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[RO]

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# MAXREFDES62# Code Documentation

V01.00

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# Contents

<b>1</b>	<b>Main Page</b>	<b>1</b>
1.1	Introduction . . . . .	1
<b>2</b>	<b>File Index</b>	<b>3</b>
2.1	File List . . . . .	3
<b>3</b>	<b>File Documentation</b>	<b>5</b>
3.1	source/init_config.c File Reference . . . . .	5
3.1.1	Detailed Description . . . . .	5
3.1.2	Function Documentation . . . . .	6
3.1.2.1	maxim_gpio_init . . . . .	6
3.1.2.2	maxim_uart_init . . . . .	6
3.1.3	Variable Documentation . . . . .	7
3.1.3.1	gpio_init_structure . . . . .	7
3.1.3.2	spi_init_structure . . . . .	7
3.1.3.3	usart_init_structure . . . . .	7
3.2	source/init_config.h File Reference . . . . .	7
3.2.1	Detailed Description . . . . .	7
3.2.2	Function Documentation . . . . .	8
3.2.2.1	maxim_gpio_init . . . . .	8
3.2.2.2	maxim_uart_init . . . . .	8
3.3	source/main.c File Reference . . . . .	9
3.3.1	Detailed Description . . . . .	9
3.3.2	Macro Definition Documentation . . . . .	10
3.3.2.1	MAJOR_REVISION . . . . .	10
3.3.2.2	MINOR_REVISION . . . . .	10
3.3.3	Function Documentation . . . . .	10
3.3.3.1	main . . . . .	10
3.4	source/maxim_device_specific_utilities.c File Reference . . . . .	10

3.4.1	Detailed Description	11
3.4.2	Function Documentation	11
3.4.2.1	maxim_keypress_loopback	11
3.4.2.2	maxim_send_file_loopback	12
3.5	source/maxim_device_specific_utilities.h File Reference	12
3.5.1	Detailed Description	12
3.5.2	Macro Definition Documentation	13
3.5.2.1	FAIL	13
3.5.2.2	PASS	13
3.5.3	Function Documentation	13
3.5.3.1	maxim_keypress_loopback	13
3.5.3.2	maxim_send_file_loopback	14
3.6	source/menu.c File Reference	14
3.6.1	Detailed Description	15
3.6.2	Function Documentation	15
3.6.2.1	maxim_menu_cls	15
3.6.2.2	maxim_menu_print_keypress_description	15
3.6.2.3	maxim_menu_print_line	16
3.6.2.4	maxim_menu_print_main_menu	16
3.6.2.5	maxim_menu_print_maxim_banner	16
3.6.2.6	maxim_menu_print_maxim_banner_big	16
3.6.2.7	maxim_menu_print_prompt	17
3.6.2.8	maxim_menu_print_send_file_description	17
3.7	source/menu.h File Reference	17
3.7.1	Detailed Description	18
3.7.2	Macro Definition Documentation	19
3.7.2.1	KEYPRESS_ARROW_DOWN	19
3.7.2.2	KEYPRESS_ARROW_LEFT	19
3.7.2.3	KEYPRESS_ARROW_RIGHT	19
3.7.2.4	KEYPRESS_ARROW_UP	19
3.7.2.5	KEYPRESS_END	19
3.7.2.6	MAIN_MENU	19
3.7.2.7	START_CONTINUOUS_KEYPRESS	20
3.7.2.8	START_SEND_FILE	20
3.7.2.9	WAIT_KEYPRESS	20
3.7.3	Function Documentation	20
3.7.3.1	maxim_menu_cls	20

3.7.3.2	<a href="#">maxim_menu_print_keypress_description</a>	20
3.7.3.3	<a href="#">maxim_menu_print_main_menu</a>	20
3.7.3.4	<a href="#">maxim_menu_print_maxim_banner</a>	21
3.7.3.5	<a href="#">maxim_menu_print_maxim_banner_big</a>	21
3.7.3.6	<a href="#">maxim_menu_print_prompt</a>	21
3.7.3.7	<a href="#">maxim_menu_print_send_file_description</a>	22
3.8	<a href="#">source/retarget.c File Reference</a>	22
3.8.1	<a href="#">Detailed Description</a>	22
3.8.2	<a href="#">Function Documentation</a>	23
3.8.2.1	<a href="#">_sys_exit</a>	23
3.8.2.2	<a href="#">_ttywrch</a>	23
3.8.2.3	<a href="#">ferror</a>	23
3.8.2.4	<a href="#">fgetc</a>	23
3.8.2.5	<a href="#">fputc</a>	23
3.8.2.6	<a href="#">getkey</a>	23
3.8.2.7	<a href="#">sendchar</a>	23
3.9	<a href="#">source/utilities.c File Reference</a>	23
3.9.1	<a href="#">Detailed Description</a>	24
3.9.2	<a href="#">Function Documentation</a>	24
3.9.2.1	<a href="#">maxim_delay</a>	24
3.10	<a href="#">source/utilities.h File Reference</a>	25
3.10.1	<a href="#">Detailed Description</a>	25
3.10.2	<a href="#">Macro Definition Documentation</a>	25
3.10.2.1	<a href="#">ONE_SECOND</a>	25
3.10.3	<a href="#">Function Documentation</a>	26
3.10.3.1	<a href="#">maxim_delay</a>	26





