CHIP: LPC18xx/43xx LCD driver

LPC18xx/43xx chip specific drivers

Detailed Description

Functions

void	**Chip_LCD_Init** (**LPC_LCD_T** *pLCD, **LCD_Config_T** *LCD_ConfigStruct) Initialize the LCD controller.
void	**Chip_LCD_DeInit** (**LPC_LCD_T** *pLCD) Shutdown the LCD controller.
STATIC INLINE void	**Chip_LCD_PowerOn** (**LPC_LCD_T** *pLCD) Power-on the LCD Panel (power pin)
STATIC INLINE void	**Chip_LCD_PowerOff** (**LPC_LCD_T** *pLCD) Power-off the LCD Panel (power pin)
STATIC INLINE void	**Chip_LCD_Enable** (**LPC_LCD_T** *pLCD) Enable/Disable the LCD Controller.
STATIC INLINE void	**Chip_LCD_Disable** (**LPC_LCD_T** *pLCD) Enable/Disable the LCD Controller.
STATIC INLINE void	**Chip_LCD_SetUPFrameBuffer** (**LPC_LCD_T** *pLCD, void ***buffer**) Set LCD Upper Panel Frame Buffer for Single Panel or Upper Panel Frame Buffer for Dual Panel.
STATIC INLINE void	**Chip_LCD_SetLPFrameBuffer** (**LPC_LCD_T** *pLCD, void ***buffer**) Set LCD Lower Panel Frame Buffer for Dual Panel.
void	**Chip_LCD_Cursor_Config** (**LPC_LCD_T** *pLCD, **IP_LCD_CURSOR_SIZE_OPT_T** cursor_size, bool **sync**) Configure Cursor.
STATIC INLINE void	**Chip_LCD_Cursor_Enable** (**LPC_LCD_T** *pLCD, uint8_t cursor_num) Enable Cursor.
STATIC INLINE void	**Chip_LCD_Cursor_Disable** (**LPC_LCD_T** *pLCD, uint8_t cursor_num) Disable Cursor.
STATIC INLINE void	**Chip_LCD_Cursor_LoadPalette0** (**LPC_LCD_T** *pLCD, **uint32_t** palette_color) Load Cursor Palette.
STATIC INLINE void	**Chip_LCD_Cursor_LoadPalette1** (**LPC_LCD_T** *pLCD, **uint32_t** palette_color) Load Cursor Palette.
STATIC INLINE void	**Chip_LCD_Cursor_SetPos** (**LPC_LCD_T** *pLCD, uint16_t x, uint16_t y) Set Cursor Position.
STATIC INLINE void	**Chip_LCD_Cursor_SetClip** (**LPC_LCD_T** *pLCD, uint16_t x, uint16_t y) Set Cursor Clipping Position.
STATIC INLINE void	**Chip_LCD_EnableInts** (**LPC_LCD_T** *pLCD, **uint32_t** ints) Enable Controller Interrupt.

STATIC INLINE void	**Chip_LCD_DisableInts** (**LPC_LCD_T** *pLCD, **uint32_t** ints) Disable Controller Interrupt.
STATIC INLINE void	**Chip_LCD_ClearInts** (**LPC_LCD_T** *pLCD, **uint32_t** ints) Clear Controller Interrupt.
void	**Chip_LCD_Cursor_WriteImage** (**LPC_LCD_T** *pLCD, uint8_t cursor_num, void *Image) Write Cursor Image into Internal Cursor Image Buffer.
void	**Chip_LCD_LoadPalette** (**LPC_LCD_T** *pLCD, void *palette) Load LCD Palette.

Function Documentation

STATIC INLINE void Chip_LCD_ClearInts (LPC_LCD_T * pLCD,
uint32_t ints
)

Clear Controller Interrupt.

Parameters

pLCD : The base of LCD peripheral on the chip

ints : OR'ed interrupt bits to clear

Returns

None

Definition at line **233** of file **lcd_18xx_43xx.h**.

```
void Chip_LCD_Cursor_Config ( LPC_LCD_T *                pLCD,
                              IP_LCD_CURSOR_SIZE_OPT_T   cursor_size,
                              bool                       sync
                            )
```

Configure Cursor.

Parameters

pLCD : The base of LCD peripheral on the chip

cursor_size : specify size of cursor

- LCD_CURSOR_32x32 :cursor size is 32x32 pixels
- LCD_CURSOR_64x64 :cursor size is 64x64 pixels

sync : cursor sync mode

- TRUE :cursor sync to the frame sync pulse
- FALSE :cursor async mode

Returns

None

Definition at line **68** of file **lcd_17xx_40xx.c**.

```
STATIC INLINE void Chip_LCD_Cursor_Disable ( LPC_LCD_T *  pLCD,
                                             uint8_t      cursor_num
                                           )
```

Disable Cursor.

Parameters

pLCD : The base of LCD peripheral on the chip

cursor_num : specify number of cursor is going to be written this param must < 4

Returns

None

Definition at line **154** of file **lcd_18xx_43xx.h**.