

trace-systemview

User Manual



MICROEJ[®]

Reference:	TLT-XXX-MAN-trace-systemview-trace-systemview
Version:	3.1.0
Revision:	XXX

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Chapter 1. File Documentation

1.1. LLMJVM_MONITOR_sysview.h File Reference

```
#include <stdint.h>
```

1.1.1. Functions

- void LLMJVM_MONITOR_SYSTEMVIEW_send_task_list (void)

Detailed Description

MicroEJ Trace library low level API.

Author: . MicroEJ Developer Team

Version: . 3.1.0

Date: . 24 July 2023

Definition in file C:/Jenkins/workspace/master2c57aa65/com.microej.clibrary.llimpl.trace-systemview/target~/ccomponentWorking/bsp/trace/inc/LLMJVM_MONITOR_sysview.h

1.2. LLTRACE_sysview_configuration.h File Reference

1.2.1. Macros

- #define MICROEJ_TRACE_MAX_THREAD_NAME_LENGTH (32)
- #define MICROEJ_TRACE_MAX_NB_THREADS (16)
- #define MICROEJ_TRACE_OVER_RTOS 1
- #define MICROEJ_TRACE_ENABLE_ALLOCATIONS 0
- #define MICROEJ_TRACE_ENABLE_EXCEPTIONS 1
- #define MICROEJ_TRACE_API_ID_OFFSET (500u)
- #define MICROEJ_TRACE_MAX_NB_MODULES (8)
- #define MICROEJ_TRACE_MAX_MODULE_DESCRIPTION_LENGTH (16)
- #define MICROEJ_TRACE_MODULE_DESCRIPTION_PREFIX "M="
- #define MICROEJ_TRACE_WAIT_FOR_SYSVIEW_CONNECTION 0

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1.3. LLMJVM_MONITOR_sysview.c File Reference

```
#include <LLMJVM_MONITOR_impl.h>
```

```
#include <MJVM_MONITOR.h>
```

```
#include <LLTRACE.h>
```

```
#include <SEGGER_SYSVIEW.h>
```

```
#include <stdio.h>
```

```
#include <string.h>
```

```
#include "LLMJVM_MONITOR_sysview.h"
```

```
#include "LLTRACE_sysview_configuration.h"
```

1.3.1. Macros

- #define THREAD_GC_UID (0xFF)
- #define THREAD_GC_NAME "GC"
- #define THREAD_GC_PRIORITY (11)
- #define apilD_ALLOCATE (0u)

- `#define apilD_EXCEPTION (1u)`

1.3.2. Functions

- `static void LLMJVM_MONITOR_SYSTEMVIEW_send_thread_info (int32_t thread_id)`
- `static void LLMJVM_MONITOR_SYSTEMVIEW_send_gc_thread_info ()`
- `void LLMJVM_MONITOR_SYSTEMVIEW_send_task_list (void)`
- `void LLMJVM_MONITOR_IMPL_initialize (bool auto_start)`
- `void LLMJVM_MONITOR_IMPL_on_shutdown (void)`
- `void LLMJVM_MONITOR_IMPL_on_thread_create (int32_t thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_thread_modified (int32_t thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_thread_state_changed (int32_t thread_id, MJVM_MONITOR_state_t new_state)`
- `void LLMJVM_MONITOR_IMPL_on_idle (void)`
- `void LLMJVM_MONITOR_IMPL_on_gc_start (int32_t current_thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_gc_stop (int32_t current_thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_allocate (void * type, int32_t size, void * method, void * instruction_address, int32_t total_memory, int32_t free_memory, bool immortal)`
- `void LLMJVM_MONITOR_IMPL_on_exception (void * exception_type, void * throw_method, void * throw_instruction_address, void * catch_method, void * catch_instruction_address, const char * message)`

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Definition in file `C:/Jenkins/workspace/master2c57aa65/com.microej.clibrary.llimpl.trace-systemview/target~/.ccomponentWorking/bsp/trace/src/LLMJVM_MONITOR_sysview.c`

1.4. LLTRACE_sysview.c File Reference

```
#include <LLTRACE_impl.h>
```

```
#include <SEGGER_SYSVIEW.h>
```

```
#include <string.h>
```

```
#include <stdbool.h>
```

```
#include <stdio.h>
```

```
#include "LLTRACE_sysview_configuration.h"
```

1.4.1. Variables

- SEGGER_SYSVIEW_MODULE LLTRACE_modules
- char * LLTRACE_module_names
- int32_t LLTRACE_next_free_module_offset
- bool LLTRACE_started

1.4.2. Functions

- void LLTRACE_IMPL_start ()
- void LLTRACE_IMPL_stop ()
- bool LLTRACE_IMPL_is_started ()
- int32_t LLTRACE_IMPL_declare_event_group (const char * group_name, int32_t nb_events)
- void LLTRACE_IMPL_record_event_void (int32_t group_id, int32_t event_id)
- void LLTRACE_IMPL_record_event_u32 (int32_t group_id, int32_t event_id, uint32_t value0)
- void LLTRACE_IMPL_record_event_u32x2 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2)
- void LLTRACE_IMPL_record_event_u32x3 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3)
- void LLTRACE_IMPL_record_event_u32x4 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4)
- void LLTRACE_IMPL_record_event_u32x5 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4, uint32_t value5)

- void LLTRACE_IMPL_record_event_u32x6 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4, uint32_t value5, uint32_t value6)
- void LLTRACE_IMPL_record_event_u32x7 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4, uint32_t value5, uint32_t value6, uint32_t value7)
- void LLTRACE_IMPL_record_event_u32x8 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4, uint32_t value5, uint32_t value6, uint32_t value7, uint32_t value8)
- void LLTRACE_IMPL_record_event_u32x9 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4, uint32_t value5, uint32_t value6, uint32_t value7, uint32_t value8, uint32_t value9)
- void LLTRACE_IMPL_record_event_u32x10 (int32_t group_id, int32_t event_id, uint32_t value1, uint32_t value2, uint32_t value3, uint32_t value4, uint32_t value5, uint32_t value6, uint32_t value7, uint32_t value8, uint32_t value9, uint32_t value10)
- void LLTRACE_IMPL_record_event_end (int32_t group_id, int32_t event_id)
- void LLTRACE_IMPL_record_event_end_u32 (int32_t group_id, int32_t event_id, uint32_t value1)

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