# Chapter 1

## Main Page

### 1.1 Introduction

This is the code documentation for the MAXREFDES62# subsystem reference design.

The Files page contains the File List page and the Globals page.

The Globals page contains the Functions, Variables, and Macros sub-pages.



## Chapter 2

# File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

source/ <a href="#">init_config.c</a> . . . . .	5
source/ <a href="#">init_config.h</a> . . . . .	7
source/ <a href="#">main.c</a> . . . . .	9
source/ <a href="#">maxim_device_specific_utilities.c</a> . . . . .	10
source/ <a href="#">maxim_device_specific_utilities.h</a> . . . . .	12
source/ <a href="#">menu.c</a> . . . . .	14
source/ <a href="#">menu.h</a> . . . . .	17
source/ <a href="#">retarget.c</a> . . . . .	22
source/ <a href="#">utilities.c</a> . . . . .	23
source/ <a href="#">utilities.h</a> . . . . .	25



## Chapter 3

# File Documentation

### 3.1 source/init\_config.c File Reference

```
#include "stm32f10x.h"
#include "stm32f10x_gpio.h"
#include "stm32f10x_usart.h"
#include "stm32f10x_spi.h"
#include "init_config.h"
```

#### Functions

- void [maxim\\_uart\\_init](#) (void)  
*Initialize the UART peripheral.*
- void [maxim\\_gpio\\_init](#) (void)  
*Initialize the GPIO peripheral.*

#### Variables

- GPIO\_InitTypeDef [gpio\\_init\\_structure](#)
- SPI\_InitTypeDef [spi\\_init\\_structure](#)
- USART\_InitTypeDef [usart\\_init\\_structure](#)

#### 3.1.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [init\\_config.c](#) Description: This module contains all the functions used to initialize the STM32F1 peripherals

Revision History:

9-17-2014 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

```

char (array) s_pmod_string[16]
float f_pmod_value
int n_pmod_value
int (array) an_pmod_value[16]
u16 u_pmod_value
u16 (array) au_pmod_value[16]
u8 uch_pmod_value
u8 (array) auch_pmod_buffer[16]
unsigned int un_pmod_value
int * pun_pmod_value
Definition in file init\_config.c.

```

### 3.1.2 Function Documentation

#### 3.1.2.1 void maxim\_gpio\_init ( void )

Initialize the GPIO peripheral.

##### Details

This function initializes the GPIO that are used in this application

##### Parameters

<i>None</i>	
-------------	--

##### Return values

<i>None</i>	
-------------	--

Definition at line 171 of file [init\\_config.c](#).

#### 3.1.2.2 void maxim\_uart\_init ( void )

Initialize the UART peripheral.

##### Details

This function initializes all UART peripherals.  
 UART1 for terminal program (baud rate = 921600)  
 UART2 connects to the MAX14783 (baud rate = 4000000)  
 UART3 connects to the MAX14789E (baud rate = 4000000)

##### Parameters

<i>None</i>	
-------------	--

**Return values**

<i>None</i>
-------------

Definition at line 71 of file init\_config.c.

**3.1.3 Variable Documentation****3.1.3.1 GPIO\_InitTypeDef gpio\_init\_structure**

Definition at line 67 of file init\_config.c.

**3.1.3.2 SPI\_InitTypeDef spi\_init\_structure**

Definition at line 68 of file init\_config.c.

**3.1.3.3 USART\_InitTypeDef usart\_init\_structure**

Definition at line 69 of file init\_config.c.

