'

Analyzer.RecordAutoFill — Precision of run-time measurements

Format: **Analyzer.RecordAutoFill AUTO | ON | OFF**

Improves precision of run-time measurement for selective trace (e.g. using **TraceEnable**). Only supported for RH850 AURORA trace.

Analyzer.REMAP — Remap trace port channels

Format: **Analyzer.REMAP** [**RAW** | **SIGnal** | **PIN**] *<channel>* *<value>*

Allows the user to remap the trace port channels to a non-standard configuration.

RAW	Deprecated. Use **PIN** or **SIGnal** instead.
SIGnal	Remaps *<channel>* to preprocessor independent signal (data *<value>*).
PIN	Remaps *<channel>* to preprocessor dependent pin number *<value>*.
<channel>	Channel name as defined by trace port.
<value>	New assignment of *<channel>*.

See also

■ Analyzer.REMAP.CLOCK ■ Analyzer.REMAP.RESet ■ Analyzer.REMAP.state

▲ 'Pin Remapping' in 'AutoFocus User's Guide'

Analyzer.REMAP.CLOCK — Select input clock

Format: **Analyzer.REMAP.CLOCK CLK0 | CLK1 | CLK2 | CLK3**

Selects one of the four possible clock inputs as trace clock.

See also

- Analyzer.REMAP
- Analyzer.REMAP.state

Analyzer.REMAP.RESet — Reset pinout configuration

Format: **Analyzer.REMAP.RESet**

Resets the preprocessor pinout to its default configuration.

See also

- Analyzer.REMAP
- Analyzer.REMAP.state

▲ 'Pin Remapping' in 'AutoFocus User's Guide'

Analyzer.REMAP.state — Display remap configuration window

Format: **Analyzer.REMAP.state**

Displays the remap configuration window.

See also

- Analyzer.REMAP
- Analyzer.REMAP.CLOCK
- Analyzer.REMAP.RESet

▲ 'Pin Remapping' in 'AutoFocus User's Guide'

Format: **Analyzer.ReProgram** [*<file>*]

Programs the trigger unit of the trace with an existing program. The program should be error free, when using this command. To write an error free program, use the command **Analyzer.Program**. Refer to **"Complex Trigger Unit for Nexus MPC5xxx"** (app_ctu_mpc5xxx.pdf) for more information.

Analyzer.SAMPLE Set AutoFocus sample time offset

Format: **Analyzer.SAMPLE** [*<channel>*] *<time1>* [*<time2>*]

Use this command to manually configure sample times of the trace channels. It is typically used to restore values previously stored using the store button of the **Trace.ShowFocus** window, or the **STOre ANALYZERFOCUS** command.

<channel> Trace signal to be configured
If the parameter is omitted, all signals are configured with the *<time>* setting.

<time1> **Parameter Type**: Float. The value is interpreted as time in nanoseconds.
Sample time offset to trace clock.
- Positive value: later
- Negative value: earlier

<time2> **Parameter Type**: Float. The value is interpreted as time in nanoseconds.
For double data rate mode only:
Sample time offset to inverted trace clock (usually this is the sample time relative to the falling edge of the trace clock).
If the parameter is omitted, *<time1>* is used for both sample time offsets.

The available AutoFocus settings and features depend on the preprocessor used:

Preprocessor:	Features:	
AutoFocus II	configuration: time resolution: max. range: max. inter-channel range:	individual sample time per channel about 78ps per step +/- 63 * 0.078ns ABS(MAX(time1)-MIN(time1)) < 63*0.078ns
NEXUS-AutoFocus	configuration: time resolution: max. range: DDR-Mode:	single sample time applied to all channels about 750ps per step +/- 15 * 0.75ns ABS(time1-time2) < 15*0.75ns

Analyzer.TOut — Trigger output line

Format: **Analyzer.TOut BusA | EXT**

Sets up the trigger output line.

See also

■ Trace

Analyzer.TraceCLOCK — Improve timestamps on PowerTrace

Format: **Analyzer.TraceCLOCK** *<data_rate>*

Usually several records have the same timestamp on PowerTrace (often 8 or 12 records) due to chip internal FIFOs. In the case of a known exported data rate, this command can be used to improve the timestamps for certain trace protocols.

A special use-case of this command is when the AutoFocus preprocessor is connected to a Single-Wire-Trace module (i.e. Trace.PortType SWV). Then this command is used to specify the bit rate. The <data_rate> is then set to 1/(min-bit-size).

See also

■ Trace

▲ 'Release Information' in 'Legacy Release History'

Analyzer.ACCESS Define access path to program code for trace decoding

See command **<trace>.ACCESS** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 131).

Analyzer.Arm Arm the trace

See command **<trace>.Arm** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 134).

Analyzer.AutoArm Arm automatically

See command **<trace>.AutoArm** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 135).

Analyzer.AutoFocus Calibrate AUTOFOCUS preprocessor

See command **<trace>.AutoFocus** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 135).

Analyzer.AutoInit Automatic initialization

See command **<trace>.AutoInit** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 140).

Analyzer.AutoStart Automatic start

See command **<trace>.AutoStart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 140).

Analyzer.BookMark — Set a bookmark in trace listing

See command **<trace>.BookMark** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 140).

Analyzer.BookMarkToggle — Toggles a single trace bookmark

See command **<trace>.BookMarkToggle** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 143).

Analyzer.Chart — Display trace contents graphically

See command **<trace>.Chart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 144).

Analyzer.Chart.Address — Time between program events as a chart

See command **<trace>.Chart.Address** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 153).

Analyzer.Chart.AddressGROUP — Address group time chart

See command **<trace>.Chart.AddressGROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 155).

Analyzer.Chart.ChildTREE — Display callee context of a function as chart

See command **<trace>.Chart.ChildTREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 156).

Analyzer.Chart.DatasYmbol — Analyze pointer contents graphically

See command **<trace>.Chart.DatasYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 157).

Analyzer.Chart.DistriB — Distribution display graphically

See command **<trace>.Chart.DistriB** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 159).

Analyzer.Chart.Func — Function activity chart

See command **<trace>.Chart.Func** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 161).

Analyzer.Chart.GROUP — Group activity chart

See command **<trace>.Chart.GROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 162).

Analyzer.Chart.INTERRUPT — Display interrupt chart

See command **<trace>.Chart.INTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 163).

Analyzer.Chart.INTERRUPTTREE — Display interrupt nesting

See command **<trace>.Chart.INTERRUPTTREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 164).

Analyzer.Chart.Line — Graphical HLL lines analysis

See command **<trace>.Chart.Line** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 165).

Analyzer.Chart.MODULE — Code execution brocken down by module as chart

See command **<trace>.Chart.MODULE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 166).

Analyzer.Chart.Nesting — Show function nesting at cursor position

See command **<trace>.Chart.Nesting** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 167).

Analyzer.Chart.PAddress — Which instructions accessed data address

See command **<trace>.Chart.PAddress** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 168).

Analyzer.Chart.PROGRAM — Code execution broken down by program

See command **<trace>.Chart.PROGRAM** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 169).

Analyzer.Chart.PsYmbol — Shows which functions accessed data address

See command **<trace>.Chart.PsYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 170).

