

**NAME**

**dwarf\_die\_CU\_offset**, **dwarf\_die\_CU\_offset\_range**, **dwarf\_dieoffset**,  
**dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset**, **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset\_b**  
- return offsets of DWARF debugging information entries

**LIBRARY**

DWARF Access Library (libdwarf, -ldwarf)

**SYNOPSIS**

**#include <libdwarf.h>**

*int*

**dwarf\_die\_CU\_offset**(*Dwarf\_Die die*, *Dwarf\_Off \*ret\_offset*, *Dwarf\_Error \*err*);

*int*

**dwarf\_die\_CU\_offset\_range**(*Dwarf\_Die die*, *Dwarf\_Off \*cu\_offset*, *Dwarf\_Off \*cu\_length*,  
*Dwarf\_Error \*err*);

*int*

**dwarf\_dieoffset**(*Dwarf\_Die die*, *Dwarf\_Off \*ret\_offset*, *Dwarf\_Error \*err*);

*int*

**dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset**(*Dwarf\_Debug dbg*, *Dwarf\_Off in\_cu\_header\_offset*,  
*Dwarf\_Off \*out\_cu\_die\_offset*, *Dwarf\_Error \*err*);

*int*

**dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset\_b**(*Dwarf\_Debug dbg*,  
*Dwarf\_Off in\_cu\_header\_offset*, *Dwarf\_Bool is\_info*, *Dwarf\_Off \*out\_cu\_die\_offset*,  
*Dwarf\_Error \*err*);

**DESCRIPTION**

These functions are used to retrieve offsets for DWARF debugging information entries.

Function **dwarf\_die\_CU\_offset**() returns the offset of the debugging information entry referenced by argument *die* relative to the start of its containing compilation unit. Argument *ret\_offset* should point to the location that is to hold the returned offset. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf\_die\_CU\_offset\_range**() returns the section-relative offset and length of the compilation unit containing the debugging information entry referenced by argument *die*. Argument *cu\_offset*

should point to a location that will hold the returned offset. Argument *cu\_length* should point to a location that will hold the returned length of the compilation unit. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf\_dieoffset()** retrieves the section-relative offset of the debugging information entry referenced by argument *die*. Argument *ret\_offset* should point to a location that is to hold the returned section-relative offset. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset()** returns the offset for the first debugging information entry for a compilation unit, given an offset to the header of the compilation unit. Argument *dbg* should reference a valid debugging context allocated using **dwarf\_init(3)**. Argument *in\_cu\_header\_offset* contains the offset to the start of a compilation unit. Argument *out\_cu\_die\_offset* points to a location that will hold the returned offset. If argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

Function **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset\_b()** behaves identically to the function **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset()** when the argument *is\_info* is non-zero. When the argument *is\_info* is zero, function **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset\_b()** returns the offset for the first debugging information entry for a type unit, given an offset to the header of the type unit in argument *in\_cu\_header\_offset*. Argument *out\_cu\_die\_offset* points to a location that will hold the returned offset. If the argument *err* is non-NULL, it will be used to return an error descriptor in case of an error.

## RETURN VALUES

On success, these functions return **DW\_DLV\_OK**. In case of an error, these functions return **DW\_DLV\_ERROR** and set argument *err*.

Function **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset()** and **dwarf\_get\_cu\_die\_offset\_given\_cu\_header\_offset\_b()** returns **DW\_DLV\_NO\_ENTRY** and sets argument *err* if there is no compilation or type unit located at the offset specified in argument *in\_cu\_header\_offset*.

## ERRORS

These functions may fail with the following errors:

[**DW\_DLE\_ARGUMENT**] One of the arguments *cu\_length*, *cu\_offset*, *dbg*, *die*, *out\_cu\_die\_offset* or *ret\_offset* was NULL.

[**DW\_DLE\_NO\_ENTRY**] Argument *in\_cu\_header\_offset* specified an unknown offset.

**SEE ALSO**

dwarf(3), dwarf\_next\_cu\_header(3), dwarf\_offdie(3), dwarf\_offdie\_b(3)