**3.2 source/init\_config.h File Reference****Functions**

- void [maxim\\_uart\\_init](#) (void)  
*Initialize the UART peripheral.*
- void [maxim\\_gpio\\_init](#) (void)  
*Initialize the GPIO peripheral.*

**3.2.1 Detailed Description**

\*\*\*\*\*

Project: MAXREFDES62# Filename: [init\\_config.h](#) Description: This module contains all the functions used to initialize the STM32F1 peripherals

Revision History:

9-17-2014 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

int n\_pmod\_value

int (array) an\_pmod\_value[16]

u16 u\_pmod\_value

u16 (array) au\_pmod\_value[16]  
u8 uch\_pmod\_value  
u8 (array) auch\_pmod\_buffer[16]  
unsigned int un\_pmod\_value  
int \* pun\_pmod\_value  
Definition in file [init\\_config.h](#).

### 3.2.2 Function Documentation

#### 3.2.2.1 void maxim\_gpio\_init ( void )

Initialize the GPIO peripheral.

##### Details

This function initializes the GPIO that are used in this application

##### Parameters

<i>None</i>	
-------------	--

##### Return values

<i>None</i>	
-------------	--

Definition at line 171 of file init\_config.c.

#### 3.2.2.2 void maxim\_uart\_init ( void )

Initialize the UART peripheral.

##### Details

This function initializes all UART peripherals.  
UART1 for terminal program (baud rate = 921600)  
UART2 connects to the MAX14783 (baud rate = 4000000)  
UART3 connects to the MAX14789E (baud rate = 4000000)

##### Parameters

<i>None</i>	
-------------	--

##### Return values

<i>None</i>	
-------------	--

Definition at line 71 of file init\_config.c.



### 3.3 source/main.c File Reference

```
#include "stm32f10x.h"
#include "stm32f10x_gpio.h"
#include "stm32f10x_rcc.h"
#include "stm32f10x_usart.h"
#include "stm32f10x_spi.h"
#include "init_config.h"
#include "menu.h"
#include "utilities.h"
#include "maxim_device_specific_utilities.h"
#include <stdio.h>
```

#### Macros

- #define [MAJOR\\_REVISION](#) 01
- #define [MINOR\\_REVISION](#) 00

#### Functions

- int [main](#) (void)  
*Main function for MAXREFDES62.*

#### 3.3.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [main.c](#) Description: This module contains the Main application for the MAXREF-DES62 example program.

Revision History:

09-16-14 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

int n\_pmod\_value

int (array) an\_pmod\_value[16]

u16 u\_pmod\_value

u16 (array) au\_pmod\_value[16]

u8 uch\_pmod\_value

u8 (array) auch\_pmod\_buffer[16]

unsigned int un\_pmod\_value

int \* pun\_pmod\_value

Definition in file [main.c](#).

### 3.3.2 Macro Definition Documentation

#### 3.3.2.1 `#define MAJOR_REVISION 01`

Definition at line 90 of file main.c.

#### 3.3.2.2 `#define MINOR_REVISION 00`

Definition at line 91 of file main.c.

### 3.3.3 Function Documentation

#### 3.3.3.1 `int main ( void )`

Main function for MAXREFDES62.

##### Details

This function initializes the peripherals and hardware. Displays the menu on the terminal program for user control.

##### Parameters

<i>None</i>	
-------------	--

##### Return values

<i>Always</i>	TRUE
---------------	------

Definition at line 105 of file main.c.

## 3.4 source/maxim\_device\_specific\_utilities.c File Reference

```
#include "maxim_device_specific_utilities.h"
#include "stm32f10x_gpio.h"
#include "stm32f10x_spi.h"
```

### Functions

- `uint8_t` [maxim\\_keypress\\_loopback](#) (`uint8_t` uch\_char)

*Keypress loopback test.*

- `uint8_t` [maxim\\_send\\_file\\_loopback](#) (`void`)

*Send file loopback test.*

### 3.4.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [maxim\\_device\\_specific\\_utilities.c](#) Description: This module is an embedded controller driver for the MAXREFDES62#. It contains high level functions: maxim\_keypress\_loopback maxim\_send\_file\_loopback

Revision History:

9/17/2014 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

int n\_pmod\_value

int (array) an\_pmod\_value[16]

u16 u\_pmod\_value

u16 (array) au\_pmod\_value[16]

u8 uch\_pmod\_value

u8 (array) auch\_pmod\_buffer[16]

unsigned int un\_pmod\_value

int \* pun\_pmod\_value

Definition in file [maxim\\_device\\_specific\\_utilities.c](#).

### 3.4.2 Function Documentation

#### 3.4.2.1 uint8\_t maxim\_keypress\_loopback ( uint8\_t uch\_char )

Keypress loopback test.

##### Details

This function waits for a character from UART1, then transmits it through UART2. If the output of the MAX14783 is connected to the input of the MAX14789E, then the same character will be received from UART3. This function checks the loopback character against the original character received from UART1.