Analyzer.Chart.RUNNABLE — Runnable activity chart

See command **<trace>.Chart.RUNNABLE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 172).

Analyzer.Chart.sYmbol — Symbol analysis

See command **<trace>.Chart.sYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 173).

Analyzer.Chart.TASK — Task activity chart

See command **<trace>.Chart.TASK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 176).

Analyzer.Chart.TASKFunc Task related function run-time analysis (legacy)

See command **<trace>.Chart.TASKFunc** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 177).

Analyzer.Chart.TASKINFO Context ID special messages

See command **<trace>.Chart.TASKINFO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 177).

Analyzer.Chart.TASKINTR Display ISR2 time chart (ORTI)

See command **<trace>.Chart.TASKINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 178).

Analyzer.Chart.TASKKernel Task run-time chart with kernel markers (flat)

See command **<trace>.Chart.TASKKernel** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 179).

Analyzer.Chart.TASKORINTERRUPT Task and interrupt activity chart

See command **<trace>.Chart.TASKORINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 180).

Analyzer.Chart.TASKORINTRState Task and ISR2 state analysis

See command **<trace>.Chart.TASKORINTRState** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 181).

Analyzer.Chart.TASKSRV Service routine run-time analysis

See command **<trace>.Chart.TASKSRV** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 182).

Analyzer.Chart.TASKState — Task state analysis

See command **<trace>.Chart.TASKState** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 183).

Analyzer.Chart.TASKVSINTERRUPT — Time chart of interrupted tasks

See command **<trace>.Chart.TASKVSINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 185).

Analyzer.Chart.TASKVSINTR — Time chart of task-related interrupts

See command **<trace>.Chart.TASKVSINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 186).

Analyzer.Chart.TREE — Display function chart as tree view

See command **<trace>.Chart.TREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 187).

Analyzer.Chart.Var — Variable chart

See command **<trace>.Chart.Var** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 188).

Analyzer.Chart.VarState — Variable activity chart

See command **<trace>.Chart.VarState** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 189).

Analyzer.CLOCK — Clock to calculate time out of cycle count information

See command **<trace>.CLOCK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 191).

Analyzer.ComPare — Compare trace contents

See command **<trace>.ComPare** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 192).

Analyzer.ComPareCODE — Compare trace with memory

See command **<trace>.ComPareCODE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 194).

Analyzer.CustomTrace — Custom trace

See command **<trace>.CustomTrace** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 195).

Analyzer.CustomTraceLoad — Load a DLL for trace analysis/Unload all DLLs

See command **<trace>.CustomTraceLoad** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 196).

Analyzer.DISable — Disable the trace

See command **<trace>.DISable** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 197).

Analyzer.DRAW — Plot trace data against time

See command **<trace>.DRAW** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 201).

Analyzer.DRAW.channel — Plot no-data values against time

See command **<trace>.DRAW.channel** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 204).

Analyzer.DRAW.Data — Plot data values against time

See command **<trace>.DRAW.Data** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 206).

Analyzer.DRAW.Var — Plot variable values against time

See command **<trace>.DRAW.Var** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 210).

Analyzer.EXPORT — Export trace data for processing in other applications

See command **<trace>.EXPORT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 212).

Analyzer.EXPORT.ARTI — Export trace data as ARTI for CP

See command **<trace>.EXPORT.ARTI** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 213).

Analyzer.EXPORT.ARTIAP — Export trace data as ARTI for AP

See command **<trace>.EXPORT.ARTIAP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 214).

Analyzer.EXPORT.Ascii — Export trace data as ASCII

See command **<trace>.EXPORT.Ascii** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 215).

Analyzer.EXPORT.Bin — Export trace data as binary file

See command **<trace>.EXPORT.Bin** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 216).

Analyzer.EXPORT.BRANCHFLOW Export branch events from trace data

See command **<trace>.EXPORT.BRANCHFLOW** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 218).

Analyzer.EXPORT.CSVFunc Export the function nesting to a CSV file

See command **<trace>.EXPORT.CSVFunc** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 219).

Analyzer.EXPORT.cycles Export trace data

See command **<trace>.EXPORT.cycles** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 220).

Analyzer.EXPORT.Func Export function nesting

See command **<trace>.EXPORT.Func** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 223).

Analyzer.EXPORT.MDF Export trace data as MDF

See command **<trace>.EXPORT.MDF** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 224).

Analyzer.EXPORT.MTV Export in MCDS Trace Viewer format

See command **<trace>.EXPORT.MTV** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 225).

Analyzer.EXPORT.TASK Export task switches

See command **<trace>.EXPORT.TASK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 226).

Analyzer.EXPORT.TASKEVENTS Export task event to CSV

See command **<trace>.EXPORT.TASKEVENTS** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 227).

Analyzer.EXPORT.TracePort Export trace packets as recorded at trace port

See command **<trace>.EXPORT.TracePort** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 228).

Analyzer.EXPORT.VCD Export trace data in VCD format

See command **<trace>.EXPORT.VCD** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 230).

Analyzer.EXPORT.VERILOG Export trace data in VERILOG format

See command **<trace>.EXPORT.VERILOG** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 231).

Analyzer.EXPORT.VHDL Export trace data in VHDL format

See command **<trace>.EXPORT.VHDL** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 232).

Analyzer.ExtractCODE Extract code from trace

See command **<trace>.ExtractCODE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 232).

Analyzer.FILE Load a file into the file trace buffer

See command **<trace>.FILE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 233).

Analyzer.Find — Find specified entry in trace

See command **<trace>.Find** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 235).

Analyzer.FindAll — Find all specified entries in trace

See command **<trace>.FindAll** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 237).

Analyzer.FindChange — Search for changes in trace flow

See command **<trace>.FindChange** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 238).

Analyzer.FindProgram — Advanced trace search

See command **<trace>.FindProgram** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 239).

Analyzer.FindReProgram — Activate advanced existing trace search program

See command **<trace>.FindReProgram** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 240).

Analyzer.FindViewProgram — State of advanced trace search programming

See command **<trace>.FindViewProgram** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 240).

Analyzer.FLOWPROCESS — Process flowtrace

See command **<trace>.FLOWPROCESS** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 241).

Analyzer.FLOWSTART — Restart flowtrace processing

See command **<trace>.FLOWSTART** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 241).

Analyzer.Get — Display input level

See command **<trace>.Get** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 242).

Analyzer.GOTO — Move cursor to specified trace record

See command **<trace>.GOTO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 244).

Analyzer.Init — Initialize trace

See command **<trace>.Init** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 246).

Analyzer.JOINFILE — Concatenate several trace recordings

See command **<trace>.JOINFILE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 246).

Analyzer.List — List trace contents

See command **<trace>.List** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 248).

Analyzer.ListNesting — Analyze function nesting

See command **<trace>.ListNesting** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 263).

Analyzer.ListVar — List variable recorded to trace

See command **<trace>.ListVar** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 266).

Analyzer.LOAD — Load trace file for offline processing

See command **<trace>.LOAD** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 270).

Analyzer.MERGEFILE — Combine two trace files into one

See command **<trace>.MERGEFILE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 272).

Analyzer.OFF — Switch off

See command **<trace>.OFF** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 278).

