

IFC-CI00 Interface Free Controller Computer Interface



Card Library Functions for Visual C# Express and Visual Basic Express

V1.0

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Function Prototype for Computer Interface (CI00)

This function explains the function prototype for controlling IFC-CI00 using PC. IFC-CI00 will translate the UART from computer/laptop to IIC communication. User may also use 'object browser' under Microsoft Visual C# to view the summary, parameter and return value description of IFC-CI00 function prototype. User need to add reference 'ifc_ci.dll' for IFC-CI00 card in order to control/communicate IFC-CI00 using PC. Please note that before user start the programming, user need to initialize the 'ifc.ifc_ci' in order to use the functions to control IFC-CI00. Example of creating a 'ifc.ifc_ci' class called 'ifc1':

```
static ifc.ifc_ci ifc1 = new ifc.ifc_ci(74);
```

For 'ifc.ifc_ci' class, user need to specify the COM Port that is connected to IFC-CI00, user need to specified the IFC-CI00 in use.

Function Prototype	Example	Summary	Parameter Description
void ci_buzzer(bool data)	ifc1.ci_buzzer(<u>true</u>)	To control Buzzer on IFC-CI00.	data: True to activate Buzzer and False to deactivate Buzzer. (bool)
void ci_buzzer(int data)	ifc1.ci_buzzer(1)	To control Buzzer on IFC-CI00.	data: 1 to activate Buzzer and 0 to deactivate Buzzer. (int)
void ci_buzzer(byte data)	ifc1.ci_buzzer(<u>1</u>)	To control Buzzer on IFC-CI00.	data: 1 to activate Buzzer and 0 to deactivate Buzzer. (byte)
void ci_iic_speed(byte data)		For IFC system internal use.	
void ci_iic_speed(int data)		For IFC system internal use.	
void ci_led(<u>byte</u> data)	ifc1.ci_led(<u>0000</u>)	To control LED 1 to LED 4 on IFC-CI00.	data: Bit 0 control LED 1, bit 1 control LED 2, bit 2 control LED 3, and bit 3 control LED 4. Representative bit set to ON LED, clear to OFF. (byte)



void ci_led(<u>int</u> data)	ifc1.ci_led(<u>1111</u>)	To control LED 1 to LED 4 on IFC-CI00.	data: Bit 0 control LED 1, bit 1 control LED 2, bit 2 control LED 3, and bit 3 control LED 4. Representative bit set to ON LED, clear to OFF. (int)
void ci_led1(bool data)	ifc1.ci_led1(<u>true</u>)	To control LED 1 on IFC-CI00.	data: True to ON and False to OFF. (bool)
void ci_led1(<u>int</u> data)	ifc1.ci_led1(<u>1</u>)	To control LED 1 on IFC-CI00.	data: 1 to ON and 0 to OFF. (int)
void ci_led1(byte data)	ifc1.ci_led1(0)	To control LED 1 on IFC-CI00.	data: 1 to ON and 0 to OFF. (byte)
void ci_led2(bool data)	ifc1.ci_led2(<u>false</u>)	To control LED 2 on IFC-CI00.	data: True to ON and False to OFF. (bool)
void ci_led2(<u>int</u> data)	ifc1.ci_led2(<u>1</u>)	To control LED 2 on IFC-CI00.	data: 1 to ON and 0 to OFF. (int)
void ci_led2(byte data)	ifc1.ci_led2(<u>1</u>)	To control LED 2 on IFC-CI00.	data: 1 to ON and 0 to OFF. (byte)
void ci_led3(bool data)	ifc1.ci_led3(<u>true</u>)	To control LED 3 on IFC-CI00.	data: True to ON and False to OFF. (bool)
void ci_led3(<u>int</u> data)	ifc1.ci_led3(<u>1</u>)	To control LED 3 on IFC-CI00.	data: 1 to ON and 0 to OFF. (int)
void ci_led3(<u>byte</u> data)	ifc1.ci_led3(<u>0</u>)	To control LED 3 on IFC-CI00.	data: 1 to ON and 0 to OFF. (int)
void ci_led4(bool data)	ifc1.ci_led4(<u>false</u>)	To control LED 4 on IFC-CI00.	data: True to ON and False to OFF. (bool)
void ci_led4(<u>int</u> data)	ifc1.ci_led4(0)	To control LED 4 on IFC-CI00.	data: 1 to ON and 0 to OFF. (int)



void ci_led4(<u>byte</u> data)	ifc1.ci_led4(1)	To control LED 4 on IFC-CI00.	data: 1 to ON and 0 to OFF. (byte)
void ci_smclr(bool data)	ifc1.ci_smclr(<u>true</u>)	To control Slave Reset of IFC system.	data: True to reset Slave and False to release Slave from reset. (bool)
void ci_smclr(<u>int</u> data)	ifc1.ci_smclr(1)	To control Slave Reset of IFC system.	data: 1 to reset Slave and 0 to release Slave from reset. (int)
void ci_smclr(<u>byte</u> data)	ifc1.ci_smclr(1)	To control Slave Reset of IFC system.	data: 1 to reset Slave and 0 to release Slave from reset. (byte)
ifc_ci(byte ComPort)	ifc1.ifc_ci(20)	Initializes a new instance of the ifc.ifc_ci class using the specified COM Port.	ComPort: The COM Port connected to IFC-CI00. (byte)
ifc_ci(<u>int</u> ComPort)	ifc1.ifc_ci(<u>14</u>)	Initializes a new instance of the ifc.ifc_ci class using the specified COM Port.	ComPort: The COM Port connected to IFC-CI00. (int)
read(byte address, byte[] data_to_write, out byte[] data_to_read)		For IFC system internal use.	
write(byte address, byte[] data_to_write)		For IFC system internal use.	

Table 1 Function Prototype for CI00



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