

clCreateProgramWithSource

Creates a program object for a context, and loads the source code specified by the text strings in the *strings* array into the program object.

```
cl_program clCreateProgramWithSource (cl_context context,  
                                     cl_uint count,  
                                     const char **strings,  
                                     const size_t *lengths,  
                                     cl_int *errcode_ret)
```

Parameters

context

Must be a valid OpenCL context.

strings

An array of *count* pointers to optionally null-terminated character strings that make up the source code.

lengths

An array with the number of chars in each string (the string length). If an element in *lengths* is zero, its accompanying string is null-terminated. If *lengths* is NULL, all strings in the *strings* argument are considered null-terminated. Any length value passed in that is greater than zero excludes the null terminator in its count.

errcode_ret

Returns an appropriate error code. If *errcode_ret* is NULL, no error code is returned.

Description

This function creates a program object for a context, and loads the source code specified by the text strings in the *strings* array into the program object. The devices associated with the program object are the devices associated with *context*. The source code specified by *strings* is either an OpenCL C program source, header or implementation-defined source for custom devices that support an online compiler.

Errors

clCreateProgramWithSource returns a valid non-zero program object and *errcode_ret* is set to CL_SUCCESS if the program object is created successfully. Otherwise, it returns a NULL value with one of the following error values returned in *errcode_ret*:

- CL_INVALID_CONTEXT if *context* is not a valid context.
- CL_INVALID_VALUE if *count* is zero or if *strings* or any entry in *strings* is NULL.
- CL_OUT_OF_RESOURCES if there is a failure to allocate resources required by the OpenCL implementation on the device.
- CL_OUT_OF_HOST_MEMORY if there is a failure to allocate resources required by the OpenCL implementation on the host.

Specification



[OpenCL Specification](#)

Also see

[clCreateProgramWithBinary](#), [clReleaseProgram](#), [clRetainProgram](#), [Cardinality Diagram](#)



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