##### Parameters

<i>None</i>	
-------------	--

##### Return values

<i>PASS</i>	or FAIL
-------------	---------

Definition at line 67 of file maxim\_device\_specific\_utilities.c.

### 3.4.2.2 uint8\_t maxim\_send\_file\_loopback ( void )

Send file loopback test.

#### Details

Similar to the keypress loopback test. This function continuously receives data from the terminal program. Loopback tests are done on each received character. Function returns when the wait time is over 1 second, that indicates the end of file.

#### Parameters

<i>None</i>	
-------------	--

#### Return values

<i>PASS</i>	or FAIL
-------------	---------

Definition at line 105 of file maxim\_device\_specific\_utilities.c.

## 3.5 source/maxim\_device\_specific\_utilities.h File Reference

```
#include "stm32f10x.h"
```

### Macros

- #define [PASS](#) 1
- #define [FAIL](#) 0

### Functions

- uint8\_t [maxim\\_keypress\\_loopback](#) (uint8\_t uch\_char)  
*Keypress loopback test.*
- uint8\_t [maxim\\_send\\_file\\_loopback](#) (void)  
*Send file loopback test.*

### 3.5.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES63# Filename: [maxim\\_device\\_specific\\_utilities.h](#) Description: This module is an embedded controller driver for the MAXREFDES63#. It contains high level functions: maxim\_max14900e\_init() maxim\_set\_output

```
This driver can be dropped into a user's application as a starting
point for development of an end application
```

Revision History:

9/17/2014 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

```
char ch_pmod_value
char (array) s_pmod_string[16]
float f_pmod_value
int n_pmod_value
int (array) an_pmod_value[16]
u16 u_pmod_value
u16 (array) au_pmod_value[16]
u8 uch_pmod_value
u8 (array) auch_pmod_buffer[16]
unsigned int un_pmod_value
int * pun_pmod_value
```

Definition in file [maxim\\_device\\_specific\\_utilities.h](#).

## 3.5.2 Macro Definition Documentation

### 3.5.2.1 #define FAIL 0

Definition at line 72 of file maxim\_device\_specific\_utilities.h.

### 3.5.2.2 #define PASS 1

Definition at line 71 of file maxim\_device\_specific\_utilities.h.

## 3.5.3 Function Documentation

### 3.5.3.1 uint8\_t maxim\_keypress\_loopback ( uint8\_t uch\_char )

Keypress loopback test.

#### Details

This function waits for a character from UART1, then transmits it through UART2. If the output of the MAX14783 is connected to the input of the MAX14789E, then the same character will be received from UART3. This function checks the loopback character against the original character received from UART1.

#### Parameters

<i>None</i>
-------------

#### Return values

<i>PASS</i> or <i>FAIL</i>
----------------------------

Definition at line 67 of file maxim\_device\_specific\_utilities.c.

### 3.5.3.2 uint8\_t maxim\_send\_file\_loopback ( void )

Send file loopback test.

#### Details

Similar to the keypress loopback test. This function continuously receives data from the terminal program. Loopback tests are done on each received character. Function returns when the wait time is over 1 second, that indicates the end of file.

#### Parameters

None	
------	--

#### Return values

PASS	or FAIL
------	---------

Definition at line 105 of file maxim\_device\_specific\_utilities.c.

## 3.6 source/menu.c File Reference

```
#include "stdio.h"
#include "menu.h"
```

### Functions

- void [maxim\\_menu\\_cls](#) ()  
*Function to clear the screen via Hyperterminal.*
- void [maxim\\_menu\\_print\\_maxim\\_banner](#) ()  
*Print standard Maxim banner at top of Hyperterminal screen.*
- void [maxim\\_menu\\_print\\_maxim\\_banner\\_big](#) ()  
*Print large Maxim banner at top of Hyperterminal screen.*
- void [maxim\\_menu\\_print\\_prompt](#) ()  
*Print a standard prompt for keyboard input ">".*
- void [maxim\\_menu\\_print\\_line](#) ()  
*Print one line of dashes across the screen via Hyperterminal.*
- void [maxim\\_menu\\_print\\_main\\_menu](#) ()  
*Print the main menu listing choice of module to test.*
- void [maxim\\_menu\\_print\\_keypress\\_description](#) ()  
*Print keypress mode description.*
- void [maxim\\_menu\\_print\\_send\\_file\\_description](#) ()  
*Print send file mode description.*

### 3.6.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [menu.c](#) Description: This module contains all the functions used to generate the menus and menu options used to run the MAXREFDES62# example firmware.