Analyzer.PipeWRITE — Connect to a named pipe to stream trace data

See command **<trace>.PipeWRITE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 278).

Analyzer.PlatformCLOCK — Set clock for platform traces

See command **<trace>.PlatformCLOCK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 278).

Analyzer.PortFilter — Specify utilization of trace memory

See command **<trace>.PortFilter** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 279).

Analyzer.PortSize — Set external port size

See command **<trace>.PortSize** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 280).

Analyzer.PortType — Specify trace interface

See command **<trace>.PortType** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 280).

Analyzer.PROfile — Rolling live plots of trace data

See command **<trace>.PROfile** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 282).

Analyzer.PROfile.CTU — Display complex trigger unit counter profile

See command **<trace>.PROfile.CTU** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 282).

Analyzer.PROfileChart — Profile charts

See command **<trace>.PROfileChart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 283).

Analyzer.PROfileChart.Address — Address profile chart

See command **<trace>.PROfileChart.Address** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 289).

Analyzer.PROfileChart.AddressGROUP — Address group time chart

See command **<trace>.PROfileChart.AddressGROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 290).

Analyzer.PROfileChart.AddressRate — Address rate profile chart

See command **<trace>.PROfileChart.AddressRate** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 292).

Analyzer.PROfileChart.COUNTER Display a profile chart

See command **<trace>.PROfileChart.COUNTER** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 293).

Analyzer.PROfileChart.DatasYmbol Analyze pointer contents graphically

See command **<trace>.PROfileChart.DatasYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 295).

Analyzer.PROfileChart.DIStance Time interval for a single event

See command **<trace>.PROfileChart.DIStance** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 296).

Analyzer.PROfileChart.DistriB Distribution display in time slices

See command **<trace>.PROfileChart.DistriB** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 297).

Analyzer.PROfileChart.DURation Time between two events

See command **<trace>.PROfileChart.DURation** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 298).

Analyzer.PROfileChart.GROUP Group profile chart

See command **<trace>.PROfileChart.GROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 301).

Analyzer.PROfileChart.INTERRUPT Display interrupt profile chart

See command **<trace>.PROfileChart.INTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 302).

Analyzer.PROfileChart.Line HLL-line profile chart

See command **<trace>.PROfileChart.Line** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 303).

Analyzer.PROfileChart.MODULE Module profile chart

See command **<trace>.PROfileChart.MODULE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 304).

Analyzer.PROfileChart.PAddress Which instructions accessed data address

See command **<trace>.PROfileChart.PAddress** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 305).

Analyzer.PROfileChart.PROGRAM Program profile chart

See command **<trace>.PROfileChart.PROGRAM** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 306).

Analyzer.PROfileChart.PsYmbol Which functions accessed data address

See command **<trace>.PROfileChart.PsYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 307).

Analyzer.PROfileChart.Rate Event frequency

See command **<trace>.PROfileChart.Rate** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 309).

Analyzer.PROfileChart.RUNNABLE Runnable profile chart

See command **<trace>.PROfileChart.RUNNABLE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 311).

Analyzer.PROfileChart.sYmbol Dynamic program behavior graphically (flat)

See command **<trace>.PROfileChart.sYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 312).

Analyzer.PROfileChart.TASK Dynamic task behavior graphically (flat)

See command **<trace>.PROfileChart.TASK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 313).

Analyzer.PROfileChart.TASKINFO Context ID special messages

See command **<trace>.PROfileChart.TASKINFO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 314).

Analyzer.PROfileChart.TASKINTR ISR2 profile chart (ORTI)

See command **<trace>.PROfileChart.TASKINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 315).

Analyzer.PROfileChart.TASKKernel Task profile chart with kernel markers

See command **<trace>.PROfileChart.TASKKernel** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 316).

Analyzer.PROfileChart.TASKORINTERRUPT Task and interrupt profile chart

See command **<trace>.PROfileChart.TASKORINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 317).

Analyzer.PROfileChart.TASKSRV Profile chart of OS service routines

See command **<trace>.PROfileChart.TASKSRV** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 318).

Analyzer.PROfileChart.TASKVSINTERRUPT Interrupted tasks

See command **<trace>.PROfileChart.TASKVSINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 319).

Analyzer.PROfileChart.TASKVSINTR Profile chart for task-related interrupts

See command **<trace>.PROfileChart.TASKVSINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 320).

Analyzer.PROfileChart.Var Variable profile chart

See command **<trace>.PROfileChart.Var** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 321).

Analyzer.PROfileSTATistic Statistical analysis in a table versus time

See command **<trace>.PROfileSTATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 322).

Analyzer.PROfileSTATistic.Address Statistical analysis for addresses

See command **<trace>.PROfileSTATistic.Address** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 325).

Analyzer.PROfileSTATistic.AddressGROUP Stat. for address groups

See command **<trace>.PROfileSTATistic.AddressGROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 325).

Analyzer.PROfileSTATistic.COUNTER Statistical analysis for counter

See command **<trace>.PROfileSTATistic.COUNTER** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 326).

Analyzer.PROfileSTATistic.DatasYmbol Statistic analysis for pointer content

See command **<trace>.PROfileSTATistic.DatasYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 326).

Analyzer.PROfileSTATistic.DistriB Distribution statistical analysis

See command **<trace>.PROfileSTATistic.DistriB** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 327).

Analyzer.PROfileSTATistic.GROUP Statistical analysis for groups

See command **<trace>.PROfileSTATistic.GROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 328).

Analyzer.PROfileSTATistic.INTERRUPT Statistical analysis for interrupts

See command **<trace>.PROfileSTATistic.INTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 329).

Analyzer.PROfileSTATistic.Line Statistical analysis for HLL lines

See command **<trace>.PROfileSTATistic.Line** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 330).

Analyzer.PROfileSTATistic.MODULE Statistical analysis for modules

See command **<trace>.PROfileSTATistic.MODULE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 331).

Analyzer.PROfileSTATistic.PAddress Which instr. accessed data address

See command **<trace>.PROfileSTATistic.PAddress** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 332).

Analyzer.PROfileSTATistic.PROGRAM Statistical analysis for programs

See command **<trace>.PROfileSTATistic.PROGRAM** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 332).

Analyzer.PROfileSTATistic.PsYmbol Which functions accessed data address

See command **<trace>.PROfileSTATistic.PsYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 333).

Analyzer.PROfileSTATistic.RUNNABLE Statistical analysis for runnables

See command **<trace>.PROfileSTATistic.RUNNABLE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 333).

Analyzer.PROfileSTATistic.sYmbol Statistical analysis for symbols

See command **<trace>.PROfileSTATistic.sYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 334).

Analyzer.PROfileSTATistic.TASK Statistical analysis for tasks

See command **<trace>.PROfileSTATistic.TASK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 335).

Analyzer.PROfileSTATistic.TASKINFO Context ID special messages

See command **<trace>.PROfileSTATistic.TASKINFO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 335).

Analyzer.PROfileSTATistic.TASKINTR Statistical analysis for ISR2 (ORTI)

See command **<trace>.PROfileSTATistic.TASKINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 336).

Analyzer.PROfileSTATistic.TASKKernel Stat. analysis with kernel markers

See command **<trace>.PROfileSTATistic.TASKKernel** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 337).

