

## CE2811 REQUIRED DEVICE DRIVER APIs

NIOS TIMERS	COMMENTS
void nios_timer0_delay(const int delayCounts)	Delay the specified timer counts.
void nios_timer0_us(const int us)	Delay the specified microseconds.
void nios_timer0_ms(const int ms)	Delay the specified milliseconds.
void nios_timer0_s(const int s)	Delay the specified seconds.
void nios_timer1_delay(const int delayCounts)	Delay the specified timer counts.
void nios_timer1_us(const int us)	Delay the specified microseconds.
void nios_timer1_ms(const int ms)	Delay the specified milliseconds.
void nios_timer1_s(const int s)	Delay the specified seconds.
void nios_timer2_delay(const int delayCounts)	Delay the specified timer counts.
void nios_timer2_us(const int us)	Delay the specified microseconds.
void nios_timer2_ms(const int ms)	Delay the specified milliseconds.
void nios_timer2_s(const int s)	Delay the specified seconds.
void nios_timer2_period(const int freq)	Delay the period of specified frequency.

NIOS LCD PANEL	COMMENTS
void nios_lcd_init(void)	<ul style="list-style-type: none"> <li>• Turns the LCD on.</li> <li>• Performs all necessary initialization.</li> <li>• Homes the cursor.</li> <li>• Disable cursor blinking.</li> <li>• Set auto-increment cursor.</li> <li>• Set data length.</li> <li>• Set font size.</li> </ul>
void nios_lcd_clear(void)	<ul style="list-style-type: none"> <li>• Clears the LCD panel.</li> <li>• Returns cursor to row 0 , column 0.</li> </ul>
void nios_lcd_home(void)	<ul style="list-style-type: none"> <li>• Does not clear LCD panel.</li> <li>• Returns cursor to row 0, column 0.</li> </ul>
void nios_lcd_gotoxy(const int x, const int y)	<ul style="list-style-type: none"> <li>• Does not clear LCD panel.</li> <li>• Moves cursor to row 0, column 0.</li> </ul>
void nios_lcd_putchar(char c)	<ul style="list-style-type: none"> <li>• Prints character at current cursor</li> </ul>
void nios_lcd_printstring(const char *s)	<ul style="list-style-type: none"> <li>• Prints the string s to the display</li> </ul>
void nios_lcd_command(unsigned int cmd)	<ul style="list-style-type: none"> <li>• Writes the command to the LCD.</li> <li>• Manipulates LCD signals E, RW, RS</li> <li>• Delays appropriate inter-cmd time</li> </ul>
void nios_lcd_blink(void)	<ul style="list-style-type: none"> <li>• Enables cursor blinking</li> </ul>
void nios_lcd_noblink(void)	<ul style="list-style-type: none"> <li>• Disables cursor blinking</li> </ul>

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NIOS SOUND	COMMENTS
void play(unsigned int freq, unsigned int ms)	<ul style="list-style-type: none"><li>• Plays tone for specified ms</li></ul>
void play1s(unsigned int freq)	<ul style="list-style-type: none"><li>• Plays tone for one second</li></ul>