Revision History:

9-16-14 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

int n\_pmod\_value

int (array) an\_pmod\_value[16]

u16 u\_pmod\_value

u16 (array) au\_pmod\_value[16]

u8 uch\_pmod\_value

u8 (array) auch\_pmod\_buffer[16]

unsigned int un\_pmod\_value

int \* pun\_pmod\_value

Definition in file [menu.c](#).

### 3.6.2 Function Documentation

#### 3.6.2.1 void maxim\_menu\_cls ( void )

Function to clear the screen via Hyperterminal.

##### Parameters

<i>None</i>	
-------------	--

##### Return values

<i>None</i>	
-------------	--

Definition at line 65 of file menu.c.

#### 3.6.2.2 void maxim\_menu\_print\_keypress\_description ( void )

Print keypress mode description.

**Details.**

**Return values**

<i>None</i>	
-------------	--

Definition at line 181 of file menu.c.

**3.6.2.3 void maxim\_menu\_print\_line ( )**

Print one line of dashes across the screen via Hyperterminal.

**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 151 of file menu.c.

**3.6.2.4 void maxim\_menu\_print\_main\_menu ( void )**

Print the main menu listing choice of module to test.

**Details.****Return values**

<i>None</i>	
-------------	--

Definition at line 163 of file menu.c.

**3.6.2.5 void maxim\_menu\_print\_maxim\_banner ( void )**

Print standard Maxim banner at top of Hyperterminal screen.

**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 79 of file menu.c.

**3.6.2.6 void maxim\_menu\_print\_maxim\_banner\_big ( void )**

Print large Maxim banner at top of Hyperterminal screen.



**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 103 of file menu.c.

**3.6.2.7 void maxim\_menu\_print\_prompt ( void )**

Print a standard prompt for keyboard input ">".

**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 137 of file menu.c.

**3.6.2.8 void maxim\_menu\_print\_send\_file\_description ( void )**

Print send file mode description.

**Details.****Return values**

<i>None</i>	
-------------	--

Definition at line 201 of file menu.c.

**3.7 source/menu.h File Reference**

```
#include "stm32f10x.h"
#include "stdio.h"
```

**Macros**

- #define `MAIN_MENU` 0  
// Menu state machine state
- #define `WAIT_KEYPRESS` 1  
// Menu state machine state

- `#define START_CONTINUOUS_KEYPRESS 2`  
*// Menu state machine state*
- `#define START_SEND_FILE 3`  
*// Menu state machine state*
- `#define KEYPRESS_ARROW_UP 240`  
*Assign up-arrow an extended ascii code which won't be used elsewhere.*
- `#define KEYPRESS_ARROW_DOWN 241`  
*Assign up-arrow an extended ascii code which won't be used elsewhere.*
- `#define KEYPRESS_ARROW_LEFT 242`  
*Assign up-arrow an extended ascii code which won't be used elsewhere.*
- `#define KEYPRESS_ARROW_RIGHT 243`  
*Assign up-arrow an extended ascii code which won't be used elsewhere.*
- `#define KEYPRESS_END 244`  
*Assign up-arrow an extended ascii code which won't be used elsewhere.*

## Functions

- void `maxim_menu_cls` (void)  
*Function to clear the screen via Hyperterminal.*
- void `maxim_menu_print_maxim_banner` (void)  
*Print standard Maxim banner at top of Hyperterminal screen.*
- void `maxim_menu_print_maxim_banner_big` (void)  
*Print large Maxim banner at top of Hyperterminal screen.*
- void `maxim_menu_print_prompt` (void)  
*Print a standard prompt for keyboard input ">".*
- void `maxim_menu_print_main_menu` (void)  
*Print the main menu listing choice of module to test.*
- void `maxim_menu_print_send_file_description` (void)  
*Print send file mode description.*
- void `maxim_menu_print_keypress_description` (void)  
*Print keypress mode description.*

### 3.7.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: `menu.h` Description: This module contains all the functions used to generate the menus and menu options used to run the MAXREFDES62 example firmware.

Revision History:

09-16-14 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char `ch_pmod_value`

char (array) `s_pmod_string[16]`

float `f_pmod_value`

int `n_pmod_value`

```
int (array) an_pmod_value[16]
u16 u_pmod_value
u16 (array) au_pmod_value[16]
u8 uch_pmod_value
u8 (array) auch_pmod_buffer[16]
unsigned int un_pmod_value
int * pun_pmod_value
Definition in file menu.h.
```

## 3.7.2 Macro Definition Documentation

### 3.7.2.1 **#define KEYPRESS\_ARROW\_DOWN 241**

Assign up-arrow an extended ascii code which won't be used elsewhere.  
Definition at line 74 of file menu.h.

