SCHEDULER

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Chapter 1

Data Structure Index

1.1 Data Structures

Here are the data structures with brief descriptions:

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Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

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This file include the interface of the SCHEDULER 9
C:/Users/houras/Desktop/scheduler/SCHEDULER_program.c
This file include the implementation of the SCHEDULER 11

Chapter 3

Data Structure Documentation

3.1 SysTask_t Struct Reference

types

Data Fields

- SysTaskInfo_t * **Task**
- u32 **RemainTickToExecute**
- u32 **PeriodTicks**
- u8 **State**

3.1.1 Detailed Description

types

The documentation for this struct was generated from the following file:

- C:/Users/houras/Desktop/scheduler/SCHEDULER_program.c

3.2 SysTaskInfo_t Struct Reference

Data Fields

- const Task_t *const **AppTask**
- u32 **delayTicks**

The documentation for this struct was generated from the following file:

- C:/Users/houras/Desktop/scheduler/SCHEDULER_interface.h

3.3 Task_t Struct Reference

Data Fields

- TaskRunnable_t **TaskRunnable**
- u32 **Period_TimeMS**
- u8 **State**

The documentation for this struct was generated from the following file:

- C:/Users/houras/Desktop/scheduler/SCHEDULER_interface.h

Chapter 4

File Documentation

4.1 C:/Users/houras/Desktop/scheduler/SCHEDULER_config.c File Reference

This file include the configuration of the SCHEDULER.

```
#include "STD_TYPES.h"
#include "SCHEDULER_interface.h"
#include "SCHEDULER_config.h"
```

Functions

- SysTaskInfo_t * SysTasksInfoFunc (void)

  function to return the arrar of tasks

Variables

- Task_t APP_Task

  Global Variables.
- Task_t **Lcd_Task**
- Task_t **Switch_Task**

4.1.1 Detailed Description

This file include the configuration of the SCHEDULER.

Author

kariman mohamed

Version

1.0

Date

20 March 2020

4.1.2 Function Documentation

4.1.2.1 SysTasksInfoFunc()

```
SysTaskInfo_t * SysTasksInfoFunc (
            void  )
```

function to return the arrar of tasks

functions prototypes

Returns

pointer to SysTaskInfo_t

Parameters

void	

4.1.3 Variable Documentation

4.1.3.1 APP_Task

```
Task_t APP_Task
```

Global Variables.

4.2 C:/Users/houras/Desktop/scheduler/SCHEDULER_config.h File Reference

This file include the configuration of the SCHEDULER.

Macros

- #define **SYSTICK_TICK_TIME_MS** 2
- #define **NUMBER_OF_TASKS** 1

4.2.1 Detailed Description

This file include the configuration of the SCHEDULER.

Author

kariman mohamed

Version

1.0

Date

20 March 2020

4.3 C:/Users/houras/Desktop/scheduler/SCHEDULER_interface.h File Reference

This file include the interface of the SCHEDULER.

Data Structures

- struct Task_t
- struct SysTaskInfo_t

Macros

- #define READY 1

  Macros and types.
- #define **SUSPEND** 0

Typedefs

- typedef void(∗ **TaskRunnable_t**) (void)

Functions

- void SCHEDULER_Init (void)

  functions prototypes
- void SCHEDULER_Start (void)

  Function to start SCHEDULER.

4.3.1 Detailed Description

This file include the interface of the SCHEDULER.

Author

kariman mohamed

Version

1.0

Date

20 March 2020

4.3.2 Macro Definition Documentation

4.3.2.1 READY

```
#define READY 1
```

Macros and types.

4.3.3 Function Documentation

4.3.3.1 SCHEDULER_Init()

```
void SCHEDULER_Init (
             void  )
```

functions prototypes

Function to initialize SCHEDULER

Returns

void

Parameters

void	functions prototypes

Function to initialize SCHEDULER

Returns

void

Parameters

void	

4.3.3.2 SCHEDULER_Start()

```
void SCHEDULER_Start (
             void  )
```

Function to start SCHEDULER.

Returns

void

Parameters

void	

4.4 C:/Users/houras/Desktop/scheduler/SCHEDULER_program.c File Reference

This file include the implementation of the SCHEDULER.

```
#include "STD_TYPES.h"
#include "SYSTICK_interface.h"
#include "SCHEDULER_interface.h"
#include "SCHEDULER_config.h"
```

Data Structures

- struct SysTask_t

  types

Functions

- SysTaskInfo_t * SysTasksInfoFunc (void)

  functions prototypes
- void SCHEDULER_Init (void)

  Functions definitions.
- void SCHEDULER_Start (void)

  Function to start SCHEDULER.

4.4.1 Detailed Description

This file include the implementation of the SCHEDULER.

Author

kariman mohamed

Version

1.0

Date

20 March 2020

4.4.2 Function Documentation

4.4.2.1 SCHEDULER_Init()

```
void SCHEDULER_Init (
            void  )
```

Functions definitions.

functions prototypes

Function to initialize SCHEDULER

Returns

void

Parameters

void	

4.4.2.2 SCHEDULER_Start()

```
void SCHEDULER_Start (
            void  )
```

Function to start SCHEDULER.

Returns

void

Parameters

void	

4.4.2.3 SysTasksInfoFunc()

```
SysTaskInfo_t* SysTasksInfoFunc (
            void  )
```

functions prototypes

functions prototypes

Returns

pointer to SysTaskInfo_t

Parameters

void	

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