Analyzer.PROfileSTATistic.TASKORINTERRUPT Interrupts and tasks

See command **<trace>.PROfileSTATistic.TASKORINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 337).

Analyzer.PROfileSTATistic.TASKSRV Analysis of OS service routines

See command **<trace>.PROfileSTATistic.TASKSRV** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 338).

Analyzer.PROfileSTATistic.TASKVSINTERRUPT Interrupted tasks

See command **<trace>.PROfileSTATistic.TASKVSINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 338).

Analyzer.PROTOcol Protocol analysis

See command **<trace>.PROTOcol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 339).

Analyzer.PROTOcol.Chart Graphic display for user-defined protocol

See command **<trace>.PROTOcol.Chart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 339).

Analyzer.PROTOcol.Draw Graphic display for user-defined protocol

See command **<trace>.PROTOcol.Draw** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 341).

Analyzer.PROTOcol.EXPORT Export trace buffer for user-defined protocol

See command **<trace>.PROTOcol.EXPORT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 342).

Analyzer.PROTOcol.Find Find in trace buffer for user-defined protocol

See command **<trace>.PROTOcol.Find** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 343).

Analyzer.PROTOcol.list Display trace buffer for user-defined protocol

See command **<trace>.PROTOcol.list** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 344).

Analyzer.PROTOcol.PROfileChart Profile chart for user-defined protocol

See command **<trace>.PROTOcol.PROfileChart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 347).

Analyzer.PROTOcol.PROfileSTATistic Profile chart for user-defined protocol

See command **<trace>.PROTOcol.PROfileSTATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 348).

Analyzer.PROTOcol.STATistic Display statistics for user-defined protocol

See command **<trace>.PROTOcol.STATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 350).

Analyzer.REF Set reference point for time measurement

See command **<trace>.REF** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 357).

Analyzer.RESet — Reset command

See command **<trace>.RESet** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 357).

Analyzer.SAVE — Save trace for postprocessing in TRACE32

See command **<trace>.SAVE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 358).

Analyzer.SelfArm — Automatic restart of trace recording

See command **<trace>.SelfArm** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 362).

Analyzer.ShowFocus — Display data eye for AUTOFOCUS preprocessor

See command **<trace>.ShowFocus** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 365).

Analyzer.ShowFocusClockEye — Display clock eye

See command **<trace>.ShowFocusClockEye** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 368).

Analyzer.ShowFocusEye — Display data eye

See command **<trace>.ShowFocusEye** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 370).

Analyzer.SIZE — Define buffer size

See command **<trace>.SIZE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 373).

Analyzer.SnapShot — Restart trace capturing once

See command **<trace>.SnapShot** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 373).

Analyzer.SPY — Adaptive stream and analysis

See command **<trace>.SPY** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 374).

Analyzer.state — Display trace configuration window

See command **<trace>.state** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 376).

Analyzer.STATistic — Statistic analysis

See command **<trace>.STATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 378).

Analyzer.STATistic.Address — Time between up to 8 program events

See command **<trace>.STATistic.Address** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 387).

Analyzer.STATistic.AddressDIStance — Time interval for single program event

See command **<trace>.STATistic.AddressDIStance** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 388).

Analyzer.STATistic.AddressDURation — Time between two program events

See command **<trace>.STATistic.AddressDURation** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 389).

Analyzer.STATistic.AddressGROUP Address group run-time analysis

See command **<trace>.STATistic.AddressGROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 391).

Analyzer.STATistic.ChildTREE Show callee context of a function

See command **<trace>.STATistic.ChildTREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 393).

Analyzer.STATistic.COLOR Assign colors to function for colored graphics

See command **<trace>.STATistic.COLOR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 394).

Analyzer.STATistic.CYcle Analyze cycle types

See command **<trace>.STATistic.CYcle** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 395).

Analyzer.STATistic.DatasYmbol Analyze pointer contents numerically

See command **<trace>.STATistic.DatasYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 398).

Analyzer.STATistic.DIStance Time interval for a single event

See command **<trace>.STATistic.DIStance** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 400).

Analyzer.STATistic.DistriB Distribution analysis

See command **<trace>.STATistic.DistriB** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 401).

Analyzer.STATistic.DURation — Time between two events

See command **<trace>.STATistic.DURation** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 402).

Analyzer.STATistic.FIRST — Start point for statistic analysis

See command **<trace>.STATistic.FIRST** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 404).

Analyzer.STATistic.Func — Nesting function runtime analysis

See command **<trace>.STATistic.Func** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 406).

Analyzer.STATistic.FuncDURation — Statistic analysis of single function

See command **<trace>.STATistic.FuncDURation** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 422).

Analyzer.STATistic.FuncDURationInternal — Statistic analysis of single func.

See command **<trace>.STATistic.FuncDURationInternal** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 423).

Analyzer.STATistic.GROUP — Group run-time analysis

See command **<trace>.STATistic.GROUP** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 424).

Analyzer.STATistic.Ignore — Ignore false records in statistic

See command **<trace>.STATistic.Ignore** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 426).

Analyzer.STATistic.INTERRUPT Interrupt statistic

See command **<trace>.STATistic.INTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 427).

Analyzer.STATistic.InterruptIsFunction Statistics interrupt processing

See command **<trace>.STATistic.InterruptIsFunction** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 428).

Analyzer.STATistic.InterruptIsKernel Statistics interrupt processing

See command **<trace>.STATistic.InterruptIsKernel** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 430).

Analyzer.STATistic.InterruptIsKernelFunction Statistics interrupt processing

See command **<trace>.STATistic.InterruptIsKernelFunction** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 430).

Analyzer.STATistic.InterruptIsTaskswitch Statistics interrupt processing

See command **<trace>.STATistic.InterruptIsTaskswitch** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 430).

Analyzer.STATistic.INTERRUPTTREE Display interrupt nesting

See command **<trace>.STATistic.INTERRUPTTREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 431).

Analyzer.STATistic.LAST End point for statistic analysis

See command **<trace>.STATistic.LAST** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 433).

Analyzer.STATistic.Line — High-level source code line analysis

See command **<trace>.STATistic.Line** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 435).

Analyzer.STATistic.LINKage — Per caller statistic of function

See command **<trace>.STATistic.LINKage** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 436).

Analyzer.STATistic.Measure — Analyze the performance of a single signal

See command **<trace>.STATistic.Measure** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 438).

Analyzer.STATistic.MODULE — Code execution broken down by module

See command **<trace>.STATistic.MODULE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 440).

Analyzer.STATistic.PAddress — Which instructions accessed data address

See command **<trace>.STATistic.PAddress** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 441).

Analyzer.STATistic.ParentTREE — Show the call context of a function

See command **<trace>.STATistic.ParentTREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 442).

Analyzer.STATistic.PROCESS — Re-process statistics

See command **<trace>.STATistic.PROCESS** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 444).

Analyzer.STATistic.PROGRAM Code execution broken down by program

See command **<trace>.STATistic.PROGRAM** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 445).

Analyzer.STATistic.PsYmbol Shows which functions accessed data address

See command **<trace>.STATistic.PsYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 446).

Analyzer.STATistic.RUNNABLE Runnable runtime analysis

See command **<trace>.STATistic.RUNNABLE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 448).