### 3.7.2.2 **#define KEYPRESS\_ARROW\_LEFT 242**

Assign up-arrow an extended ascii code which won't be used elsewhere.  
Definition at line 75 of file menu.h.

### 3.7.2.3 **#define KEYPRESS\_ARROW\_RIGHT 243**

Assign up-arrow an extended ascii code which won't be used elsewhere.  
Definition at line 76 of file menu.h.

### 3.7.2.4 **#define KEYPRESS\_ARROW\_UP 240**

Assign up-arrow an extended ascii code which won't be used elsewhere.  
Definition at line 73 of file menu.h.

### 3.7.2.5 **#define KEYPRESS\_END 244**

Assign up-arrow an extended ascii code which won't be used elsewhere.  
Definition at line 77 of file menu.h.

### 3.7.2.6 **#define MAIN\_MENU 0**

```
// Menu state machine state
Definition at line 68 of file menu.h.
```

### 3.7.2.7 `#define START_CONTINUOUS_KEYPRESS 2`

// Menu state machine state

Definition at line 70 of file menu.h.

### 3.7.2.8 `#define START_SEND_FILE 3`

// Menu state machine state

Definition at line 71 of file menu.h.

### 3.7.2.9 `#define WAIT_KEYPRESS 1`

// Menu state machine state

Definition at line 69 of file menu.h.

## 3.7.3 Function Documentation

### 3.7.3.1 `void maxim_menu_cls ( void )`

Function to clear the screen via Hyperterminal.

#### Parameters

<i>None</i>	
-------------	--

#### Return values

<i>None</i>	
-------------	--

Definition at line 65 of file menu.c.

### 3.7.3.2 `void maxim_menu_print_keypress_description ( void )`

Print keypress mode description.

#### Details.

#### Return values

<i>None</i>	
-------------	--

Definition at line 181 of file menu.c.

### 3.7.3.3 `void maxim_menu_print_main_menu ( void )`

Print the main menu listing choice of module to test.

**Details.****Return values**

<i>None</i>	
-------------	--

Definition at line 163 of file menu.c.

**3.7.3.4 void maxim\_menu\_print\_maxim\_banner ( void )**

Print standard Maxim banner at top of Hyperterminal screen.

**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 79 of file menu.c.

**3.7.3.5 void maxim\_menu\_print\_maxim\_banner\_big ( void )**

Print large Maxim banner at top of Hyperterminal screen.

**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 103 of file menu.c.

**3.7.3.6 void maxim\_menu\_print\_prompt ( void )**

Print a standard prompt for keyboard input ">".

**Parameters**

<i>None</i>	
-------------	--

**Return values**

<i>None</i>	
-------------	--

Definition at line 137 of file menu.c.

### 3.7.3.7 void maxim\_menu\_print\_send\_file\_description ( void )

Print send file mode description.

**Details.**

#### Return values

None
------

Definition at line 201 of file menu.c.

## 3.8 source/retarget.c File Reference

```
#include <stdio.h>
#include <rt_misc.h>
#include "stm32f10x.h"
#include "stm32f10x_usart.h"
```

### Functions

- int [sendchar](#) (int c)
- int [getkey](#) (void)
- int [fputc](#) (int c, FILE \*f)
- int [fgetc](#) (FILE \*f)
- int [ferror](#) (FILE \*f)
- void [\\_\\_ttywrch](#) (int c)
- void [\\_sys\\_exit](#) (int return\_code)

### 3.8.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [retarget.c](#) Description: This file redefines functions used by printf() for outputting characters and getchar() for inputting characters. The printf() function ultimately relies on the [fputc\(\)](#) function to operate. The [fputc\(\)](#) has been implemented using USART\_SendData() Similarly, getchar() relies on the [fgetc\(\)](#) function to operate. [fgetc\(\)](#) has been implemented using USART\_ReceiveData()

Revision History:

04-05-13 Rev 01.00 MTS Initial release.

02-27-14 Rev 02.00 MTS Re-release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

```
int n_pmod_value
int (array) an_pmod_value[16]
u16 u_pmod_value
u16 (array) au_pmod_value[16]
u8 uch_pmod_value
u8 (array) auch_pmod_buffer[16]
unsigned int un_pmod_value
int * pun_pmod_value
Definition in file retarget.c.
```

### 3.8.2 Function Documentation

#### 3.8.2.1 void \_sys\_exit ( int *return\_code* )

Definition at line 115 of file [retarget.c](#).

