

# Basic functions

## Functions

- **GrdHandle** **grdOpen**(uint32\_t publicCode, uint32\_t readCode, uint32\_t writeCode)
- **GrdHandle** **grdOpenByFindMode** (uint32\_t findFlags, const **GrdFindMode** \*findMode, size\_t findModeSize, uint32\_t readCode, uint32\_t writeCode)
- uint32\_t **grdCodeRun** (**GrdHandle** handle, uint16\_t algorithmName, uint32\_t p1, const void \*inBuffer, size\_t inBufferSize, void \*outBuffer, size\_t outBufferSize, uint32\_t \*codeRet)
- uint32\_t **grdCodeLoadFile** (**GrdHandle** handle, uint16\_t algorithmName, const char \*filePath)
- uint32\_t **grdCodeLoad** (**GrdHandle** handle, uint16\_t algorithmName, const void \*buffer, size\_t bufferSize)
- uint32\_t **grdGetDongleInfo** (**GrdHandle** handle, **GrdDongleInfo** \*dongleInfo, size\_t dongleInfoSize)
- uint32\_t **grdGetFindInfo** (**GrdHandle** handle, **GrdFindInfo** \*findInfo, size\_t findInfoSize)
- uint32\_t **grdUpdateVendorInfo** (**GrdHandle** handle, const **GrdVendorInfo** \*vendorInfo, size\_t vendorInfoSize)
- uint32\_t **grdClose** (**GrdHandle** handle)

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## Detailed Description

To interact with the dongle using a standard scenario

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## Function Documentation

```
GrdHandle grdOpen (uint32_tpublicCode, uint32_treadCode, uint32_twriteCode)
```

This function opens a handle to the dongle

### Parameters:

**publicCode** - Public code

**readCode** - Read code

**writeCode** - Write code

### Returns:

If the function succeeds, the return value is a handle to the dongle. If the function fails or fails to locate dongles from the search terms, the return value is INVALID\_HANDLE

```
GrdHandle grdOpenByFindMode (uint32_tfindFlags, const GrdFindMode *findMode, size_tfindModeSize, uint32_treadCode, uint32_twriteCode)
```

This function opens a handle to the dongle that matches a specific search criteria

### Parameters:

**findFlags** - Combination of GrdFM\_xxx flags

**findMode** - A pointer to the GrdFindMode structure

**findModeSize** - Size of the GrdFindMode structure

**readCode** - Read code

**writeCode** - Write code

**Returns:**

If the function succeeds, the return value is a handle to the dongle. If the function fails or fails to locate dongles from the search terms, the return value is INVALID\_HANDLE

```
uint32_t grdCodeRun (GrdHandlehandle, uint16_talgorithmName, uint32_tpl, const void *inBuffer,
size_tinBufferSize, void *outBuffer, size_toutBufferSize, uint32_t *codeRet)
```

Run user-defined loadable code

**Parameters:**

**handle** - A valid handle value

**algorithmName** - Algorithm numerical name

**p1** - Parameter (subfunction code) for loadable code

**inBuffer** - A pointer to the buffer that contains the data to be sent into the user-defined loadable code

**inBufferSize** - The amount of data to be sent to the dongle

**outBuffer** - A pointer to the buffer that is to receive the data returned by the user-defined loadable code

**outBufferSize** - The amount of data to be received from the dongle

**codeRet** - Pointer to the return code returned by the user-defined loadable code

**Returns:**

Returns zero if successful, otherwise an error code is returned

```
uint32_t grdCodeLoadFile (GrdHandlehandle, uint16_talgorithmName, const char *filePath)
```

Load user-defined loadable code

**Parameters:**

**handle** - A valid handle value

**algorithmName** - Algorithm numerical name

**filePath** - A pointer to zero terminating string, which contains the full path to the GCExe-file.

**Returns:**

Returns zero if successful, otherwise an error code is returned

```
uint32_t grdCodeLoad (GrdHandlehandle, uint16_talgorithmName, const void *buffer, size_tbufferSize)
```

Load user-defined loadable code

**Parameters:**

**handle** - A valid handle value

**algorithmName** - Algorithm numerical name

**buffer** - A pointer to the buffer for GCExe-file

**bufferSize** - Buffer size for GCExe-file

**Returns:**

Returns zero if successful, otherwise an error code is returned

```
uint32_t grdGetDongleInfo (GrdHandlehandle, GrdDongleInfo *dongleInfo, size_tdongleInfoSize)
```

The function returns detailed information about the dongle, that was previously opened by **grdOpen** function

**Parameters:**

**handle** - A valid handle value

**dongleInfo** - A pointer to the **DongleInfo** structure

**dongleInfoSize** - Size of the **dongleInfo** buffer

**Returns:**

Returns zero if successful, otherwise an error code is returned

```
uint32_t grdGetFindInfo (GrdHandlehandle, GrdFindInfo *findInfo, size_tfindInfoSize)
```

The function returns information about finding dongle, that was previously opened by **grdOpen** function

**Parameters:**

**handle** - A valid handle value

**findInfo** - A pointer to the **FindInfo** structure

**findInfoSize** - Size of the **findInfo** buffer

**Returns:**

Returns zero if successful, otherwise an error code is returned

```
uint32_t grdUpdateVendorInfo (GrdHandlehandle, const GrdVendorInfo *vendorInfo, size_tvendorInfoSize)
```

Update vendor dongle fields

**Parameters:**

**handle** - A valid handle value

**vendorInfo** - A pointer to the **GrdVendorInfo** structure

**vendorInfoSize** - Size of the **GrdVendorInfo** structure

**Returns:**

Returns zero if successful, otherwise an error code is returned

```
uint32_t grdClose (GrdHandlehandle)
```

The **grdCloseHandle** function closes handles previously opened with **grdOpen** function

**Parameters:**

**handle** - A valid handle value

**Returns:**

Returns zero if successful, otherwise an error code is returned