Analyzer.STATistic.RUNNABLEDURation Runnable duration analysis

See command **<trace>.STATistic.RUNNABLEDURation** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 449).

Analyzer.STATistic.Sort Specify sorting criteria for statistic commands

See command **<trace>.STATistic.Sort** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 450).

Analyzer.STATistic.sYmbol Flat run-time analysis

See command **<trace>.STATistic.sYmbol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 458).

Analyzer.STATistic.TASK Task activity statistic

See command **<trace>.STATistic.TASK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 461).

Analyzer.STATistic.TASKFunc Task related function run-time analysis

See command **<trace>.STATistic.TASKFunc** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 464).

Analyzer.STATistic.TASKINFO Context ID special messages

See command **<trace>.STATistic.TASKINFO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 464).

Analyzer.STATistic.TASKINTR ISR2 statistic (ORTI)

See command **<trace>.STATistic.TASKINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 465).

Analyzer.STATistic.TASKKernel Task analysis with kernel markers (flat)

See command **<trace>.STATistic.TASKKernel** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 466).

Analyzer.STATistic.TASKLOCK Analyze lock accesses from tasks

See command **<trace>.STATistic.TASKLOCK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 469).

Analyzer.STATistic.TASKORINTERRUPT Statistic of interrupts and tasks

See command **<trace>.STATistic.TASKORINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 470).

Analyzer.STATistic.TASKORINTRState Task and ISR2 statistic analysis

See command **<trace>.STATistic.TASKORINTRState** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 471).

Analyzer.STATistic.TASKSRV Analysis of time in OS service routines

See command **<trace>.STATistic.TASKSRV** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 472).

Analyzer.STATistic.TASKState Performance analysis

See command **<trace>.STATistic.TASKState** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 474).

Analyzer.STATistic.TASKStateDURation Task state runtime analysis

See command **<trace>.STATistic.TASKStateDURation** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 478).

Analyzer.STATistic.TASKTREE Tree display of task specific functions

See command **<trace>.STATistic.TASKTREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 479).

Analyzer.STATistic.TASKVSINTERRUPT Statistic of interrupts, task-related

See command **<trace>.STATistic.TASKVSINTERRUPT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 480).

Analyzer.STATistic.TASKVSINTR ISR2 statistic (ORTI), task related

See command **<trace>.STATistic.TASKVSINTR** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 481).

Analyzer.STATistic.TREE Tree display of nesting function run-time analysis

See command **<trace>.STATistic.TREE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 482).

Analyzer.STATistic.Use — Use records

See command **<trace>.STATistic.Use** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 483).

Analyzer.STATistic.Var — Statistic of variable accesses

See command **<trace>.STATistic.Var** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 484).

Analyzer.STREAMCompression — Select compression mode for streaming

See command **<trace>.STREAMCompression** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 485).

Analyzer.STREAMFILE — Specify temporary streaming file path

See command **<trace>.STREAMFILE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 486).

Analyzer.STREAMFileLimit — Set size limit for streaming file

See command **<trace>.STREAMFileLimit** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 487).

Analyzer.STREAMLOAD — Load streaming file from disk

See command **<trace>.STREAMLOAD** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 488).

Analyzer.STREAMSAVE — Save streaming file to disk

See command **<trace>.STREAMSAVE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 490).

Analyzer.TDelay — Trigger delay

See command **<trace>.TDelay** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 491).

Analyzer.TERMination — Use trace line termination of preprocessor

See command **<trace>.TERMination** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 493).

Analyzer.TestFocus — Test trace port recording

See command **<trace>.TestFocus** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 494).

Analyzer.TestFocusClockEye — Scan clock eye

See command **<trace>.TestFocusClockEye** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 496).

Analyzer.TestFocusEye — Check signal integrity

See command **<trace>.TestFocusEye** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 497).

Analyzer.TestUtilization — Tests trace port utilization

See command **<trace>.TestUtilization** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 497).

Analyzer.THreshold — Optimize threshold for trace lines

See command **<trace>.THreshold** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 498).

Analyzer.Timing — Waveform of trace buffer

See command **<trace>.Timing** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 499).

Analyzer.TraceCONNECT — Select on-chip peripheral sink

See command **<trace>.TraceCONNECT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 501).

Analyzer.TRACK — Set tracking record

See command **<trace>.TRACK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 502).

Analyzer.TSELect — Select trigger source

See command **<trace>.TSELect** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 503).

Analyzer.View — Display single record

See command **<trace>.View** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 504).

Analyzer.ZERO — Align timestamps of trace and timing analyzers

See command **<trace>.ZERO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 505).

APU

Auxiliary processing unit

APU (Auxiliary Processing Unit) commands are necessary to debug sub-cores where the debugger is implemented in a library usually written by the manufacturer or any other third party. Most **APU** commands are comparable to common debug commands. Therefore see according commands in the “General Commands Reference Guides” for more detailed information.

Please report any issues regarding the sub-core debugger to its manufacturer. For writing your own subcore debugger, see the **“API for Auxiliary Processing Unit”** (api_apu.pdf) documentation.

See also

- APU.Break
- APU.command
- APU.Data
- APU.Go
- APU.GREP
- APU.List
- APU.ListHll
- APU.LOAD
- APU.Register
- APU.REset
- APU.Step
- APU.StepHll
- APU.View

▲ ’Introduction’ in ’API for Auxiliary Processing Unit’

APU.Break

APU breakpoints

See also

- APU.Break.Delete
- APU.Break.direct
- APU.Break.Init
- APU.Break.List
- APU.Break.RESet
- APU.Break.Set
- APU
- APU.command

APU.Break.Delete

Delete APU breakpoint

Format: **APU.Break.Delete** [*<address>* | *<range>*] [*<option>*]

Deletes APU breakpoints from list.

Delete the breakpoint at the given address or inside the range. Without a parameter, this command removes all APU breakpoints.

```
APU.Break.Delete                ; Delete all APU breakpoints
```

See also

- APU.Break

Format: **APU.Break.direct** [*<address>*]

Stops the execution of the APU.

If no address is given the program is aborted at the next assembler instruction. If an address is given a temporary breakpoint is set, which is deleted when hit.

```
APU.Break.direct 0x2              ; Break if the APU reaches address 0x2.
```

See also

- APU.Break

APU.Break.Init Initialize APU breakpoint system

Format: **APU.Break.Init**

Removes all temporary breakpoints, set with the **Break** or **Go** command. Permanent breakpoints are not affected.

See also

- APU.Break

APU.Break.List List APU breakpoints

Format: **APU.Break.List**

Opens the **APU.Break.List** window, listing all APU breakpoints.

See also

- APU.Break

Format: **APU.Break.RESet**

Removes all breakpoints.

See also

- APU.Break

APU.Break.Set Set permanent APU breakpoint

Format: **APU.Break.Set** [*<address>* | *<range>*] [**/***<break>*]

<break>: **Program** | **ReadWrite** | **Read** | **Write**

Sets a breakpoint. The availability of on-chip breakpoints depends on the implementation of the APU Debugger and the Sub Core.