#### 3.8.2.2 void \_ttywrch ( int *c* )

Definition at line 108 of file [retarget.c](#).

#### 3.8.2.3 int ferror ( FILE \* *f* )

Definition at line 102 of file [retarget.c](#).

#### 3.8.2.4 int fgetc ( FILE \* *f* )

Definition at line 91 of file [retarget.c](#).

#### 3.8.2.5 int fputc ( int *c*, FILE \* *f* )

Definition at line 83 of file [retarget.c](#).

#### 3.8.2.6 int getkey ( void )

#### 3.8.2.7 int sendchar ( int *c* )

### 3.9 source/utilities.c File Reference

```
#include "utilities.h"
#include "stm32f10x.h"
#include "stdio.h"
#include "stdlib.h"
```

## Functions

- void [maxim\\_delay](#) (uint32\_t un\_delay)  
*Delay function.*

### 3.9.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [utilities.c](#) Description: This module contains a collection of general utility functions which are not specific to any particular module.

Revision History:

9/17/2014 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

int n\_pmod\_value

int (array) an\_pmod\_value[16]

u16 u\_pmod\_value

u16 (array) au\_pmod\_value[16]

u8 uch\_pmod\_value

u8 (array) auch\_pmod\_buffer[16]

unsigned int un\_pmod\_value

int \* pun\_pmod\_value

Definition in file [utilities.c](#).

### 3.9.2 Function Documentation

#### 3.9.2.1 void [maxim\\_delay](#) ( uint32\_t *un\_delay* )

Delay function.

##### Parameters

in	<i>un_delay</i>	-delay factor
----	-----------------	---------------

##### Return values

<i>None</i>
-------------

Definition at line 67 of file utilities.c.



## 3.10 source/utilities.h File Reference

```
#include "stm32f10x.h"
```

### Macros

- #define [ONE\\_SECOND](#) 7200000

### Functions

- void [maxim\\_delay](#) (uint32\_t un\_delay)  
*Delay function.*

#### 3.10.1 Detailed Description

\*\*\*\*\*

Project: MAXREFDES62# Filename: [utilities.h](#) Description: This module contains a collection of general utility functions which are not specific to any particular module.

Revision History:

9/17/2014 Rev 01.00 GL Initial release.

This code follows the following naming conventions:

char ch\_pmod\_value

char (array) s\_pmod\_string[16]

float f\_pmod\_value

int n\_pmod\_value

int (array) an\_pmod\_value[16]

u16 u\_pmod\_value

u16 (array) au\_pmod\_value[16]

u8 uch\_pmod\_value

u8 (array) auch\_pmod\_buffer[16]

unsigned int un\_pmod\_value

int \* pun\_pmod\_value

Definition in file [utilities.h](#).

#### 3.10.2 Macro Definition Documentation

##### 3.10.2.1 #define ONE\_SECOND 7200000

Definition at line 66 of file utilities.h.

### 3.10.3 Function Documentation

#### 3.10.3.1 void maxim\_delay ( uint32\_t un\_delay )

Delay function.

##### Parameters

in	<i>un_delay</i>	-delay factor
----	-----------------	---------------

##### Return values

<i>None</i>
-------------

Definition at line 67 of file utilities.c.

# Index

- `_sys_exit`
    - `retarget.c`, [23](#)
  - `_ttywrch`
    - `retarget.c`, [23](#)
- FAIL
  - `maxim_device_specific_utilities.h`, [13](#)
- ferror
  - `retarget.c`, [23](#)
- fgetc
  - `retarget.c`, [23](#)
- fputc
  - `retarget.c`, [23](#)
- getkey
  - `retarget.c`, [23](#)
- gpio\_init\_structure
  - `init_config.c`, [7](#)
- init\_config.c
  - `gpio_init_structure`, [7](#)
  - `maxim_gpio_init`, [6](#)
  - `maxim_uart_init`, [6](#)
  - `spi_init_structure`, [7](#)
  - `usart_init_structure`, [7](#)
- init\_config.h
  - `maxim_gpio_init`, [8](#)
  - `maxim_uart_init`, [8](#)
- KEYPRESS\_ARROW\_DOWN
  - `menu.h`, [19](#)
- KEYPRESS\_ARROW\_LEFT
  - `menu.h`, [19](#)
- KEYPRESS\_ARROW\_RIGHT
  - `menu.h`, [19](#)
- KEYPRESS\_ARROW\_UP
  - `menu.h`, [19](#)
- KEYPRESS\_END
  - `menu.h`, [19](#)
- MAIN\_MENU
  - `menu.h`, [19](#)
- MAJOR\_REVISION
  - `main.c`, [10](#)
- MINOR\_REVISION
  - `main.c`, [10](#)