For information about the options, see **Break.Set**.

```
APU.Break.Set 0x2                ; Break at address 0x2.
```

See also

- APU.Break

APU.command — Execute APU specific command

Format: **APU.command** [*<cmd>*]

Executes any APU specific command. Processing is up to the APU, so there is no general list of options and parameters. For more information, please contact the developer of the APU debugger library.

<cmd> Any command to be sent to the APU library.

See also

- APU
- APU.Break
- APU.Data
- APU.Go
- APU.GREP
- APU.List
- APU.ListHll
- APU.LOAD
- APU.Register
- APU.RESet
- APU.Step
- APU.StepHll
- APU.View

APU.Data — APU data command group

See also

- APU.Data.dump
- APU.Data.List
- APU.Data.LOAD
- APU.Data.Set
- APU
- APU.command

APU.Data.dump — Data memory display

Format: **APU.Data.dump** [*<address>* |*<range>* | *<value>*] [*/<option>*]

Opens a memory dump window for the APU core similar to the **Data.dump** command.

For more information on the parameters and options, see **Data.dump**.

See also

- APU.Data

Format:	**APU.Data.List** [*<address>* |*<range>*] [**/***<option>*]

Opens a source listing window for the APU core similar to the **List.auto** command.

For more information on the parameters, see **List.auto**.

See also

- APU.Data

APU.Data.LOAD Load file

Format:	**APU.Data.LOAD.***<file_format>* [*<file>*] [*<address>*|*<range>*] [**/***<option>*]
<file_format>:	**auto** | **Binary** | **IntelHex** | **S1record** | **S2record** | **S3record** | …

Loads a binary file of type *<file_format>* to the APU memory. Note that not all formats are supported since there is no support for a specific compiler format.

For more information on the parameters, see **Data.LOAD**.

See also

- APU.Data

Format:	**APU.Data.Set** [*<address>* | *<range>*] **%***<format>* [*<data>* | *<string>*]
<format>:	**Byte** | **Word** | **Long**

Modifies the APU memory.

<address>, etc.	For more information on the parameters, see **Data.Set**.

See also

- APU.Data

APU.Go Start the APU

Format:	**APU.Go** [*<address>*]

Starts the real-time execution of the APU core.

An address can be specified as temporary breakpoint where execution stops. The breakpoint is deleted when it is hit.

```
APU.Go 0x2                          ; Run until address 0x2 is reached.
```

See also

- APU
- APU.command

Format:	**APU.GREP** *<string>* [*<file>*] [**/***<option>*]
<option>:	**Word** | **Case** | …

The command **APU.GREP** allows to search for a specific string in a (all) source files. It does basically the same as the **GREP** command, but instead of opening **Data.*** windows for displaying results it will open **APU.*** windows.

Word	Search for the whole word.
Case	Perform a case sensitive search.
…	For the other options, see **APU.List**.

```
APU.GREP "i"                    ; search for “i“ in all source files

APU.GREP "i" diabc1.c           ; search for “i“ in diabc1.c

APU.GREP "i" *.* /Word          ; search for the word “i“ in all source
                                ; files
```

See also

■ APU ■ APU.command

▲ ’Release Information’ in ’Legacy Release History’

APU.List View program

Format:	**APU.List** [*<address>* | *<range>*] [**/***<option>*]

Displays the APU program at the given address.

<address>	If *<address>* is omitted, the program is listed at the current PC. For more information on the parameters, see **List.auto**.

See also

■ APU ■ APU.command

Format: **APU.ListHll** [*<address>* | *<range>*] [*/<option>*]

Display the APU program in source format at the given address.

<address> If *<address>* is omitted, the program is listed at the current PC. For more information on the parameters, see **List.auto**.

See also

- APU
- APU.command

APU.LOAD Load APU library

Format: **APU.LOAD** *<file>* [*<string>* | *<address>* | *<value>*] (deprecated)

Loads the APU library from *<file>*. Depending on the implementation, one or more parameters are passed optionally or mandatory.

See also

- APU
- APU.command

APU.Register Show APU register window

Format: **APU.Register** [*<file>*] [*<tree_search_item>*]

Opens the **APU.Register** window, the content is defined in a peripheral file. For information on how to create peripheral files, see:

- **PER** command group
- **"Peripheral Files Programming Commands"** (per_prog.pdf)

Only registers that are memory mapped and accessible from the Main Core Debugger can be displayed.

<file> If *<file>* is omitted, `perapureg.per` is loaded by default. For more information on displaying peripheral files, see **PER.view**.

See also

- APU.Register.Set
- APU.Register.view
- APU
- APU.command

APU.Register.Set — Register modification

Format: **APU.Register.Set** *<register_name>* [*<value>*]

Modifies an APU core register. This command is currently not implemented.

See also

- APU.Register

APU.Register.view — Register display

Format: **APU.Register.view** [*/<option>*]

<option>: **SpotLight** | **DualPort** | **Track** | **AlternatingBackGround**
CORE *<core_number>*

Displays the APU core registers, the content is defined in a peripheral file.

<option> For a description of the options, see **PER.view**.

See also

- APU.Register

APU.RESet — Reset APU core

Format: **APU.RESet**

Unloads the APU library and resets APU debugger.

See also

- APU
- APU.command

APU.Step — Single-stepping

Format: **APU.Step**

Executes one program step in assembler mode.

See also

- APU
- APU.command

APU.StepHll — HLL single-stepping

Format: **APU.StepHll**

Executes one program step in high-level language mode.

See also

- APU
- APU.command

Format: **APU.View** [*<file>*] [**/***<tree_search_item>*]

Opens the peripheral window for the APU core.

<file> If *<file>* is omitted, `perapu.per` is loaded by default. For more information on displaying peripheral files, see **PER.view**.

For more information about how to create peripheral files, see:

- **PER** command group
- **"Peripheral Files Programming Commands"** (per_prog.pdf)

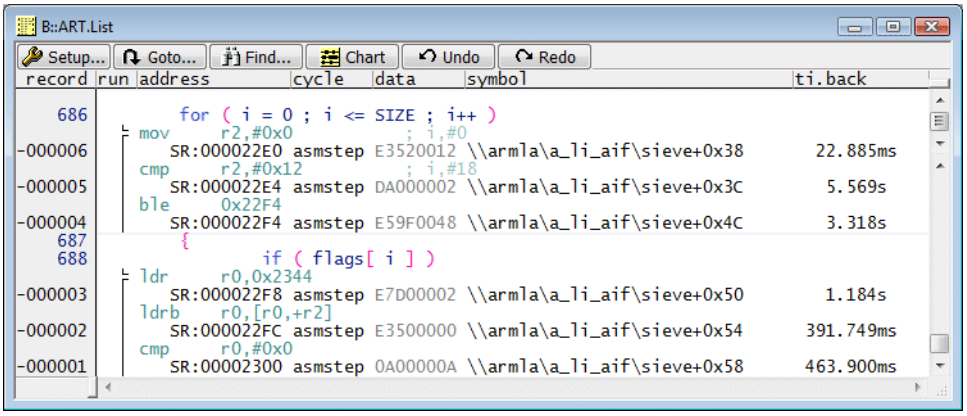
Only registers that are memory mapped and accessible from the Main Core Debugger can be displayed.