- main
  - `main.c`, [10](#)
- main.c
  - `MAJOR_REVISION`, [10](#)
  - `MINOR_REVISION`, [10](#)
  - `main`, [10](#)
- maxim\_delay
  - `utilities.c`, [24](#)
  - `utilities.h`, [26](#)
- maxim\_device\_specific\_utilities.c
  - `maxim_keypress_loopback`, [11](#)
  - `maxim_send_file_loopback`, [11](#)
- maxim\_device\_specific\_utilities.h
  - FAIL, [13](#)
  - `maxim_keypress_loopback`, [13](#)
  - `maxim_send_file_loopback`, [13](#)
  - PASS, [13](#)
- maxim\_gpio\_init
  - `init_config.c`, [6](#)
  - `init_config.h`, [8](#)
- maxim\_keypress\_loopback
  - `maxim_device_specific_utilities.c`, [11](#)
  - `maxim_device_specific_utilities.h`, [13](#)
- maxim\_menu\_cls
  - `menu.c`, [15](#)
  - `menu.h`, [20](#)
- maxim\_menu\_print\_keypress\_description
  - `menu.c`, [15](#)
  - `menu.h`, [20](#)
- maxim\_menu\_print\_line
  - `menu.c`, [16](#)
- maxim\_menu\_print\_main\_menu
  - `menu.c`, [16](#)
  - `menu.h`, [20](#)
- maxim\_menu\_print\_maxim\_banner
  - `menu.c`, [16](#)
  - `menu.h`, [21](#)
- maxim\_menu\_print\_maxim\_banner\_big
  - `menu.c`, [16](#)
  - `menu.h`, [21](#)
- maxim\_menu\_print\_prompt
  - `menu.c`, [17](#)
  - `menu.h`, [21](#)
- maxim\_menu\_print\_send\_file\_description
  - `menu.c`, [17](#)

- menu.h, 21
- maxim\_send\_file\_loopback
  - maxim\_device\_specific\_utilities.c, 11
  - maxim\_device\_specific\_utilities.h, 13
- maxim\_uart\_init
  - init\_config.c, 6
  - init\_config.h, 8
- menu.c
  - maxim\_menu\_cls, 15
  - maxim\_menu\_print\_keypress\_description, 15
  - maxim\_menu\_print\_line, 16
  - maxim\_menu\_print\_main\_menu, 16
  - maxim\_menu\_print\_maxim\_banner, 16
  - maxim\_menu\_print\_maxim\_banner\_big, 16
  - maxim\_menu\_print\_prompt, 17
  - maxim\_menu\_print\_send\_file\_description, 17
- menu.h
  - KEYPRESS\_ARROW\_DOWN, 19
  - KEYPRESS\_ARROW\_LEFT, 19
  - KEYPRESS\_ARROW\_UP, 19
  - KEYPRESS\_END, 19
  - MAIN\_MENU, 19
  - maxim\_menu\_cls, 20
  - maxim\_menu\_print\_keypress\_description, 20
  - maxim\_menu\_print\_main\_menu, 20
  - maxim\_menu\_print\_maxim\_banner, 21
  - maxim\_menu\_print\_maxim\_banner\_big, 21
  - maxim\_menu\_print\_prompt, 21
  - maxim\_menu\_print\_send\_file\_description, 21
  - START\_SEND\_FILE, 20
  - WAIT\_KEYPRESS, 20
- ONE\_SECOND
  - utilities.h, 25
- PASS
  - maxim\_device\_specific\_utilities.h, 13
- retarget.c
  - \_sys\_exit, 23
  - \_ttywrch, 23
  - ferror, 23
  - fgetc, 23
  - fputc, 23
  - getkey, 23
  - sendchar, 23
- START\_SEND\_FILE
  - menu.h, 20
- sendchar
  - retarget.c, 23
- source/init\_config.c, 5
- source/init\_config.h, 7
- source/main.c, 9
- source/maxim\_device\_specific\_utilities.c, 10
- source/maxim\_device\_specific\_utilities.h, 12
- source/menu.c, 14
- source/menu.h, 17
- source/retarget.c, 22
- source/utilities.c, 23
- source/utilities.h, 25
- spi\_init\_structure
  - init\_config.c, 7
- usart\_init\_structure
  - init\_config.c, 7
- utilities.c
  - maxim\_delay, 24
- utilities.h
  - maxim\_delay, 26
  - ONE\_SECOND, 25
- WAIT\_KEYPRESS
  - menu.h, 20