See also

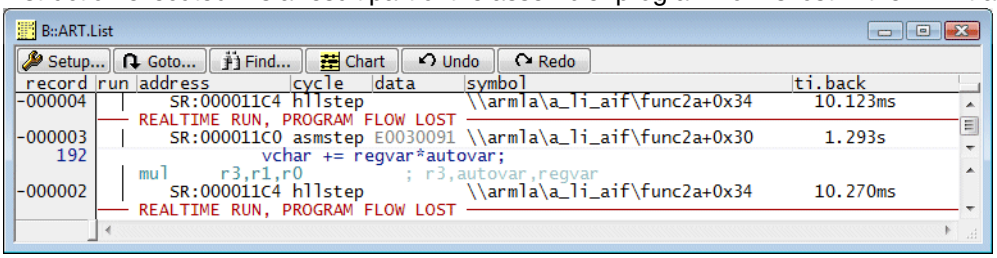
- APU
- APU.command

ART Trace method for Advanced Register Trace

ART (Advanced Register Trace) is the most basic TRACE32 trace method. When debugging in mixed (**Mode.Mix**) or assembly mode (**Mode.Asm**), ART logs all CPU registers when single stepping on assembler level. This information is used to provide a single step trace.

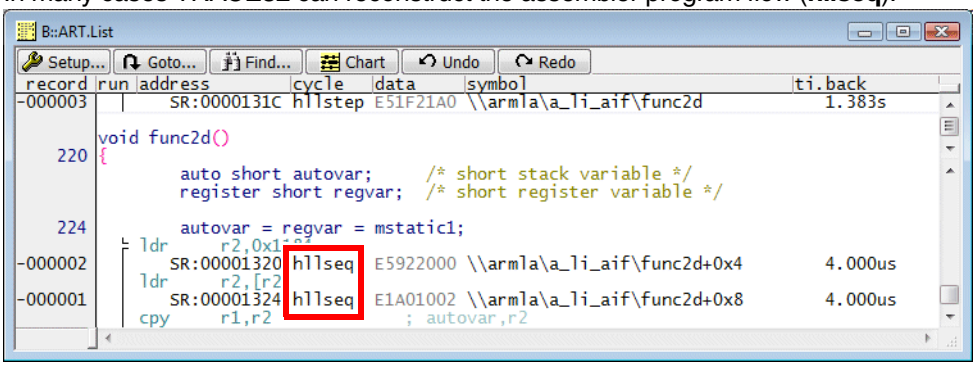


When performing high-level single steps, the program execution is however started and stopped at the next high-level code line. Due to this proceeding, the trace method ART cannot log the CPU registers for each instruction executed. As a result part of the assembler program flow is lost in the ART trace.



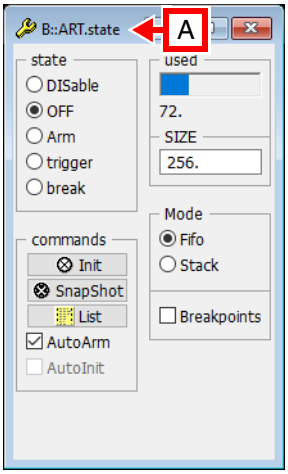
The default size of the ART is 256 single steps (records). The maximum size is 65536.

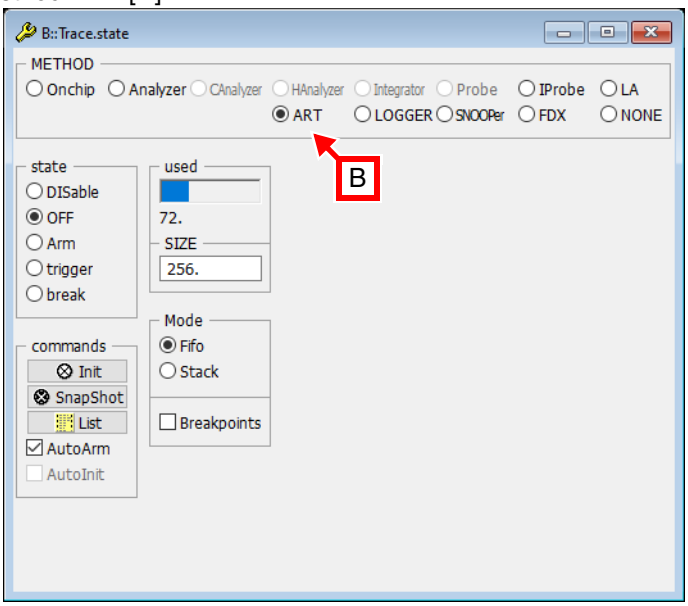
In many cases TRACE32 can reconstruct the assembler program flow (**hllseq**).



For selecting and configuring the trace method ART, use the TRACE32 command line of a PRACTICE script (*.cmm) or the **ART.state** window [**A**].

Alternatively, use the **Trace.state** window: Click the option **ART** or execute the command **Trace.METHOD ART** in order to select the trace method **ART** [**B**].





ART trace can also be used for code coverage. Please refer to **"ART Mode Code Coverage"** in Application Note for Trace-Based Code Coverage, page 98 (app_code_coverage.pdf) for more information.

The chapter **"ART-specific Trace Commands"**, page 76 describes the ART-specific configuration commands. While the chapter **"ART Trace Commands"**, page 77 lists the ART trace analysis and display commands, which are shared with other TRACE32 trace methods.

See also

- COVerage.METHOD
- Trace.METHOD
- ▲ 'Release Information' in 'Legacy Release History'

ART.Mode — Set the trace operation mode

Format: **ART.Mode** [*<mode>*]

<mode>: **Fifo**
Stack

Selects the trace operation mode.

Fifo — If the trace is full, new records will overwrite older records. The trace records always the last cycles before the break.

Stack — If the trace is full recording will be stopped. The trace always records the first cycles after starting the trace.

See also

- <trace>.Mode

ART.Arm — Arm the trace

See command **<trace>.Arm** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 134).

ART.AutoArm — Arm automatically

See command **<trace>.AutoArm** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 135).

ART.AutoInit — Automatic initialization

See command **<trace>.AutoInit** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 140).

ART.BookMark — Set a bookmark in trace listing

See command **<trace>.BookMark** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 140).

ART.Chart — Display trace contents graphically

See command **<trace>.Chart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 144).

ART.ComPare — Compare trace contents

See command **<trace>.ComPare** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 192).

ART.DISable — Disable the trace

See command **<trace>.DISable** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 197).

ART.DRAW — Plot trace data against time

See command **<trace>.DRAW** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 201).

ART.EXPORT — Export trace data for processing in other applications

See command **<trace>.EXPORT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 212).

ART.FILE — Load a file into the file trace buffer

See command **<trace>.FILE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 233).

ART.Find — Find specified entry in trace

See command **<trace>.Find** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 235).

ART.FindAll — Find all specified entries in trace

See command **<trace>.FindAll** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 237).

ART.FindChange — Search for changes in trace flow

See command **<trace>.FindChange** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 238).

ART.GOTO — Move cursor to specified trace record

See command **<trace>.GOTO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 244).

ART.Init — Initialize trace

See command **<trace>.Init** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 246).

ART.List — List trace contents

See command **<trace>.List** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 248).

ART.ListNesting — Analyze function nesting

See command **<trace>.ListNesting** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 263).

ART.LOAD — Load trace file for offline processing

See command **<trace>.LOAD** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 270).

ART.OFF — Switch off

See command **<trace>.OFF** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 278).

ART.PROfileChart — Profile charts

See command **<trace>.PROfileChart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 283).

ART.PROTOcol — Protocol analysis

See command **<trace>.PROTOcol** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 339).

ART.PROTOcol.Chart Graphic display for user-defined protocol

See command **<trace>.PROTOcol.Chart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 339).

ART.PROTOcol.Draw Graphic display for user-defined protocol

See command **<trace>.PROTOcol.Draw** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 341).

ART.PROTOcol.EXPORT Export trace buffer for user-defined protocol

See command **<trace>.PROTOcol.EXPORT** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 342).

ART.PROTOcol.Find Find in trace buffer for user-defined protocol

See command **<trace>.PROTOcol.Find** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 343).

ART.PROTOcol.list Display trace buffer for user-defined protocol

See command **<trace>.PROTOcol.list** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 344).

ART.PROTOcol.PROfileChart Profile chart for user-defined protocol

See command **<trace>.PROTOcol.PROfileChart** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 347).

ART.PROTOcol.PROfileSTATistic Profile chart for user-defined protocol

See command **<trace>.PROTOcol.PROfileSTATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 348).

ART.PROTOcol.STATistic — Display statistics for user-defined protocol

See command **<trace>.PROTOcol.STATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 350).

ART.REF — Set reference point for time measurement

See command **<trace>.REF** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 357).

ART.RESet — Reset command

See command **<trace>.RESet** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 357).

ART.SAVE — Save trace for postprocessing in TRACE32

See command **<trace>.SAVE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 358).

ART.SelfArm — Automatic restart of trace recording

See command **<trace>.SelfArm** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 362).

ART.SIZE — Define buffer size

See command **<trace>.SIZE** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 373).

ART.SnapShot — Restart trace capturing once

See command **<trace>.SnapShot** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 373).

ART.state — Display trace configuration window

See command **<trace>.state** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 376).

ART.STATistic — Statistic analysis

See command **<trace>.STATistic** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 378).

ART.Timing — Waveform of trace buffer

See command **<trace>.Timing** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 499).

ART.TRACK — Set tracking record

See command **<trace>.TRACK** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 502).

ART.View — Display single record

See command **<trace>.View** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 504).

ART.ZERO — Align timestamps of trace and timing analyzers

See command **<trace>.ZERO** in 'General Commands Reference Guide T' (general_ref_t.pdf, page 505).

AutoSTOre Save and restore settings (history, GUI, etc.) automatically

Format:	**AutoSTOre** *<file>* [*<item>* …] [**/***<option>*]
<item>:	**default** | **ALL** | **SYStem** … *<history_and_gui_settings>*
<option>:	**NoDate**

Restores settings from the previous TRACE32 session and stores specified settings automatically at the end of a TRACE32 session.

When **AutoSTOre** is executed, the following happens:

- **AutoSTOre** calls the PRACTICE script specified by *<file>*. The script is executed as if it was executed by the **DO** command.
- **AutoSTOre** registers the specified items to be stored when the TRACE32 session ends. The settings will be stored to the PRACTICE script specified by *<file>*.

The **AutoSTOre** command should be used only once per TRACE32 session. Usually it is used within the PRACTICE script file autostore.cmm (which you should not edit), but you can also use it again in the PRACTICE script files system-settings.cmm (in the TRACE32 system directory) or user-settings.cmm (in the user settings directory, on Windows %APPDATA%\TRACE32 or ~/.trace32 otherwise).

Alternatively, you can save settings manually with the **STOre** command and restore them with the **DO** command. Therefore you might want to use **SETUP.QUITDO** to execute **STOre** at the end of a TRACE32 session.

<file> or **,**	User-defined path and file name. If a comma is used instead, TRACE32 saves the file in the temporary directory of TRACE32. See example. The auto-generated file name consists of the return value of the **OS.ID()** function and the string `store.cmm`.
<item>, *<option>*	For a detailed description of *<item>* and *<option>,* refer to the **STOre** command.
<history_and_gui_settings>	See 'AutoSTOre' in 'PowerView Command Reference'.
default	When executing the **AutoSTOre** command without parameters (default), all settings will be stored, **except for the window setting**.

ALL	Stores all settings except the **Break** and **FLAG** information. For storing **Break** and **FLAG** information, see example.
SYStem …	All other keywords refer to the command settings of the same name.

Example 1: Restore settings saved by **AutoSTOre** in the previous TRACE32 session and register the saving of the following items when TRACE32 gets closed: Command history (`HISTORY`), the address and trace bookmarks (`BOOKMARK`) and the help bookmarks (`HELP`).

```
AutoSTOre , HISTORY BOOKMARK HELP
```

Example 2: For storing **Break** and **FLAG** information, please use the command:

```
STOre test.cmm ALL Break FLAG
```

See also

- BookMark.List
- ClipSTOre
- STOre
- SETUP.STOre

AVX — AVX registers (Advanced Vector Extension)

Intel® x86

The **AVX** command group is used to display and modify AVX (Advanced Vector Extension) registers of Intel® x86.

See also

- AVX.Init
- AVX.Set
- AVX.view
- AVX512
- AVX()
- 'Command Groups for Special Registers' in 'Intel® x86/x64 Debugger'
- 'AVX Functions' in 'General Function Reference'

AVX.Init — Initialize AVX registers

Intel® x86

Format: **AVX.Init**

Sets the AVX registers to their default values.

See also

- AVX
- AVX.view

AVX.Set — Modify AVX registers

Intel® x86

Format: **AVX.Set** <*register*> <*value*> … [**/**<*option*>]

Modifies the AVX registers.

<*option*> For a description of the options, see **Register.view**.

See also

- AVX
- AVX.view

Format: **AVX.view** [/*<option>*]

Displays the AVX registers.

<option> For a description of the options, see **Register.view**.

See also

■ AVX ■ AVX.Init ■ AVX.Set

▲ 'Release Information' in 'Legacy Release History'

AVX512 AVX512 registers (Advanced Vector Extension)

Intel® x86

The **AVX512** command group is used to display and modify AVX512 (Advanced Vector Extension) registers of Intel® x86.

See also

- AVX512.Init
- AVX512.Set
- AVX512.view
- AVX
- AVX512()
- 'Command Groups for Special Registers' in 'Intel® x86/x64 Debugger'
- 'AVX Functions' in 'General Function Reference'

AVX512.Init Initialize AVX512 registers

Intel® x86

Format: **AVX512.Init**

Sets the AVX512 registers to their default values.

See also

- AVX512
- AVX512.view

AVX512.Set Modify AVX512 registers

Intel® x86

Format: **AVX512.Set** *<register> <value>* … [*/<option>*]

Modifies the AVX512 registers.

<option> For a description of the options, see **Register.view**.

See also

- AVX512
- AVX512.view

Format: **AVX512.view** [*/<option>*]

Displays the AVX512 registers.

<option> For a description of the options, see **Register.view**.

See also

■ AVX512 ■ AVX512.Init ■ AVX512.Set

▲ 'Release Information' in 'Legacy Release History'